

BEFORE THE PUBLIC UTILITIES COMMISSION  
STATE OF SOUTH DAKOTA

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

EL 19-003

INTERVENORS' PROPOSED  
FINDINGS OF FACT AND  
CONCLUSIONS OF LAW

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In the Proposed Findings of Fact and Conclusions of Law of Intervenor, "Applicant" refers to Crowned Ridge Wind, LLC and "Application" refers to the Applicant's application for a permit in this proceeding including submitted testimony and evidence.

**FINDINGS OF FACT #1 - *Sound Levels***

The Commission finds:

**A. (Hessler A-F)**

1. The record does not demonstrate that Applicant has minimized impacts from noise. Staff witness Hessler recommended in a 2011 professional article that "The nighttime sleep disturbance threshold has recently been reexamined by the WHO (2009) and has been lowered from 45 db(A) to 40 db(A) outside residences. No inside value is specified. The level is expressed as a design target to protect the public. Considering this guideline, nighttime sound levels from wind developments outside residences should be generally targeted at 40 db(A) as an ideal design goal to avoid sleep disturbance issues." Exhibit I 5, page 96.

**B.**

2. Staff witness Hessler testified in the 2018 South Dakota PUC Prevailing Winds proceeding before this Commission, “Q. And did you indicate to the Commission in that case that, ‘we’ve recommended for many years that every project should shoot for an ideal design goal of 40?’ A. That’s correct.” (Hessler), June 6, 2019, page 60, lines 11-14

**C.**

3. Staff witness Hessler advised the Minnesota Public Services Commission in his 2011 report to the Commission entitled, *NARUC, Assessing Sound Emissions from Proposed Wind Farms & Measuring the Performance of Completed Projects* that “Consequently, it would be advisable for any new project to attempt to maintain a mean sound level of 40 dBA or less outside all residences as an ideal design goal.” Exhibit I 2, page 12

**D.**

4. Staff witness Hessler advised the Wisconsin Public Service Commission in his 2012 report to the Wisconsin Public Service Commission entitled *A Cooperative Measurement Survey and Analysis of Low Frequency and Infrasound at the Shirley Wind Farm in Brown County, Wisconsin* that “the long-term-average (2 week sample) design goal for sound emissions attributable to the array of wind turbines, exclusive of the background ambient, at all non-participating residences shall be 39.5 dBA or less.” Exhibit I 1, page 8

**E.**

5. Staff witness Hessler testified in this proceeding, “A. Are you referring to the 40 dBA ideal design goal? Q. Right. Correct. A. Yeah. Yeah. I've maintained that for many years that the ideal performance -- that that's where projects ought to be to have a minimal impact on the community.”[ (Hessler) June 6, 2019, page 26, lines 4-8] “At 40 the level is so low in absolute terms that most people are fine with it.” (Hessler), June 6, 2019, page 30, lines 16-18
6. Hessler further testified, “Mr. Hessler, is it your goal as a professional that you would like to see a sound level of no more than 40 dBA at every non-participant? A. Yes. We've been recommending that for years.” (Hessler), June 6, 2019, page 64, line 24 – page 65, line 2
7. Regarding his pre-filed testimony, on page 5, Hessler testified, “Q. Did you state on line 4 that "any time wind turbine sound levels higher than about 40 dBA are predicted at residences, I would anticipate complaints with the number and severity increasing exponentially as the sound levels approach 50 dBA"? A. That's correct.” (Hessler), June 6, 2019, page 65, lines 12-17
8. He further testified, “Q. Okay. Would 40 be better than 42? A. Yeah. Q. For the public? A. I would love to see that.” (Hessler), June 6, 2019, page 74, lines 2-5
9. Hessler further testified in this proceeding in the following paragraphs: 10, 11, 12, 13, 14, 15 and 16. “Q. Would 40 be acceptable to the welfare of the public as a permit condition? A. 40

would be a good place to be. I wish the project could achieve that.” (Hessler), June 6, 2019, page 74, lines 10-13

10. “Q. So you don't disagree with the recommendation on page 12 [Direct Testimony]... in which you said that any new project should attempt to maintain a mean sound level of 40 dBA or less at all residents as an ideal design goal? A. That's correct. Importantly as an ideal design goal.” (Hessler), June 6, 2019, page 81, lines 8-13
11. “Q. Well, do you agree that as an author on page 96 you said that the level of 40 is expressed as a design target to protect the public? A. Yeah. That is what the WHO said in 2009.” (Hessler), June 6, 2019, page 88, lines 21-24 and Exhibit I 8
12. “Q. But isn't it your testimony that you're still recommending an ideal design goal of 40 dBA? A. Yeah. I think we've established that today, yes.” (Hessler), June 6, 2019, page 90, lines 3-5
13. “Q. Mr. Hessler, for the Highlands Project when you gave a report for the Wisconsin Public Service Commission did you recommend a non-participating dBA level of 40 dBA? A. Yeah. That recommendation is just consistent with that noise control engineering journal article that we previously talked about.” (Hessler), June 6, 2019, page 96, line 22 – page 97, line 2 and Exhibit I 1

14. In answering a question about Exhibit I 1, Staff witness Hessler said: “A. Yeah. I think the conclusion in this paper was the consensus of a committee where some average level came out of the work and that's where this 39.5 comes from. Yeah. We did say that that's what we recommended for Highland. That's not different in any meaningful way from the 40 we've been talking about. Q. But that was more than just a consensus opinion. In fact, on page 8 doesn't it say based on the above, Hessler & Associates recommends 39.5 dBA or less? Isn't that true? A. Yeah. That's what it says, yes.” (Hessler), June 6, 2019, page 97, line 19 – page 98, line 4 and Exhibit I 1

**F.**

15. Staff witness Hessler testified regarding the findings of a 2017 article by Hessler et al, Mr. Ganje: “Do you agree with the author's conclusion in that article in which the author states, ‘the authors have generally found that wind turbine farms designed to a level of 40 dBA or a bit lower at nonparticipating residential receptors have an acceptable community response’? A. Yes. I agree with that.” (Hessler), June 6, 2019, page 95, lines 8-14 and Exhibit I 4

**G. (Ollson G-L)**

16. Applicant witness Ollson in a professional article co-written by the witness in 2011 described the World Health Organization nighttime noise guideline of 40 db(A) as a “health-based limit value.” Exhibit A24-2, page 2

**H.**

17. Applicant witness Ollson testified in a 2014 wind farm application proceeding that “Based on the available evidence, and taken directly from Knopper et al. 2014, our research team has suggested the following best practices for wind turbine development in the context of human health.” The witness, Ollson, in that testimony then made the following best practices recommendation: “Preference should be given to sound emissions of  $\leq 40$  dB(A) for non-participating receptors, measured outside, at a dwelling, and not including ambient noise. This value is the same as the WHO (Europe) night noise guideline (WHO, 2009) and has been demonstrated to result in levels of wind turbine community annoyance similar to, or lower than, known background levels of noise-related annoyance from other common noise sources.” Exhibit I 9b, page 6

# I.

18. Applicant Witness Ollson wrote in a 2014 article, *Wind Turbines and Human Health*, that “Annoyance may be associated with some self-reported health effects (e.g., sleep disturbance) especially at sound pressure levels  $>40$  dB(A). Because environmental noise above certain levels is a recognized factor in a number of health issues.” Exhibit A24-10, page 1

19. In a 2014 article by Ollson entered by Applicant as an exhibit in this proceeding he wrote, “Collectively, the evidence has shown that while noise from wind turbines is not loud enough to cause hearing impairment and is not causally related to adverse effects, wind turbine noise can be a source of annoyance for some people and that annoyance maybe associated with certain reported health effects (e.g., sleep disturbance), especially at sound pressure levels

>40 dB(A).” [Exhibit A24-10, page 16] “Preference should be given to sound emissions of ~40 dB(A) for non-participating receptors, measured outside, at a dwelling, and not including ambient noise. This value is the same as the WHO (Europe) night noise guideline.” Exhibit A24-10, page 17

**J.**

20. Applicant witness Ollson wrote in a 2014 presentation he gave that “Environmental noise above certain levels is a recognized factor in a number of human health issues—e.g., hearing, sleep, myocardial infarction, annoyance. Noise from wind turbines can be annoying to some and associated with sleep disturbance—especially when found at levels greater than 40 dB(A).” Exhibit I 10, page 6

21. In the 2014 presentation called *Intrinsic’s Health Based Siting Recommendations*, witness Ollson also wrote “Preference should be given to sound emissions of  $\leq 40$  dBA (outside, not including ambient) for non-participating individuals.” Exhibit I 10, page 20, number 2

**K.**

22. When questioned about his 2014 presentation during the current proceeding, Ollson stated “Q. I believe in that testimony you said that the limit of 40 dBA or less for non-participators was the same guideline as WHO, that is the World Health Organization, had recommended in a 2009 study, isn't it? A. Yes. In fact, there's a bit of nuance to that, but, yes, it is consistent.” (Ollson), June 12, 2019, page 461, lines 15-20

23. When questioned about his 2014 Canadian testimony witness Ollson gave in another proceeding, he stated: “Q. And in that -- I'm going to -- prior to that Canadian testimony that you were talking about here in the Cedar Point proceeding, you stated that in another matter 40 dBA and a minimum separation of 550 meters were reasonable and sufficient to protect against human health effects. And that's found, isn't it, in the Cedar Point testimony? A. Yes.” [June 12, 2019, page 461, line 25 – page 462, line 8] “Q. Well, you said generally that it was reasonable and sufficient to protect against human effects, didn't you? A. Indeed I did.” (Ollson), June 12, 2019, page 462, lines 17-19
24. Ollson further testified in this proceeding that “Q. Okay. In your written testimony or statement did you state that ‘these best practices include a preference for sound emissions of 40 dBA or less for nonparticipating receptors’? A. I did.” (Ollson), June 12, 2019, page 463, lines 11-15
25. “Q. In the [2014] presentation did you state that ‘noise from wind turbines can be annoying to some and associated with sleep disturbances especially at levels greater than 40 dBA’? A. Yes.” [(Ollson), June 12, 2019, page 466, lines 12-16] “Q. In that presentation didn't you report that a 40 dBA limit was based on the World Health Organization noise guideline? A. Yes. And, again, you have to be -- I mean, yes.” [(Ollson), June 12, 2019, page 467, lines 14-17] “Q. In this [2014] presentation did you state that -- did you recommend that preference should be given to sound emissions of 40 dBA or less outside, not including ambient, for a nonparticipating individuals? A. Yes.” (Ollson), June 12, 2019, page 472, lines 9-13



26. “Q. Okay. So you've testified that yes, indeed you did use the word preference for 40 dBA in this presentation. You've testified that you've also indicated that in apparently some writings that it be your preference. Have you retracted that and changed that number in any subsequent writings? A. No.” [(Ollson), June 12, 2019, page 473, lines 10-17] “Q. But have you changed in any of your writings your opinion from the statement that preference should be given to sound emissions of 40 or less dBA? A. I have not.” (Ollson), June 12, 2019, page 474, lines 13-16

27. “Q. And in that 2011 article, which is [Exhibit] A24-2, on page 2, did you refer to the 40 dBA noise guideline as a ‘health based value limit’?” [(Ollson), June 12, 2019, page 475, lines 8-10] “Q. That's right. And then towards the bottom you discuss the 40 dBA recommendation. Just to help make you move forward to what I want to ask is? A. Sure. Q. You quoted the World Health Organization recommendation but then in your own words in the article you referred to it as a health based limit value; is that correct? A. Certainly.” [(Ollson), June 12, 2019, page 475, line 18 – page 476, line 1] “Q. Uh-huh. And did you again state in this 2014 article that your preference should be given to sound emissions of 40 dBA or less for non-participating receptors? A. Yes.” (Ollson), June 12, 2019, page 481, lines 5-9

**L.**

28. In a professional article in 2015, Ollson wrote: “It is well known that exposure to excessive levels of audible noise, regardless of the source, can cause annoyance, sleep disturbance, cognitive impairment, and other serious health effects.” Exhibit A24-6, page 1 of:

Christopher A. Ollson et al., *Health-Based Audible Noise Guidelines Account for Infrasound and Low-Frequency Noise Produced by Wind Turbines*, 3 FRONTIERS IN PUBLIC HEALTH 1-14, 1 (Feb. 24, 2015).

29. The Applicant has failed to satisfy the requirements for the issuance of a permit. Based upon the writings, testimony, and best practices recommendations and opinions of Staff witness Hessler and Applicant witness Ollson, this Commission finds that 40 or less dBA levels for Applicant's proposed project is in the best interest of the health and welfare of the non-participants.

#### **CONCLUSIONS OF LAW #1 - Sound Levels**

30. Based upon the writings, testimony, and best practices recommendations and opinions of Staff witness Hessler and Applicant witness Ollson, this Commission concludes that 40 or less dBA levels for Applicant's proposed project is in the best interest of the health and welfare of the non-participants. The Applicant has not met its burden of proof. The Applicant has not shown that the proposed facility at the proposed dBA levels will not substantially impair the health and welfare of the inhabitants. SDCL 49-41B-1; and SDCL 49-41B-22 (3)

#### **FINDINGS OF FACT #2 - Land Agreements**

The Commission finds:

**A.**

31. As of May 23, 2019, the Applicant had several outstanding land contract issues. See Applicant's response to Intervenor's Second Data Request 2-3, Exhibit A34: "Q. Describe and identify what property rights need to be obtained. A. (2) easement option agreements to support underground collection and temporary construction access; (3) easement option agreements to support underground collection; and (2) easement option agreements to support alternate turbine locations and associated facilities (underground collection, turbine access road and temporary construction access etc." The response from the Applicant totals seven outstanding land contract issues. Further, in the Affidavit of the Applicant, in response to the Second Motion to Deny, witness Wilhelm stated that six land agreements had expired or terminated. Affidavit of Wilhelm filed 5/23/19.

**B.**

32. The Applicant was required by the Commission to submit a final land status map on Friday the 7th day of June, 2019. At the request of Mr. Ganje, the Applicant provided Exhibits A-64 and A-65 in support of the Commission's Order. These Exhibits do not comprise the total of the disclosed and admitted nonexistent, expired, or incomplete seven agreements identified in the Intervenor's second data request response. The Application is incomplete with regard to the necessary land agreements needed for a completed Application. Intervenor's were not provided with a complete Application under which they could reasonably participate in this proceeding.

33. In the final minutes of the Evidentiary Hearing on June 12, 2019, the Applicant filed Exhibits A67 and A68, also during the Evidentiary Hearing the Applicant filed Exhibit A57. The

tables in these three exhibits show four participants with status still unknown. The tables in these exhibits also show four participators under the status ‘pending’. Designating four participators as pending at the end of the Evidentiary Hearing does not provide understandable information which would be needed to approve the proposed Project. There is no clear vision of who is participating, who is not, and how effects on these receptors should be measured. Exhibit A67, Exhibit A68 and Exhibit A57

34. The Applicant has failed to satisfy the requirements for the issuance of a permit.

#### **CONCLUSIONS OF LAW #2 - *Land Agreements***

35. The incomplete and misleading information of the Application denies Intervenor's due process of the law in this proceeding. Applicant did not provide (1) configuration and (2) number of wind turbines. ARSD 20:10:22:33.02 (1) (2) Applicant did not provide the names of the participants as required. ARSD 20:10:22:06 Applicant failed to sustain its burden of proof under SDCL 49-41B-22 (1)

#### **FINDINGS OF FACT #3 – *Land Value***

The Commission finds:

##### **A.**

36. The Applicant failed to provide a forecast of the impact of the land values of the affected counties, Codington and Grant, including whether values will be adversely impacted by the

issuance of the permit. This is evident by the lack of knowledge and incompetence of the Applicant's land value expert witness, Baker.

**B.**

37. Applicant witness Baker admitted he did not complete an analysis of land with turbine easements in Codington or Grant counties. "Q. Are you aware of any sales of land in Grant County that took place during the calendar year 2018 in which the land had an identified Geronimo Energy wind easement indicated in a part of the auction sale bill for the sale? A. I am not. Q. Are you aware that a closing took place in 2018 with regard to the sale of 135 acres of land which included and identified sale item called Geronimo Energy wind easement which closed in that county on November 26 of 2018?" [(Baker), June 11, 2019, page 139, line 21 - page 140, line 6] "A. Yeah. I haven't looked at any sales in Grant County because they don't have a wind farm there. Q. And you didn't look at any sales in Grant County that had easements or options regarding potential wind farm or wind turbines, did you? A. No. No, I did not. Q. And would your answer be the same for Codington County? A. Yes." (Baker), June 11, 2019, page 140, line 19 – page 141, line 2

**C.**

38. Applicant witness Baker admitted he did not review local owners in Codington or Grant counties. "Q. Did you determine how many comparable local owners existed of a similar nature in Grant County as a part of your study? A. No. Q. Did you determine as a part of your study how many so-called local owners existed in Codington County? A. No." (Baker), June 11, 2019, page 141, lines 13-19

**D.**

39. Applicant witness Baker admitted he did not review sales in the project area. “Q. Did you do any analysis in which you compared sales in the project area which had wind easements with sales in the project area which did not have any designated wind easements? A. No.” (Baker), June 11, 2019, page 141, lines 20-24

**E.**

40. The Applicant was required to provide an analysis of land values and a forecast of the impact of the proposed facility on land values in the affected area. The Applicant failed to provide this necessary information. Ganje questioned Baker regarding Intervenors’ Exhibit I 28, “Q. Mr. Baker, did you take this sale into consideration when you made a determination concerning values or the effect on values in Grant County, South Dakota as a part of your report? A. Yeah. I've answered this. I did not look at sales in Grant County because there's no wind farm in Grant County. So no.” (Baker), June 11, 2019, page 156, lines 7-13 and Exhibit I 28.

**F.**

41. Applicant witness Baker is unreliable. In his testimony, he states several times that there were no sales of rural residences in Brookings County where he conducted his land value impact study. “Commissioner Nelson: Q. Just so I'm clear, did you find sales of rural residences in Brookings County? Witness: A. No. Commissioner Nelson: Q. Since 2011. Witness: A. No. Not that were adjacent to wind turbines.” [Baker, June 11, 2019, page 147,

lines 7-11] “Commissioner Nelson: Q. And so but you did not find any sales of rural residences in Brookings County since 2011, correct? Witness: A. Correct. That were located adjacent to wind turbines.” (Baker), June 11, 2019, Page 148, lines 8-12.

**G.**

42. Witness Baker’s statements regarding no rural residence sales in Brookings County was found to be inaccurate through presentation of documents from Staff Attorney Edwards. Exhibit S8.

**H.**

43. On January 30, 2018, Applicant filed A1-K- Appendix K - Property Value Effect Studies. The Applicant did not file supporting testimony or further documentation to support the filing at the time of Application.
44. The Applicant has failed to satisfy the requirements for the issuance of a permit.

**CONCLUSIONS OF LAW #3 – *Land Values***

45. The Applicant was required to provide an analysis of land values and a forecast of the impact of the proposed facility on land values in the affected area. The Applicant failed to provide this necessary information. ARSD 20:10:22:23 (1) The Applicant did not provide a reliable analysis of the compatibility of the proposed facility with present land use of the surrounding area, with special attention paid to the effects on rural life. ARSD 20:10:22:18 (3) Upon

filing the Application, Applicant did not file testimony of any witness to support the Berkeley Study. Applicant shall also file all data, exhibits and related testimony ... application shall specifically show the witnesses supporting the information contained in the Application. ARSD 20:10:22:39 And the Applicant did not meet its burden of proof SDCL 49-41B-22 (1),(2),(3) and (4)

#### **FINDINGS OF FACT # 4 – *Non-Existent Environmental Information***

The Commission finds:

##### **A.**

46. Applicant's expert witness Wells represented in her pre-filed testimony to the Commission in support of the Application that "The current Project site . . . avoids and minimizes impacts to natural (e.g., wetlands, wildlife) and cultural (e.g., cairns, stone circles) resources." This representation is an erroneous representation of the record. The following findings reflect why no weight should be given to Applicant's representations on the issue addressed in this Finding.

47. Applicant witness Sappington states during her testimony, "The testimony -- my main testimony, page 3, [actually found on page 4] indicates the avian point count surveys were completed from April to November 2017." (Sappington), June 11, 2019, page 175, lines 15-17



48. “This report summarizes the methods and results of large and small bird use surveys conducted from April 1, 2017, through November 30, 2017, in the study area.” Exhibit A1-E - Avian Use Survey Report, page 1

**B.**

49. “CRW completed desktop analyses and site-specific field studies to determine the potential for presence of sensitive natural resources.” Exhibit A25, Bates Stamp page 3, line 21
50. A large portion of the project was not acquired by the Applicant until the last month of the incomplete avian point count surveys. “Cattle Ridge Wind Farm, LLC was acquired by the CRW on November 22, 2017 for inclusion with the Project.” The Applicant would have had to complete an avian point count survey within the last eight days of November 2017. It did not do this. Exhibit A1, page 88

**C.**

51. The fact the Application contains no Avian Study of the completed project area is confirmed by Applicant witness Sappington’s testimony. “Q. Now my question then to you is knowing that the striped line in black does not include the northeastern portion of the subject project area, does it? A. The dashed line does not include that northern portion. Is that what you asked? Q. That is what I asked. A. Correct. Q. So then no avian study report was done for that portion of the project, was it? A. *No Avian Use Survey.*” [Emphasis added] (Sappington), June 11, 2019, page 177, line 16 – page 177, line 1, Exhibit A1-E, page 2

**D.**

52. Maps provided to South Dakota Game Fish and Parks (SDGFP) did not include the northeastern portion of the project, known as Cattle Ridge, which is confirmed by Applicant witness Sappington. “Q. I would ask you please to refer to A1-B page 80.” [(Sappington), June 11, 2019, page 178, line 18] “Q. And is the -- referring now to page 80 of the exhibit, please. Is page 80 the colored area, the area of interest that was studied by your company?” “A. This was studied as of July 2017.” “Q. Yes. And does that study area include the northeastern portion of the proposed No. This map does not have it project that I referred to you in a previous question and showed you on a previous map? A. Are you referring to that northeast portion? Q. That is correct. A.” (Sappington), June 11, 2019, page 179, lines 5-15

**E.**

53. Staff witness Kirschenmann testified that an avian study could not have possibly been completed given the timelines of the study provided by the Applicant as compared to the date the northeastern portion of the project was purchased. “Q. Would it be possible between November 22, 2017, that portion of the land I've described for you a moment ago? ... A. Looking at those dates in the consideration of doing a bird study in that area I would have to say no based on less than a 10-daytime frame and that would not be the ideal time of the year to do such a bird evaluation.” (Kirschenmann), June 12, 2019, page 517, lines 16-19, continuing at page 518, lines 3-6

**F.**

54. The only avian study map submitted to the Commission by the Applicant regarding the avian studies was Exhibit A1-E, page 2. This map was identified by Applicant witness Sappington. The map does not include an avian study in the northeastern portion of the proposed Project which consists of 15,500 acres of land and 25 proposed turbine sites or alternative turbine sites. The Applicant has failed to provide a complete avian study of the proposed Project thus has failed to provide a description of the existing environment, estimates of changes in the existing environment which are anticipated to result from the construction and operation of the proposed facility, or identification of irreversible changes. The Applicant has not calculated the hazards. Exhibit A1-E, page 2

**G.**

55. In the Application, on page 88, the Applicant states under oath that the project formerly owned by Geronimo Energy, known as Cattle Ridge, was purchased by this Applicant on November 22, 2017, and is now owned by Crowned Ridge Wind, LLC and is part of the proposed Project site. Exhibit A1, page 88

**H.**

56. The most recent Project map in this Application is Exhibit A54. This map was submitted June 10, 2019, in this proceeding. This most recent map includes the former project area known as Cattle Ridge and now this Project area. Exhibit A54

57. The Applicant has failed to satisfy the requirements for the issuance of a permit.

#### **CONCLUSION OF LAW #4 – *Non-Existent Environmental Information***

58. The proposed Application provided an incomplete avian study. Environmental studies are required by law. SDCL 49-41B-11 (11). Applicant did not supply SDGFP with an updated report and map concerning the addition of 15,500 acres in the northeast area of the project. ARSD 20:10:22:04 (5) Applicant failed to provide a description of the existing environment, estimates of changes, and identify irreversible changes. ARSD 20:10:22:13 Applicant failed to provide information to identify and quantify impacts to terrestrial biotic environment including important species, breeding times and places, pathways of migration and plans to ameliorate negative biological impacts. ARSD 20:10:22:16 Applicant failed to file all data and exhibits. ARSD 20:10:22:39 Applicant has not met its burden of proof. SDCL 49-41B-22(1) (2) (3)

#### **FINDINGS OF FACT # 5 – *Threat to Economic Condition of Inhabitants***

The Commission finds:

##### **A.**

59. The Applicant, Crowned Ridge LLC, is not a financially viable company. “There is no balance sheet or annual profit and loss statement for Crowned Ridge Wind, LLC.” Although the Project under review for permitting has an “estimated capital cost of approximately \$400 million.” (Project Manager Wilhelm), June 11, 2019, page 236, lines 20-21 and Exhibit A1, page 17.

**B.**

60. Subsidiaries of NextEra Energy Resources, LLC (parent company to the Applicant) have a history of liens being placed on participating landowners which causes a significant impact to the landowner's economic welfare. [Exhibit I 31] "Q. Has NextEra or any of the affiliates of NextEra identified in your several data responses over the last couple of months -- ever had a lien placed on land owned by landowners because of nonpayment or dispute overpayment concerning construction contracts? A. Not to my knowledge, no. Q. You do know about that. Okay. I'll present a couple of documents to the witness, if you'll bear with me for a moment, please. (Counsel gives document to the witness.) Q. Sir, I've set upon you by paper clip one, two, three, four documents. Do you have those in front of you? A. I do. Q. And are you aware of a NextEra company called Pegasus as you say? A. I am not familiar with any development efforts outside the State of South Dakota. I'm not personally involved with those. Q. And what is the business address of NextEra in Florida? A. It is -- give me one second, please. Q. Certainly. A. It's 700 Universe Boulevard, Juno Beach, Florida 33408. Q. Thank you. And I'd ask you to look at the second document that I put in front of you, which is called Claim of Lien. Does it identify the construction project as owned by Pegasus Wind, LLC of 700 Universe Boulevard, Juno Beach, Florida? A. Yes. That's how it's stated in this document. Yes, sir. Q. And isn't it true that NextEra as a company has a tendency to create multiple different subsidiaries or companies to do different projects in the wind energy siting business? A. Yes, sir." (Wilhelm), June 11, 2019, page 237, line 14 - page 239, line 1 and Exhibit I 31

61. The Applicant has failed to satisfy the requirements for the issuance of a permit.

**CONCLUSIONS OF LAW # 5 – *Threat to Economic Condition of Inhabitants***

62. The Applicant has not proven it has the financial means to complete or meet obligations ameliorating negative social impacts ARSD 20:10:22:23 (7), and have the ability to make planned measures to ameliorate adverse impacts on land ARSD 20:10:22:18 (4) and take measures to ameliorate negative biological impacts on aquatic ecosystems ARSD 20:10:22:17 and take measures to ameliorate negative biological impacts ARSD 20:10:22:16 Applicant has not met its burden of proof. SDCL 49-41B-22 (1) (2) (3)

**FINDINGS OF FACT #6 – *Threat to Economic Condition of Inhabitants***

The Commission finds:

**A.**

63. The Applicant, Crowned Ridge Wind, LLC, is not a financially viable company. “There is no balance sheet or annual profit and loss statement for Crowned Ridge Wind, LLC.” Although the Project under review for permitting has an “estimated capital cost of approximately \$400 million”. (Wilhelm), June 11, 2019, page 236, lines 20-21, Exhibit A1, page 17.

**B.**

64. The Applicant's parent company, NextEra, [Exhibit A29] will not guarantee the performance of terms and conditions of this permit. The Applicant has not proven that this is a financially viable or sound project. "Q. But the Applicant is Crowned Ridge. NextEra is the big cheese. That's a big company. I'm asking it will guarantee the performance of whatever terms and conditions the honorable Commission may consider should it grant a permit? A. NextEra Energy Resources isn't a party to this. Q. Okay. So what's your answer? A. No." (Massey), June 11, 2019, page 285, lines 6-14

65. The Applicant has failed to satisfy the requirements for the issuance of a permit.

#### **CONCLUSIONS OF LAW #6 – *Threat to Economic Condition of Inhabitants***

66. The Applicant has the burden of proof to establish (2) The facility will not pose a threat of serious injury to the 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. Applicant has not proven this is a financially viable or sound project. The Application fails to meet its burden of proof SDCL 49-41B-22: (2) (3)

#### **FINDINGS OF FACT #7 – *Incomplete Sound Level Studies***

The Commission finds:

**A.**

67. Applicant witness Haley testified that sound from 20-25 miles away is impacting non-participating landowner receptors. “Commissioner Nelson: So you're telling me the Dakota Range turbines would impact Mr. Robish's property? Witness: That's what it looks like, yes. Commissioner Nelson: He's got to be a good 20 miles, 25 miles from the Dakota Range turbines. Witness: That's the only difference that I could find between the models.” (Haley), June 12, 2019, page 391, lines 18-24

**B.**

68. The Applicant did not analyze all turbines from neighboring wind projects, therefore did not present information proving non-participating landowner residences are within county ordinance noise limits. Exhibit A43-2 shows that 17 Dakota Range turbines were included in sound studies related to this Application. Docket EL 18-003 approved 72 turbines for Dakota Range I and II Wind Farm. Docket EL 18-046 Dakota Range III applied for 42 turbines, whose application was granted a permit. 17 of the total 114 Dakota Range turbines were considered in the Applicant’s sound study. All Dakota Range I, II and III wind turbines are within 20-25 miles of non-participating landowner residences in this Application. Docket EL 18-053 Deuel Harvest Wind Farm has been granted a permit by the PUC. A significant number of the Deuel Harvest Wind Farm wind turbines are within 20-25 miles of residences in this Application. Failure to include all 114 Dakota Range turbines and the Deuel Harvest turbines within 20-25 miles of residences within this Application boundary in the Applicant’s sound impact studies results in failure to prove county noise ordinance limits are met. Applicant’s Exhibit A57, does not address the sound effects of all receptors in the Project area. The table does not include any residences in Stockholm and only 3 of the 17 residences



in Waverly. Also not included are in the sound impact study are Gregory Richter and Helen Comes [Exhibit A6, page 21] residences just south of Waverly, which are in the project boundary. There is no ARSD or SDCL that allows for an exception to leave a residence out of a sound study. Neither the table at A57, nor elsewhere in the Application, is a report or study provided concerning additional wind farm projects in the area and the possible cumulative sound effects of multiple projects on the aforementioned residences. The Applicant has not given a true picture of how many receptors (homes and property lines) may be impacted by the effects of sound. Exhibit A57 and Exhibit A6

**C.**

69. The Applicant has not proven that project residences within Dakota Range I, II, III and Deuel Harvest are not being impacted by the Applicant's noise emission. Therefore, the burden of proof regarding cumulative effects of multiple wind farms has not been taken into consideration.

70. The Applicant has failed to satisfy the requirements for the issuance of a permit.

**CONCLUSIONS OF LAW #7—*Incomplete Sound Level Studies***

71. The Applicant did not calculate, reveal and assess demonstrated or expected hazards to the health and welfare of human, plant and animal communities which may be cumulative or synergistic consequences of siting the proposed facility in combination with any operating energy conversion facility existing or under construction. ARSD 20:10:22:13 and (3) analysis

of the compatibility of proposed facility and present land use of the surrounding area with special attention paid to the effects of rural life. ARSD 20:10:18 (3) Applicant has failed to meet its burden of proof. SDCL 49-41B-22(1)(3)

**FINDINGS OF FACT #8 – *Hearsay and Incompetent Testimony***

The Commission finds:

**A.**

72. Applicant witness Sappington testified she is able to adopt the testimony of Kimberly Wells because they worked closely together on the Project. Wells is an employee of NextEra Energy Resources, LLC in Houston, TX. Sappington is an employee of SWCA in Bismarck, ND. Exhibit I-29

73. Mr. Ganje: “Q. And in your professional capacity have you had the opportunity to work with Kimberly Wells? A. Yes. Q. Please describe your working relationship with Kimberly Wells. A. Yes. I report directly to Kimberly Wells as part of the Crowned Ridge Project. We have gone back and forth and worked hand in hand on the environmental permitting and studies for the Crowned Ridge Wind Project.” [(Sappington), June 11, 2019, page 169, line 24 – page 170, line 7] “Q. And did you have any role in working with Kimberly Wells in preparation of that testimony? A. Yes. *We* helped prepare her testimony.” [Emphasis added] (Sappington), June 11, 2019, page 170, lines 13-15

**B.**

74. The Applicant has failed to provide sufficient evidence Applicant witness Sappington worked with Kimberly Wells and as a result is not qualified to adopt her testimony. There is no evidence of correspondence between Applicant witness Sappington and Wells in the Application. This is confirmed during Applicant witness Sappington's testimony when she admits there are no emails with her included in any correspondence: "I don't believe there are any e-mails filed by me with my name on them." [(Sappington), June 11, 2019, page 186, lines 9-10] The Applicant witness Sappington adaptation of Kim Wells' testimony is unreliable and will not be considered by the Commission.

**C.**

75. Applicant informed the Commission, "This letter is to inform you that due to Kimberly Wells not being available for the evidentiary hearing on this docket, Sarah Sappington is adopting all of the responses of Kimberly Wells to Data Requests, including but not limited to the February 19, 2019 responses 1-4 and 1-5 to Staff's First Set of Data Requests; the March 18, 2019, responses 2-3, 2-8, 2-13, 2-15, 2-16 through 2-24, 2-37 and 2-38 to Staff's Second Set of Data Requests; and the March 22, 2019 responses 1-34 through 1-37, 1-39, 1-40, 1-90 through 1-92 and 1-146 and 1-147 to Intervenor's First Set of Data Requests."

Exhibit A30

**D.**

76. "The testimony -- my main testimony, page 3, indicates the avian point count surveys were completed from April to November 2017 and raptor nest aerial surveys were completed from

April and May 2017 and into the spring of 2018.” (Sappington), June 11, 2019, page 175, line 15-19

**E.**

77. Applicant witness Sappington testified that her employee, Kely Mertz, not herself, conducted the correspondence with the two most important governing agencies; SDGFP and the US Fish and Wildlife Service (USFWS). Further, there is no evidence that Applicant witness Sappington was even included in direct communication with Kely Mertz and these agencies. This is supported by Applicant witness Sappington’s testimony, “Kely Mertz is a colleague that works at SWCA. I’ve worked directly with her on this project.” [(Sappington), June 11, 2019, page 186, lines 11-12] “Not all of the e-mail correspondence that goes on between Crowned Ridge and SWCA is included in this Application. My name would be on those kinds of communications, but I do not see my name on any e-mail directly, for example, on the Exhibit E, which was for -- or Exhibit A1-E, which was correspondence with South Dakota Game, Fish & Parks, which my colleague Kely Mertz conducted.” (Sappington), June 11, 2019, page 187, line 14-21

78. Sappington admitted she is not a wildlife biologist. Chairman Hanson: “You are not a wildlife biologist, are you? A. That’s correct. I’m an archeologist.” (Sappington), June 11, 2019, page 208, lines 16-18

79. Applicant witness Sappington admitted she relied on hearsay. “A I have not personally done that. I know our biologists have studied eagles and the folks that we have that have looked specifically at the eagle issues, the bird issues, they would be able to speak to the actual

distance. But from what I understand this one and a half mile for this project is a sufficient buffer for eagle nests.” (Sappington), June 11, 2019, page 209, lines 4-10

80. Applicant witness Sappington’s testimony was hearsay and her testimony is unreliable.

81. The Applicant has failed to satisfy the requirements for the issuance of a permit.

### **CONCLUSIONS OF LAW #8 – *Hearsay and Incompetent Testimony***

82. The testimony of witness Sappington, the documents introduced through the witness will not be considered and will be inadmissible. Admissibility of expert testimony is governed by SDCL 19–19–702 (2019) (Rule 702). A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (a) The expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) The testimony is based on sufficient facts or data;
- (c) The testimony is the product of reliable principles and methods; and
- (d) The expert has reliably applied the principles and methods to the case’s facts.

83. SDCL § 19-19-702 (2019). An expert may base an opinion on facts or data that the expert has been made aware of or personally observed. Id. § 19-19-703 (2019). A fundamental baseline for reliability is that experts are limited to offering opinions within their expertise. *Brain v. Mann*, 129 Wis. 2d 447 (1986); *Garland v. Rossknecht*, 2001 S.D. 42 (2001).

84. And Evidence Rule 703 was not intended to abolish the hearsay rule and to allow a witness, under the guise of giving expert testimony, to in effect become the mouthpiece of the witnesses on whose statements or opinions the expert purports to base his opinion. *Ely v. Cabot Oil & Gas Corp.*, 2016 WL 4169220, at \*6–7 (M.D.Pa. 2016) (citing see, e.g., *Factory Mut. Ins. v. Alon USA L.P.*, 705 F.3d 518, 523-24 (5th Cir. 2013); *In re Wagner*, CIV A 6-CV-01026, 2007 WL 966010, at \*4 (E.D. Pa. Mar. 29, 2007) (“The Federal Rules of Evidence do not permit experts to simply ‘parrot’ the ideas of other experts or individuals....”).

85. A testifying expert may rely on the opinions of non-testifying experts as a foundation for the opinions within the testifying expert's field of expertise. Rule 703, however, is not a license for an expert witness to simply parrot the opinions of non-testifying experts. *Aquino v. County of Monterey Sheriff's Department*, 2018 WL 3548867, at \*4 (N.D. Cal. 2018); see also *Matter of James Wilson Assoc.*, 965 F.2d 160, 172-173 (7th Cir. 1992) (“The architect could use what the engineer told him to offer an opinion within the architect's domain of expertise, but he could not testify for the purpose of vouching for the truth of what the engineer had told him—of becoming in short the engineer's spokesman.”).

86. Permitting an expert to testify outside of their field of expertise is a reversible error. See *Khoury v. Philips Medical Systems*, 614 F.3d 888, 893 (8th Cir. 2010) (citing see, e.g., *Wheeling Pittsburgh Steel Corp. v. Beelman River Terminals, Inc.*, 254 F.3d 706, 715–16

(8th Cir.2001) (holding a district court abused its discretion in permitting a hydrologist to testify about safe warehousing practice outside of his expertise).

87. In this proceeding, Ms. Sappington is not a reliable expert for the testimony of Ms. Wells, which addressed the fields of wildlife biology. Ms. Sappington does not have sufficient knowledge or experience to testify to or adopt the testimony that addresses wildlife biology. It has not been shown by a preponderance of the evidence that Ms. Sappington has the training, education, or experience necessary to assess the accuracy, merit or sufficiency of the wildlife surveys and wildlife mitigation strategies, upon which the Commission plans to base its decision.

88. Ms. Sappington plainly adopted the statements and conclusions of Dr. Wells. In so doing, Sappington provided an expert opinion on wildlife biology that is outside the scope of her expertise in archeology and project planning — the expert statements she made both at the hearing and those filed in her adopted testimony should be excluded as inadmissible. By way of example, Dr. Wells’ testimony in her pre-filed testimony provided an opinion on “potential adverse impacts to wildlife from the Project” that was adopted word for word by Sappington. This is one of the many statements and conclusions of Sappington that relies on inadmissible hearsay. Sappington’s statements, further, were hearsay. Sappington does not benefit from the rule that allows experts to rely on prepared facts. Sappington’s testimony and opinions are likely to mislead the Commission and prejudice the Intervenor on wildlife issues.

89. The witness' testimony will not be considered by the Commission in this proceeding as she was not qualified in the areas discussed.

**FINDINGS OF FACT #9 – *Absent Cultural and Historical Study***

The Commission finds:

**A.**

90. The Applicant has not provided evidence establishing there has been a cultural impact study conducted in the northeast area of the Project, formerly known as Cattle Ridge. Applicant has not proven there will not be a negative impact on cultural resources and other areas of cultural significance as a result of the proposed permit.

**B.**

91. A significant portion of the project area under review with this Application was not reviewed by the SD State Historical Preservation Society and its representative, Staff witness Olson. This is evident by the map that was submitted to Staff witness Olson through email communication. This map excluded the entire northeast portion of the Project area under consideration with this Permit Application. Exhibit A1-B, pages 68-71.

**C.**

92. This finding is confirmed by Staff witness Paige Olson's testimony that she did not review the entire northeast portion of the project area during her cultural impact study. "Q. The area



that you studied was that which is found in Exhibit A1-B, page 71? A. To best of my knowledge, it is, yes.” (Olson), June 12, 2019 page 548, lines 9-11

93. The Applicant has failed to satisfy the requirements for the issuance of a permit.

#### **CONCLUSIONS OF LAW #9 – *Absent Cultural and Historical Study***

94. The proposed Application provided a missing cultural study for 15,500 acres of the proposed project, which study is required by law. Community Impacts... (6) A forecast of the impact on landmarks and cultural resources of historic, religious, archaeological, scenic, natural, or other cultural significance. The information shall include the applicant's plans to coordinate with the local and state office of disaster services in the event of accidental release of contaminants from the proposed facility. ARSD 20:10:22:23 Applicant must file all data, exhibits and testimony with its application. Applicant failed to timely and fully file a cultural study. ARSD 20:10:22:39 Applicant has failed to meet its burden of proof pursuant to SDCL 49-41B-22 (1)

#### **FINDINGS OF FACT #10 – *Failure to Relocate Turbines***

The Commission finds:

**A.**

95. The record does not demonstrate that Applicant has minimized impacts from noise. Staff witness Hessler stated the turbine placement proposed by the Applicant is affecting the

welfare of the citizens. “The rest of it is purely a matter of annoyance basically. I guess that would fall under the welfare Category.” [(Hessler), June 6, 2019, page 105, lines 20-22] “Q. Would 40 [db(A)] be acceptable to the welfare of the public as a permit condition? A. 40 [db(A)] would be a good place to be. I wish the project could achieve that.” (Hessler), June 6, 2019, page 74, lines 10-13

**B.**

96. Staff witness Hessler recommended 16 turbines be relocated to protect non-participating citizens. “The 16 units that I believe are unduly and unnecessarily affecting non-participating landowner residences are circled in black in Exhibit DMH-2, which is a mark-up of the latest sound contour plots.” [Exhibit S1, page 6, lines 2-5] The Commission finds that the recommendation of Staff witness Hessler is a matter concerning the health and welfare of the public and that any reduction in the number of the so recommended turbine relocations advised by the witness to be relocated is a failure of Applicant’s burden of proof regarding the health and welfare of the inhabitants.

**C.**

97. The Applicant offered to address only seven of the turbines that were recommended to be removed by Staff witness Hessler. “I’m excited to say that we were able to come up with seven locations that were proposed by Hessler to make advances in sound optimization efforts, and I appreciate everybody’s time.” The Applicant’s refusal to remove the 16 recommended turbines clearly shows the Applicant is not concerned about protecting the best interests of non-participating residents. (Wilhelm), June 11, 2019, page 232, lines 11-14

**D.**

98. The Applicant confirms their plan to only address seven of the 16 turbines that Staff witness Hessler recommended be relocated through testimony of Project Manager Wilhelm. “Q. I understand from your testimony today that you are suggesting by this most recent iteration of the project that there will be seven turbine relocations based on Hessler's recommendation; is that correct? A. Seven of the turbines -- seven of the 16 turbine locations recommended by Mr. Hessler were taken into consideration. Yes, sir.” [(Wilhelm), June 11, 2019, page 248, lines 17-22] “Q. You're not going to move 16 of them? A. We have agreed to moving seven turbine locations. Q. You haven't agreed to move 16? A. That's correct. We agreed to move seven.” (Wilhelm), June 11, 2019, page 249, lines 19-22

**E.**

99. The Applicant will not move 16 turbines that were recommended for relocation by Staff witness Hessler, but will only agree to the possible relocation of seven turbines. Yet the original sites could still be used in Applicant's discretion. “Witness: When you say they may be coming back we're marking them as an all the as in worst-case scenario that we cannot consider another turbine location. We're committing to those seven turbines being -- the Hessler seven we're committing to not using those seven. We'd like to reserve the right of having just an alternate to consider in the event that something else was to occur that's unknown to us at this time during the construction process.” (Wilhelm), June 11, 2019, page 267, lines 4-12

**F.**

100. The Applicant's offer only addresses seven of the 16 turbines that were recommended should be relocated by Staff witness Hessler. The Applicant's several witnesses in this proceeding do not reflect any dispute or criticism of the recommendations of Mr. Hessler that 16 turbines should be relocated. To not follow the recommendations of Staff witness Hessler puts at risk the health and welfare of non-participating citizens. Exhibit A61, page 6, section 28.

101. None of Applicant's proposed 'moving of seven turbines' complies with the Staff witness' recommendations. None of this proposed action by Applicant shows that Applicant is taking adequate action to protect the health, safety and welfare of project inhabitants. The proposed action by Applicant does not adequately protect non-participants. The Applicant is over-careful regarding its own interests at the expense of the project community, the inhabitants and non-participants.

102. The Applicant has failed to satisfy the requirements for the issuance of a permit.

**CONCLUSIONS OF LAW #10 – *Failure to Relocate Turbines***

103. A relocation of a minimal number of the turbine relocations contrary to the recommendation by Staff witness Hessler is a failure of Applicant's burden of proof regarding the health and welfare of the inhabitants. The 16 turbine locations which are recommended by witness Hessler to be relocated because they are "unduly and unnecessarily

affecting non-participating residences” cannot be ignored by the Commission. The Applicant’s several witnesses in this proceeding do not reflect any dispute or criticism of the recommendations of Mr. Hessler that 16 turbines should be relocated. Applicant has not met its burden of proof in this Application pursuant to SDCL 49-41B-22 (3).

**FINDINGS OF FACT #11 – *Failure of Compliance with Regulations***

The Commission finds:

**A.**

104. The Applicant’s Project Manager Wilhelm stated that five or ten feet GPS location discrepancies in certain turbines caused the FAA to require the Applicant to file a new FAA No Hazard Determination Permit for those turbines that had GPS location changes. “A. When we filed our locations with the FAA for all of our proposed turbines...there was a discrepancy for five turbines on the exact GPS location. That was tied to it. So whether that be five feet off or 10 feet off, there was a discrepancy. So we had to refile and restart the process for those five specific locations.” (Wilhelm), June 11, 2019, page 253, line 18 – page 254, line 1

**B.**

105. Although the FAA is sensitive to 5-10 feet turbine location changes, Staff and Applicant have agreed to allow a 250-foot shift in turbine placement post-PUC permitting. “Is it accurate to say that Applicant is accepting of a 250-foot setback as ordered in recent dockets? A. That's correct.” (Edwards and Wilhelm), June 11, 2019, page 252, lines 19-22

**C.**

106. The allowed 250 feet (which circular distance would encompass 4.5 acres) or less turbine location change is further detailed in proposed agreed upon conditions between Staff and Applicant. “Applicant may make turbine adjustments of 250 feet or less from the turbine locations identified at the time a Facility Permit is issued without prior Commission approval...” Exhibit A61, page 4, Item 22

**D.**

107. NextEra Energy Resources, LLC, the parent-company to the Applicant, has a history of aeronautical accidents resulting in loss of lives in South Dakota. Project Manager Wilhelm admits there has been an aeronautical accident as a result of another NextEra Energy Resources wind project during his testimony, “Q: Has any NextEra facility in the State of South Dakota ever been involved in an aeronautical accident where an airplane flew into one of the towers owned and operated by NextEra? A. I am aware of such an incident. Yes, sir.” (Wilhelm), June 11, 2019, page 236, line 23 – page 237, line 1 and line 9

**E.**

108. FAA compliance and safe aeronautical practices are important not only to commercial passenger operations, but important to the state’s agricultural sector. The Project boundary includes a total of 24,934.53 agricultural acres which rely heavily on air crop-dusting. The ability of the local air crop-dusting operations to operate safely is important to support the agricultural operations within the Project. [Exhibit A1, page 48]

109. The Applicant has failed to satisfy the requirements for the issuance of a permit.

**CONCLUSIONS OF LAW #11** – *Failure of Compliance with Regulations*

110. The proposed conditions agreed upon by Staff and Applicant regarding turbine placement shifts are made for the benefit of the Applicant’s ease of construction only and results in changes that do not take the safety and welfare of the public into consideration. The Applicant failed to forecast the impact on (1) commercial and industrial sectors, and government facilities or services and (5) transportation facilities ARSD 20:10:22:23 (1)(5) Applicant failed to provide an analysis of land use compatibility with special attention paid to the effects of the business of farming ARSD 20:10:22:18(2) Applicant failed to meet its burden of proof under SDCL 49-41B-22(1)(2)(3) and SDCL 49-41B-1

**FINDINGS OF FACT #12** – *Commission will Disregard False and Misleading Evidence and Testimony*

The Commission finds:

**A.**

111. Applicant witness Haley let his Professional Engineering licenses expire. “Back in 2016 I elected to let my registration lapse and not renew it.” (Haley), June 12, 2019, page 344, lines 5-6

**B.**

112. Applicant witness Haley continued to represent himself as a Professional Engineer to the public and the Commission although he was no longer a Professional Engineer. (See Intervenor Exhibits I 20, I 21, I 22, I 23, I 24, I 25, I 26, I 27, I 29, I 30 and Applicant Exhibits A1-H, A1-I, A8, A9, A10, A11) This also includes a resume submitted to the Intervenor as late in the Application process as May 30, 2019. Exhibit I 15b

**C.**

113. Applicant witness Haley told the public he was a Professional Engineer at the Public Input Hearing for the Docket 19-003, March 20, 2019, Waverly, SD. Applicant witness Haley confirmed his Public Input Hearing statement through testimony: “Q: Well, isn't it true that on March 20 of this year you stated that you were at that time -- I'll use your words and I'll give you a copy of the transcript if you'd like to confirm this. You stated, ‘to answer your first question, yes, I am a registered professional engineer.’ And that was a statement you made in South Dakota at one of the hearings on this Application. A: If that's a quote, then that's what I said.” Applicant Witness Haley has purposely misled the Intervenor, the public and the Commission to believe he is a Professional Engineer when he is not. Applicant Witness Haley has proven to be untruthful and unreliable. (Haley), June 12, 2019, page 346, line 18 - page 347, line 2 and Exhibit I 30

114. The Applicant has failed to satisfy the requirements for the issuance of a permit.



**CONCLUSIONS OF LAW #12** - *Commission will Disregard False and Misleading Evidence and Testimony*

115. The testimony and evidence presented by Applicant witness Haley will not be considered by the Commission. Any person practicing engineering shall submit evidence of qualifications to the board to be licensed. A person is “practicing engineering” if he makes a “verbal claim, sign, advertisement” ... or represents himself by using the title that implies he to be a Professional Engineer SDCL 36-18A-8. Witness Halley may not imply or represent that person is a Professional Engineer SDCL § 36-18A-9. It is unlawful to provide false or misleading information to the Commission. SDCL 49-1-9.1

**FINDINGS OF FACT #13** – *Failure to Comply with Grasslands Guidelines*

The Commission finds:

**A.**

116. The Applicant has proposed placing 19 wind turbines on land that has been determined to be undisturbed native grassland. The siting of turbines on grasslands is certain to result in severe fragmentation from turbines, access roads, crane paths, and collection lines.

“Fragmentation results in the direct loss of habitat and diminishes the value of remaining habitat.” Exhibit S3 page 13, lines 4-5 and Exhibit A10

117. Staff witness Kirschenmann’s SDGFP recommendation stated efforts should be made to avoid placements of turbines and new roads in grasslands, especially untilled native prairie. “Approximately 19 of the planned 130 turbines appear to be positioned in native prairie. A

continued recommendation for wind development is to avoid untilled native prairie habitat...”

Exhibit S3, page 12, lines 10-13

118. Sent on July 12, 2017, Exhibit A1-B, page 80, is the last map submitted to the docket with regard to correspondence to SDGFP, where Kirschenmann is the Deputy Director of Wildlife Division and the Chief of Terrestrial Resources. The map provided does not include the northeastern 15,500 acres of the proposed Project. Exhibit A1-B, page 80.

119. Commissioner Fiegen: “There's been a lot of moving parts, and one of the moving parts is certainly the turbine locations. And, you know, they -- it's certainly been at the eleventh hour. In your testimony you talk about 19 turbines being placed on native prairie land or prairie grasses. Has the Applicant given you new numbers that that 19 may be different because of some of the changes that just happened in the last few days? Witness:  
Commissioner Fiegen, in response to that, no, I do not have any new figures, nor do I believe that our environmental review biologist has any new figures. We derived that from the information that was in the Application itself.” (Kirschenmann), June 12, 2019, page 529, lines 6-19

**B.**

120. The Application states, “The Applicant will avoid impacts to native grasslands to the extent practicable;” The Applicant has not made an effort to avoid impacts to native grasslands which are habitat to many important species. Once the land is broken for construction, it will forever more not be native grassland. Exhibit A1, page 12

### C.

121. The Dakota skipper, which is listed as threatened by SDGFP, relies on native grassland habitat. “The Dakota skipper (*Hesperia dacotae*) is an obligate of undisturbed, native prairies, and generally inhabits wet lowlands dominated by bluestem grasses, or dry uplands that are a mix of bluestem and needle stem grasses (Vaughn 2005). Larvae have been observed feeding on several grasses, although little bluestem (*Schizachyrium scoparium*) is the preferred food source; the preferred nectar source for adults is purple coneflower (*Echinacea angustifolia*; Vaughn 2005), in addition to other prairie flowering species.” Exhibit A1, page 55
122. The SDGFP has listed the Powershiek skipperling as an endangered species and it also relies on native grasslands for its home. “The Poweshiek skipperling (*Oarisma poweshiek*) lives in high quality tallgrass prairie in both upland, dry areas and low moist areas (USFWS 2014). Nectar species for the Poweshiek skipperling include purple coneflower, black-eyed Susan (*Rudbeckia hirta*), palespike lobelia (*Lobelia spicata*), and other flowering prairie species. There is no definitive research available regarding which plant species are necessary for larvae to develop, but they appear to select finestemmed grasses and sedges, such as slender spike rush (*Eleocharis elliptica*), prairie dropseed (*Sporobolus heterolepis*), and little bluestem (USFWS 2014; Shepherd 2005). Skadsen (2015) suggests the Poweshiek Skipperling may be extirpated from South Dakota.” Exhibit A1, page 55

### D.

123. Native grasslands of northeastern South Dakota are unique and significant terrestrial ecosystems supporting important species of animal communities. "The Great Plains also supports the last remaining expanses of native temperate grasslands in North America (Stephens et al. 2008; Rashford et al. 2011; Doherty et al. 2013); thus, the increase in habitat loss and fragmentation associated with wind development has adverse impacts on wildlife (McDonald et al. 2009; Kiesecker et al. 2011)." Exhibit S3, page 40. Many residents of South Dakota and others seek out the native grasslands for bird watching and hunting, both bring economic value to rural communities. The Applicant has failed to recognize the significance of the limited resource of native grasslands, which as part of the Northern Great Plains, legislature has set forth a permitting process to ensure energy facilities produce minimal adverse impacts on the environment. SDCL 49-41B-1

124. The Applicant has failed to satisfy the legal requirements for the issuance of a permit.

#### **CONCLUSIONS OF LAW #13 – *Failure to Comply with Grasslands Guidelines***

125. Native grasslands contain important flora species that are both food and habitat for animal communities. The Applicant failed to provide a description of the existing grassland environment at the time of the submission of the Application, including plant communities, or provide estimates of changes in the existing environment which are anticipated to result from construction and operation of the proposed facility. ARSD 20:10:22:13 Applicant did not provide an analysis of the impact of construction and operation of the proposed facility or provide measures to ameliorate negative biological impacts regarding grasslands. ARSD

20:10:22:16 Applicant failed to provide an (3) analysis of compatibility and effects with present land use with special attention paid to the effects of rural life and (4) planned measures to ameliorate adverse impacts. ARSD 20:10:22:18 (3) (4) Applicant failed to provide environmental study on native grasslands. SDCL 49-41B-11 (11) Applicant failed to meet its burden of proof under SDCL 49-41B-22 (1) (2) and 49-41B-1

**FINDINGS OF FACT #14 – *Failure to Comply with Water Line Regulations***

The Commission finds:

**A.**

126. The land use map submitted by the Applicant does not identify rural water lines within the Project boundary. Exhibit A1-A, Figure 13 and Exhibit A35-12

**B.**

127. The Applicant was alerted to the lack of rural water lines on their maps through the Intervenor’s fourth Data Request: “4-8) Why does neither map show rural water lines in the project boundary?” Although the Intervenor raised the concern to the Applicant, the Applicant chose to ignore applicable law and gave the following response to Intervenor’s fourth data request: “4-8) Response: There is no requirement to provide a map showing rural water lines within the project boundary.” Applicant fails to meet Application requirements. Exhibit I 29.

## **CONCLUSIONS OF LAW #14 – *Failure to Comply with Water Line Regulations***

128. Rural water lines are considered transportation facilities in the state of South Dakota.

SDCL 31-26-22 The Transportation Commission may promulgate rules and the Department of Transportation may issue permits, to allow other utilities, including rural water service pipelines, whether above or below ground, to operate the facilities over, under, or along public grounds, streets, alleys and highways under its jurisdiction in this state. The Applicant failed to provide a map showing rural water transportation facilities. ARSD 20:10:22:11 The Applicant failed to provide a forecast of the impact on transportation facilities. ARSD 20:10:22:23 (5) The Applicant failed to provide all data and exhibits upon filing. ARSD 20:10:22:39 Applicant has not met its burden of proof pursuant to SDCL 49-41B-22 (1) (4).

## **FINDINGS OF FACT #15 - *Mammals***

The Commission finds:

### **A.**

129. Applicant's expert witness Wells represented in her pre-filed testimony to the Commission in support of the Application that "The current Project site . . . avoids and minimizes impacts to natural (e.g., wetlands, wildlife) and cultural (e.g., cairns, stone circles) resources." This representation is an erroneous representation of the record. The following findings reflect why no weight should be given to Applicant's representations and Application on the issue addressed in this Finding.

130. Merriam-Webster's Dictionary defines "terrestrial" as, *of or relating to the Earth or its inhabitants* and defines "ecosystems" as, *the complex of a community of organisms and its environment functioning as an ecological unit*. Within the terrestrial ecosystem of the Application Project area fauna exist. Fauna includes all animal life present in a particular region, including mammals. The Applicant failed to consider the effects on mammals in the Application. The Applicant cannot know what mammals even exist in the Project area because the Applicant admits, "Mammal inventories have not been completed for the project." [Exhibit A1, page 53] This fact was brought to the attention of the Applicant and Commission earlier in the Application process during Intervenor's First Motion to Dismiss, "there is a failure to provide adequate information on the effect of the proposed facility on terrestrial ecosystems, and there is a failure to properly quantify species in detail and plan measures to ameliorate any negative biological impacts. I'm referring here to Rule 13 and Rule 16. Which, again, these are mandatory provisions of an Application. And the relevant words of the rules say that one -- that is, the Application shall calculate these matters and that an analysis of the impact *shall* be provided." [Emphasis added] (Mr. David Ganje), May 9, 2019, page 11, lines 11-21

131. "14. *The Applicant's Project information contains no mammal studies, and does not discuss such fauna as the Project's effect on foxes, beavers and burrowing animals.*", yet the issue remains entirely unaddressed. Affidavit of Patrick Lynch, paragraph 14, filed 4/25/19.

**B.**

132. The Prefiled Testimony of Staff witness Kirschmann stated that the USFWS guidelines advise the use of *rigorous* scientific wildlife surveys for wind farms. [Emphasis added] [Exhibit S-3, page 6, lines 5-6 and lines 8-9] The USFWS guidelines define wildlife as “Birds, fishes, mammals, and all other classes of wild animals and all types of aquatic and land vegetation upon which wildlife is dependent.” Although surveying was recommended by Staff witness Kirschmann, none occurred regarding mammals.

**C.**

133. The Applicant’s failure to adequately analyze the impacts to mammals through the Application is supported by testimony. Staff witness Kirschmann stated the following during his testimony, Ganje: “Q. Do you know of any mammal surveys that were completed on this project?” Kirschmann: “A. off the top of my head I do not recall any mammal surveys conducted in this project area.” [(Kirschmann) June 12, 2019, page 513, lines 20-23] Without the Applicant rigorously conducting mammal inventories, surveys or studies, it is impossible for the Applicant to meet its burden of proof related to the effects of the Application on mammal ecosystems.

**D.**

134. The failure by the Applicant to adequately address mammals is highlighted by the Applicant’s neglect in considering the impacts to the state-protected northern river otters. The Application states, “The closest documented observation of the northern river otter was along an unnamed tributary approximately 13.8 miles east of the Project Study Area.”



Exhibit A1, page 60. This is inaccurate as detailed in Reply Brief of Intervenor in Support of Motion to Deny and Dismiss, dated May 6, 2019, page 16.

135. The Applicant did not supply the SDGFP with maps of the entire proposed project.

[Exhibit A1-B page 80] The Applicant states in Exhibit A1, page 60, Section 11.3.1.3.1,

“The closest documented observation of the northern river otter was along an unnamed tributary approximately 13.8 miles east of the Project Study Area (South Dakota Natural Heritage Database spatial data accompanying correspondence shown in Appendix B).”

Because of Applicant’s use of incorrect maps, it is not known if the proceeding statement is correct.

136. The Applicant has failed to satisfy the requirements for the issuance of a permit.

#### **CONCLUSIONS OF LAW #15 - *Mammals***

137. By its own admission, the Applicant failed to provide environmental studies on

mammals. SDCL 49-41B-11 (11) The Applicant did not provide a description of the existing environment, estimate of the changes as a result of construction and operation, environmental effects revealing the demonstrated or suspected hazards to health and welfare of animal communities, which may be cumulative or synergistic consequences of siting the proposed facility in combination with any operating energy conversion facilities, existing or under construction. ARSD 20:10:22:13 The Applicant failed to provide information on the effect of the proposed facility including existing information resulting from biological surveys to

identify and quantify the terrestrial flora potentially affected within the wind energy site, and an analysis of the impact of construction and operation of the proposed facility on the terrestrial biotic environment, *important species*, [emphasis added] the planned measures to ameliorate negative biological impacts as a result of construction and operation of the proposed facility. ARSD 20:10:22:16 Applicant has failed to meet its burden of proof. SDCL 49-41B-22 (1)(2)(3)

**FINDINGS OF FACT #16 – *Failure to Provide Reliable Technical Evidence***

The Commission finds:

**A.**

138. The Applicant in this proceeding submitted a technical expert report by way of Applicant witness Haley and his company EAPC. The report and documents attached to Mr. Haley's report in support of the report on sound modeling and flicker analysis include multiple technical maps identifying the detailed results and opinions submitted by Haley and his company for the benefit of the Commission, the public and Applicant. This evidence was submitted for the Commission's consideration based on the reliability, accuracy and efficacy of the technical information all in support of the pending wind farm permit Application in this proceeding.

**B.**

139. All of the Haley and EAPC technical maps include the following language: "Neither EAPC nor any person acting on their behalf: (a) makes any warranty, express or implied, with respect to the use of any information disclosed on this drawing; or (b) assumes any

liability with respect to the use of any information or methods disclosed on this drawing.

Any recipient of this document, by their acceptance or use of this document, releases EAPC, its parent corporations and its affiliates, from any liability for direct, indirect, consequential, or special loss or damage whether arising in contract, warranty, express or implied, tort or otherwise, and irrespective of fault, negligence, and strict liability. The responsibilities for the applications and use of the material contained in this document remain solely with the client.”

### C.

140. This disclaimer language written by Haley and his company EAPC to the Commission, to the public, to Interveners and to the Applicant absolve, release and disclaim responsibility, liability and representation of accuracy as well as representation of reliability of the reports concerning sound modeling and flicker analysis. Any party using or relying on the reports, including the Commission, the Interveners, and the affected public, release Haley and his company from responsibility for the reliability or accuracy of the information.

141. The Commission finds the submitted evidence unreliable.

### **CONCLUSIONS OF LAW #16 – *Failure to Provide Reliable Technical Evidence***

142. The testimony and supporting documentation provided by Haley, and his company EAPC, is not reliable. The Commission cannot rely upon the soundness of evidence provided in the described testimony and supporting documentation which is disclaimed as to accuracy and reliability. The Commission will not consider as a part of its decision the evidence of

Haley and his company. The presented evidence does not meet the burden of proof required of the Applicant on the matters of health, safety or welfare of inhabitants. Based upon the above findings, the described testimony and supporting documentation is not the product of reliable principles. SDCL 19-19-702. The Applicant has not met its burden of proof. The Applicant has not shown that the proposed facility will not substantially impair the health, safety or welfare of the state's population. SDCL 49-41B-22 (2)(3)

### **FINDINGS OF FACT #17 – *Takings and Violation of Ordinance***

The Commission finds:

#### **A.**

143. Codington County Ordinance 68 mandates noise levels to remain at 50 db(A) at nonparticipating landowner's property lines. "Codington County - 50 dBA, average A-weighted sound pressure level effects at the property line of existing sound receptors." [Exhibit A1, page 11] During the Application process, the Applicant knowingly ignored this mandate and chose to apply a different sound level at its own discretion, by measuring sound levels at residences instead of property lines. This non-compliance in violation of the county ordinance distracts and hides the relevant impacts to nonparticipating landowners. Exhibit A57

#### **B.**

144. Mr. Ganje: “Q. Mr. Haley, looking at Exhibit A57, A57, and I think it's Bates -- let's look at Bates marked page number 1. So it's Bates -- it's paged on the bottom. A57, the Table. A. All right. I have it. Q. Okay. Very good. Thank you. Now this is a noise only table for Codington County; Correct? A. No. This is for the entire project. Q. Oh. This includes Codington and Grant? A. Yeah. Grant is further down in the table. Q. Indeed. Okay. Yeah. I was looking at the Codington entries. I think on the Codington entries you testified but I want to make sure that's correct that you didn't do this table based on the boundary lines. You, rather, did it on structures and not the boundary line; correct? A. That is correct. Q. Okay. So that -- and this is not a final table? A. This is a final table. Q. Okay. Why didn't you use the Codington ordinance boundary line protocol on this? A. The purpose of Hessler's suggestions were to reduce the sound levels at the homes. And so with that in mind, there was no point in comparing the reduction at a boundary line to his anticipated reductions at structures.”  
(Haley), June 12, 2019, page 404, line 16- page 405, line 17

**C.**

145. Exhibit A63 ignores the Codington County ordinance of noise levels at the property line. In the first paragraph of Exhibit A63 amended proposed condition, it states “exclusive of all unrelated background noise, shall not generate a sound pressure level (10-minute equivalent continuous sound level, Leq) of more than 45 dBA as measured within 25 feet of any non-participating residence unless the owner of the residence has signed a waiver.” Exhibit A63

146. The Applicant has failed to satisfy legal requirements for the issuance of a permit. Placing a calculation point for determining noise at a dwelling or residence rather than at the

required property line prejudices the landowner's right to enjoy and use its property. A property line may be located some distance away from a dwelling or residence and therefore receive greater and louder sound levels emitting from a wind turbine.

### **CONCLUSIONS OF LAW #17 – *Takings and Violation of Ordinance***

147. It is a violation of Codington County Ordinance 68 to allow Applicant to take the action it proposes. SDCL 49-41B-22 (1) Intervenor as residents and owners of property within the State of South Dakota claim the benefits and protections of the South Dakota Constitution, including Article 6, § 2, providing that “[n]o person shall be deprived of . . . property without due process of law.” The Intervenor as citizens of the United States, claim the benefits and protections of provisions of the United States Constitution, similar to provisions above. Intervenor claim the benefits and protections of Article 6, § 13, South Dakota Constitution, providing, inter alia, that “[p]rivate property shall not be taken for public use, or damaged, without just compensation . . . .” Placing a calculation point for determining sound at a dwelling or residence rather than at the required property line prejudices the landowner's right to enjoy and use its property. A property line may be located some distance away from a dwelling or residence and therefore receive greater and louder sound levels emitting from a wind turbine. Noise and sound disruptions based on government action by granting a permit in violation of an existing law or ordinance 1.) would be a taking, 2.) would be a disruption in the reasonable use of the property 3.) and would provide a possible claim for damages to the value of the land. The Commission will not approve a calculation of sound or noise as described by the acts of Applicant in the above Findings of Fact. Applicant has not met its burden of proof under SDCL 49-41B-22 (1)(2)(3)

## **FINDINGS OF FACT #18 – *Pre-Construction Sound Study Required***

The Commission finds:

### **A.**

148. The Commission concludes that the Application does not contain a baseline or benchmark ambient sound survey pre-construction; and the Commission further concludes that such a sound survey is warranted and necessary to protect the health and welfare affected parties. The Applicant did not provide a pre-construction sound study with the Application. Staff witness Hessler testified that a pre-construction sound study is recommended. “Q. Wasn't it your recommendation at the end of section 4.2 regarding pre-construction sound surveys that you recommended them where there is a desire to carry out a complete and thorough assessment? A. Yes. That's exactly right.” (Hessler), June 6, 2019, page 81, lines 18-22

### **B.**

149. To exclude a pre-construction sound study denies the Commission the ability to fully understand the impact sound has on properties in the Application. This finding is supported by Staff witness Hessler during his testimony. “Q. Does the lack of such a pre-construction sound survey deny the Commission information that the Commission should have access to regarding the impact level on the property in the project area?” [(Hessler), June 6, 2019, page 83, lines 18-21] Continuing after an objection, “A. Okay. All I'm saying in my testimony there is that it would have been better practice on their part to do a survey and determine if

some lower design goal were appropriate. Q. But wouldn't it assist the PUC in making a decision in this case? A. Yes. I would have rather had them do a survey.” (Hessler), June 6, 2019, Page 84, line 12-18

**C.**

150. The Applicant choosing to not conduct a pre-construction sound study evidences Applicant’s lack of concern regarding the imposed impacts to the community arising from the proposed project.
151. Staff witness Hessler stated “...I mentioned earlier that I would have had a much more favorable opinion of the Applicant’s sound study if they had carried out a survey of existing conditions and used the results to establish an ambient-based design target for the project, *because such an approach would have demonstrated a desire to make project noise as unobtrusive and acceptable to the community as possible.*” [Emphasis added] Exhibit S1, page 7, lines 13-17
152. Staff witness Hessler further testified in this proceeding that “There's nothing in the initial studies that demonstrates any kind of effort to go beyond the regulatory limit or to adapt the project to the specific site or try to minimize sound levels.” [(Hessler), June 6, 2019, page 66, lines 7-10] “I would fault the study for focusing exclusively on regulatory compliance and *failing to evaluate or assess the potential noise impact of the project on the community.* For example, it is common, but by no means universal, industry practice to perform one or more baseline sound surveys of the existing conditions within the site area



and then compare the expected project sound levels at residences to this pre-existing sound level under comparable wind conditions. The amount by which the project sound level exceeds the background level generally determines the project's perceptibility and potential impact and it is good practice to attempt to minimize this differential." [Emphasis added]  
Exhibit S1, page 3, lines 11-20

153. In Mr. Hessler's pre-filed testimony he also opines that, "Q. Does that mean you believe a survey should have been done? A. A survey and a subsequent impact analysis, while not absolutely essential in all cases, would have demonstrated a concern for the community's welfare and acceptance of the project." Exhibit S1, page 4, lines 4-7.

**D.**

154. Staff witness Hessler, in his report and recommendations to the Minnesota Public Service Commission, commonly referred to as the NARUC Report, advised that, "not all sites are the same and it is often prudent to perform a survey of existing conditions to establish just what the baseline sound levels are at residences in the proposed project area. In general, the audibility of, and potential impact from, any project is a function of how much, if at all, its noise exceeds the prevailing background level. A comparison between the predicted/modeled sound level from a proposed project and the actual background sound level measured in the project area under comparable wind and weather conditions gives a site-specific indication of the potential relative impact from the project." Exhibit I 2, page 22, paragraph 1

155. Hessler’s Minnesota PSC report stated, “Such a survey is not essential in all cases but is recommended when:

- Unusually high background levels are suspected...
- *Unusually low background levels are suspected*
- *The project is unusually large or controversial*
- *There is simply a desire to carry out a complete and thorough assessment*” [Emphasis added] Exhibit I 2, page 22, paragraph 2

156. “The objective of a pre-construction survey is to establish what levels of environmental sound are currently being experienced at typical residences within the general project area in order to form a baseline against which the predicted sound emissions from the project can be compared...” Exhibit I 2, page 22, paragraph 3

#### **E.**

157. Applicant’s witness Ollson, in his co-authored article *Health Effects and Wind Turbines: A Review of the Literature*, explains, “Conducting further research into the effects of wind turbines (and environmental change) on human health, emotional and physical, as well as the effect of public consultation...reducing pre-construction anxiety, is warranted. Such an undertaking should be initiated prior to public announcement of a project..., baseline noise and infrasound monitoring... noise modeling and then post-construction follow-up on all of the aforementioned aspects. We believe that research of this nature should be undertaken by...acoustical engineers, health scientists, epidemiologists, social scientists and public health physicians.” Exhibit A24-2, page 9, column 2, paragraph 2

**F.**

158. Failure to complete a pre-construction sound study by the Applicant has resulted in a turbine design layout that is flawed. “Q. Mr. Hessler, in your testimony in this proceeding, on page 7 of your testimony you've said that the ship has sailed with regard to the question of doing a pre-construction sound survey; is that correct? ... A. That should have been done way back before the modeling was even done to establish baseline conditions and potentially come up with a design target.” (Hessler), June 6, 2019, page 66, line 17 – page 67, line 3

159. The Applicant has failed to satisfy the legal requirements for the issuance of a permit.

**CONCLUSIONS OF LAW #18 – *Pre-Construction Sound Study Required***

160. The Commission concludes that a pre-construction sound study should have been completed and submitted. Applicant failed to provide a complete analysis of the compatibility and effects of the proposed facility with/on present land use, rural residences, farmsteads, family farms, ranches and noise sensitive land uses, of the surrounding area, with special attention paid to the effects on rural life, ARSD 20:10:22:18 (3). Applicant has failed to meet its burden of proof under SDCL 49-41B-22 (1)(2)(3)

**FINDINGS OF FACT #19 – *False Representation of Application***

The Commission finds:

**A.**

161. On the last day of the Evidentiary Hearing, at the last hour, the Applicant submitted without review, Exhibit A67 – Table C-1, and Exhibit A68 – Table C-2. These tables show a change of shadow flicker encroachment to zero on 15 receptors/residences in Codington County and 18 receptors in Grant County. These tables do not identify all receptors/residences in the footprint and misrepresent material facts.

162. Staff witness Hessler suggested in his pre-filed testimony that 16 of the Applicant's primary turbines adversely affect many non-participants and recommended they be relocated. "16 units that I believe are unduly and unnecessarily affecting non-participating residences." [Exhibit S1, page 6, lines 3-4] The Applicant has indicated that seven of the 16 turbines would possibly be relocated, but the Applicant refused to drop them completely. [CR-16, CR-19, CR-23, CR-60, CR-49, CR-67 and CR-68. Exhibit A61, Condition 28] The Applicant does not propose where these seven turbines will be relocated. These seven turbines have not been 'dropped' by the Applicant. The Applicant reserves the right to use them. These turbines are still considered active. Retaining seven turbines as reserve locations does not change their status as to casting flicker and noise if they are used.

163. Commissioner Fiegen questions Project Manager Tyler Wilhelm, "Q. Well, you're still reserving the right to use those turbines; correct? A. We would like the right to use those turbines, if needed." (Wilhelm), June 11, 2019, page 274, lines 7-10

164. These seven turbines have not moved from their plotted positions, their status has not changed to ‘dropped’. All other active turbines in the project retain their estimated flicker values as before, yet the Applicant erased the turbines’ effects to the non-participants on their revised Tables. [Exhibit A67, Exhibit A68] Flicker appears as 0:00 on Applicant’s Shadow Flicker Tabular Results, falsely changing the shadow flicker consequences of these turbines. The Applicant wishes the Commission to believe it has improved conditions because of the Hessler recommendations for non-participants, when in fact the effects remain.
165. The Applicant admits that they may use ‘dropped’ turbines. “...the Applicant shall file an affidavit with the Commission setting forth why the alternative turbine cannot be used and identifying which primary turbine will be used.” Exhibit A61, number 28
166. The Applicant has failed to satisfy the requirements for the issuance of a permit.

#### **CONCLUSIONS OF LAW #19 – *False Representations of Application***

167. By entering the described exhibits electronically, with inadequate notice for the Intervenor to review before the close of the Evidentiary Hearing, the Applicant denied the Intervenor the opportunity to review and evaluate the accuracy of the evidence. ARSD 20:10:22:04(5) Applicant has failed to meet its burden of proof under SDCL 49-41B-22(1)(2)(3) Further, this process denies Intervenor due process of the law.

#### **FINDINGS OF FACT #20 - *Due Process***

The Commission finds:

**A.**

168. The Applicant submitted its Application on January 30, 2019 and the first session of the Evidentiary Hearing was held June 6, 2019. On that first day of the Evidentiary Hearing, June 6, 2019, Staff apprised the Commission that the Application had “48 possible contingent problems”. [(Ganje to Hessler), June 6, 2019, page 75, line 14] In the following days of the Evidentiary Hearing, additional discrepancies of the Application surfaced.

169. Where the Applicant had indicated on maps that land parcels were actively leased, [Exhibit A22-3] on May 23, 2019 three land parcels were suddenly reported as “lease expired”. [Exhibit A32-2] The result was the dropping of three turbines (CR-79, Alt 19 and Alt 20). “The next turbine I’ll go to is CR 79. This is another turbine that will be dropped because of the lack of collection from the William Comes property which is sited nearby that turbine is stranded and we have elected to drop that turbine. We also have turbine CR Alt 20, the CR Alt 19. Those are located on expired wind easement agreements and we do not have the ability to proceed with those properties at this time so those turbines are being marked as dropped turbines.” (Wilhelm), June 11, 2019, page 229, line 23 – page 230, line 16

170. In response to Intervenor’s Fifth Data Request, the Applicant on June 4, 2019 provided Exhibit A45-3 which is an undated and inconsecutively numbered map intended as an update to Applicant Exhibit A35-1, Public Lands map. For the first time in the process the Applicant showed and admitted it will be crossing USFWS grassland/wetland easements and turbines will be placed on USFWS wetland easement land. This was one week before the hearing.

The map, Exhibit A35-1 changed drastically, now showing seven turbines on USFWS wetland easements, several collector line wetland intersections and a crane path through a USFWS grassland/wetland easement.

171. On June 7, 2019, a day after the Evidentiary Hearing began, in response to the demand by the Commission to finalize outstanding land easements which would define the project, two land parcels were said to be confirmed and changed from “pending” to “lease active”, thus resulting in the Applicant’s access to 43 turbines that up until that date were still unknown. Exhibit A53, map.

172. Following the demand of the Commission to provide final land status, the Project layout still continued to change. Subsequent to the final land status update, the Applicant made additional changes and submitted to the docket on June 10, 2019 Exhibit A54. This map was submitted the day before the official Evidentiary Hearing, and several days after the first witness testimony. This on-going change and re-shaping of the Application, even throughout the Evidentiary Hearing, clearly impeded the Intervenor’s ability to understand and argue the validity of the Application. Project details understood by Staff witness Hessler, were fundamentally changed and different by the time the last Staff witness was called as witness. An understanding of the Application was impossible.

173. Unexpectedly on June 11, 2019, the Applicant submitted Exhibit A55 which included a legend indicating 16 turbines “dropped”, and five turbines moved, leading many to believe that 16 turbines had been dropped.

174. The Applicant did not reveal new coordinates of moved turbines to the Intervenor, nor explain how far or in what direction the moves happened. This last minute change and murky circumstances of the Project change directly impact the Intervenor and their families' ability to challenge and/or understand the Project and its impacts.

175. The Applicant provided monumental changes to the project by the way of these last minute exhibits, stifling due process. See 6/7 filed A52; 6/10 filed A54; 6/11 filed A55, A56, A57, A58, A59, A60, A61; 6/12 filed A62, A63, A64, A65, A66, A67, A68, A69; 6/14 filed A70. The late submissions deprive Intervenor and the Commission the opportunity to fully evaluate the proposed project that would affect the State of South Dakota for a long time.

176. The ability for the Intervenor to understand the changes (who, when, why) was not available. Applicant's changes affect the Application, and ultimately the lives of the Intervenor and the neighboring non-participating landowners.

**B.**

177. At the conclusion of the Evidentiary Hearing on June 12, 2019, the following relevant facts are unknown:

178. It is not known if the five turbines identified during the hearing that have not received their FAA Determination of No Hazard Permit will be approved for construction. Exhibit A62



179. It is not known what turbine locations will be activated. This is admitted by the Applicant on several occasions during the Evidentiary Hearing:

180. “Q. Are you prepared to commit to what alternative sites will be used to move the so-called Hessler turbines you've agreed to move before the end of this hearing? A. No, sir.” (Wilhelm), June 11, 2019, page 271, line 23 – page 272, line 1

181. Question from Commissioner Nelson during the 2nd Motion to Dismiss hearing: “Based on Friday's filing I understand that you dropped turbine 79. My question is have you chosen an alternate replacement for that turbine?” [(Nelson), June 11, 2019, page 2, lines 23-25] Answered by Applicant attorney Murphy, “We haven't chosen what alternative turbine we will use.” (Draft Transcript, Intervenor's Second Motion to Deny and Dismiss) (Murphy), June 11, 2019, page 3, lines 12-13

182. During the hearing on Intervenor's Second Motion to Dismiss, Commissioner Nelson admonished the Applicant for their ‘murky’ application at that stage of the process. The Applicant's project should be clearer as the process progresses toward the Evidentiary Hearing, instead the Commission finds it has become more ‘murky’.

183. Commissioner Fiegen was struggling with the clarity and timeliness of Applicant's information when she commented at the June 11th Evidentiary Hearing, “Well, because this

was filed so late, I would certainly appreciate the continuous explanation.” (Fiegen), June 11, 2019, page 229, lines 7-9

184. Chairman Hanson mentioned the Applicant being dilatory more than once in the process. His most recent statement concerning the Applicant’s hindering of the process came June 11th at the Evidentiary Hearing, “As I said previously, accuracy is extremely important as we go through this process. And it does place a disadvantage on the Intervenors from a standpoint if the information that's provided is dilatory, they need to have the opportunity to go through the process.” (Draft Transcript, Intervenors’ Second Motion to Deny and Dismiss) (Hanson), June 11, 2019, page 4, line 24 - page 5, line 13

185. The lack of clarity of turbine activation sites is further detailed in the Joint Stipulation of Agreed to Conditions between Crowned Ridge and PUC Staff. [Exhibit A61, paragraph 28] Ganje questions Wilhelm, “I understand from your testimony today that you are suggesting by this most recent iteration of the project that there will be seven turbine relocations based on Hessler's recommendation; is that correct? A. Seven of the turbines -- seven of the 16 turbine locations recommended by Mr. Hessler were taken into consideration. Yes, sir. Q. ...did you testify earlier and provide this Commission with information as to where on this project map you're going to relocate those seven turbines? A. We have not specified exactly what alternate turbines will be utilized in place of those seven. But those seven -- our alternate turbine locations are available as well as all noise and shadow flicker, you know, impacts on non-participating and participating. Association you know, regardless of the seven that would be utilized, that information is readily available to the Commission. Q.

Well, no, it isn't. Isn't it true that you have not reported to this Commission today on the first day of the hearing on the merits of this proceeding, that that you haven't picked or selected where you're going to put those turbines? A. We have not identified the exact seven alternate locations that will be utilized.” (Wilhelm), June 11, 2019, page 248, line 17- page 249, line 18

186. The process the Applicant has used in presenting the Application denies Intervenor due process of the law.

#### **CONCLUSIONS OF LAW #20 - *Due Process***

187. The Commission concludes as a matter of law that in this proceeding Intervenor were—and continue to be—deprived of the evidence and facts necessary to analyze and contest the Application, and that Intervenor have been denied due process of the law. U. S. Const. amend XIV; S.D. Const. Art. VI, §2. “[D]ue process is flexible, and calls for such procedural protections as the particular situation demands.” *Morrissey v. Brewer*, 408 U.S. 471.

#### **FINDINGS OF FACT #21 - *Proposed Conditions***

The Commission finds:

**A.**

188. All the preceding findings of fact and conclusions of law are incorporated into this finding of fact. The Applicant and Staff Counsel agreed upon proposed conditions to be recommended to the Commission. Staff Counsel also has a proposed condition not agreed upon between the Applicant and Staff Counsel. Exhibit A61, Exhibit A63 and Exhibit S7.
189. The proposed permit conditions were negotiated privately by and between Staff Counsel and Applicant representatives. Intervenors were not invited to participate in the negotiations. Intervenors have not approved the proposed conditions. Intervenors have not accepted the proposed conditions.
190. The Applicant has failed to satisfy the legal requirements for the issuance of a permit.

#### **CONCLUSIONS OF LAW #21 - *Proposed Conditions***

191. All the preceding conclusions of law are incorporated into this conclusion of law. The Applicant failed to meet its burden of proof that the proposed conditions will comply with all applicable laws and rules. SDCL 49-41B-22 and SDCL 49-41B-1 The process of creating and negotiating proposed conditions for the Commission to consider was done by two parties in this matter without the participation of Intervenors and was done with unfair prejudice to the Intervenors. The Commission Staff and the Applicant failed to negotiate in good faith in developing and submitting proposed conditions without the participation of Intervenors. The proposed conditions shall not be considered by the Commission under these circumstances.
- SDCL 19-19-403

**FINDINGS OF FACT # 22 - *Failure of the Application to Comply with Applicable Law and Rules***

(Note that the abbreviation “FOF” means Findings of Fact and “COL” means the corresponding Conclusions of Law.)

**FOF A.**

192. The Applicant has not provided a completed Ancillary Facilities Report, of access roads, crane paths, collector lines, concrete batch plant and laydown yard. (Olson) June 12, 2019, page 542, lines 1-9

**COL A.**

193. The Applicant has not met the requirement to provide a forecast of impact on transportation facilities and cultural resources of historic, religious, archaeological, scenic, natural or other cultural significance. ARSD 20:10:22:23 (5) (6) Upon filing, the Applicant was to file all data to support the Application. ARSD 20:10:22:39 Applicant has failed to meet its burden of proof under SDCL 49-41B-22 (1)

**FOF B.**

194. The Applicant failed to provide all required FAA Determination of No Hazard Permits. (Wilhelm) June 11, 2019, page 243, lines 7-10

**COL B.**

195. At this late time in the permitting process, the Applicant still has not provided an important document that affects turbine siting. Title 14 of the Code of Federal Regulations (14 CFR 77), ARSD 20:10:22:23 (5), Applicant has failed to meet its burden of proof under SDCL 49-41B-22 (1)

**FOF C.**

196. The Applicant failed to provide a Positive Determination from the Department of Energy. (Massey) June 11, 2019, page 244 line 22 – page 245, line 2 and page 245, lines 7-15

**COL C.**

197. At the late date of the Evidentiary Hearing when the Application is up for full review of all the proposed facts, including turbine locations, the Applicant admitted it is waiting for No Hazard Determinations from the FAA, and has failed to provide a letter of positive determination from the DOE. The Applicant has not met the requirements of ARSD 20:10:22:33:02 (6). Upon filing, the Applicant was to file all data and exhibits in support of the Application. ARSD 20:10:22:39 The Applicant did not update, provide a date, or notify the Commission on the permit list requirement regarding a government agency. ARSD 20:10:22:05 Applicant has failed to meet its burden of proof under SDCL 49-41B-22 (1)

**FOF D.**

198. The Applicant did not complete an Avian Study on a significant portion of the proposed project. (Sappington) June 11, 2019, page 177, line 24 – page 178, line 1

**COL D.**

199. The Applicant failed to complete environmental studies. SDCL 49-41B-11(11) The Applicant did not provide a description of the existing environment, estimates of changes as a result of construction and operation, environmental effects revealing the demonstrated or suspected hazards to health and welfare of animal communities which may be cumulative or synergistic consequences of the proposed facility in combination with any operating energy conversion facilities. ARSD 20:10:22:13 The Applicant also failed to provide biological surveys to quantify and identify terrestrial fauna and flora. Applicant has failed to meet its burden of proof under SDCL 49-41B-22 (1) (2) (3)

**FOF E.**

200. The Applicant did not provide a complete Cultural Study; the study was not completed on the entire northeast portion of the project area. (Olson) June 12, 2019, page 548, lines 9-11

**COL E.**

201. The Applicant failed to meet the requirements to forecast the impact on cultural resources of historic, religious, archaeological, scenic natural or other cultural significance. ARSD 20:10:22:33 (6) Applicant has failed to meet its burden of proof under SDCL 49-41B-22 (1)

**FOF F.**

202. The Applicant did not provide the distances between turbines in the Application.

**COL F.**

203. The Applicant failed to disclose the distances between wind turbines in the proposed project. ARSD 20:10:22:33:02 (1) Applicant has failed to meet its burden of proof under SDCL 49-41B-22 (1)

**FOF G.**

204. The Applicant did not disclose the conductor configuration and size, length of span between structures, and number of circuits per pole or tower for any electric interconnection facilities, or the number of circuits in the Application.

**COL G.**

205. The Applicant did not provide conductor configuration, size, length of span between structures, number of circuits per pole or tower, even after being informed of missing information on 4/25/2019. ARSD 20:10:22:33:02 (12) Applicant has failed to meet its burden of proof under SDCL 49-41B-22 (1)

**FOF H.**

206. The Applicant has not provided the full details of underground facilities in the contents of this Application.

**COL H.**

207. The Applicant has not provided the distance between access points conductor configuration and size and number. ARSD 20:10:22:33:02 (13) Applicant has failed to meet its burden of proof under SDCL 49-41B-22 (1)

**FOF I.**

208. The Applicant failed to provide setback distances from buildings, right of ways of public roads and property lines.

**COL I.**



209. The Administrative Rules require the Applicant provide setback distances from off-site buildings, right-of-way of public roads, and property lines. ARSD 20:10:22:33:02 (4)  
Applicant has failed to meet its burden of proof under SDCL 49-41B-22 (1)

**FOF J.**

210. The Applicant did not identify or provide an analysis of the effects the construction, operation and maintenance of the proposed facility will have on landmarks.

**COL J.**

211. The Applicant failed to provide an analysis of landmarks and the effects to them. ARSD 20:10:22:33:02 (6) Applicant has failed to meet its burden of proof under SDCL 49-41B-22 (1) (2)

**FOF K**

212. The Applicant failed to consider rural water lines as transportation facilities per SDCL 31-26-22. Exhibit A1-A Figure 13 and A45-3 and Exhibit I 29, 4-8. The Applicant did not include rural water lines on any maps of the Project.

**COL K**

213. Applicant failed to provide a map that included transportation facilities. ARSD 20:10:22:11 and ARSD 20:10:22:11 Applicant has failed to meet its burden of proof under SDCL 49-41B-1(1)

**FOF L**

214. The Application does not consider rural water lines as transportation facilities in South Dakota.

**COL L**

215. The Applicant failed to identify and analyze the effects and impacts of construction, operation and maintenance of the proposed facility on rural water lines, a transportation facility. ARSD 20:10:22:23(5) Applicant has failed to meet its burden of proof under SDCL 49-41B-22 (1) (2) (3)

**FOF M.**

216. The Applicant did not provide overhead photographs of the proposed wind energy site.

**COL M.**

217. The Applicant did not provide overhead photographs of the proposed wind energy site. ARSD 20:10:22:33:02 (7) Applicant has failed to meet its burden of proof under SDCL 49-41B-22 (1)

**FOF N.**

218. The Applicant did not complete a mammal study of the project area. See Exhibit A1 page 53 and (Kirschenmann) June 12, 2019, page 513, lines 20-23

**COL N.**

219. The Crowned Ridge Wind LLC Application is incomplete. Applicant has not provided a mammal study. ARSD 20:10:22:16 and SDCL 49-41B-11 Applicant has failed to meet its burden of proof under SDCL 49-41B-22 (1) (2) (3)

**FOF O.**

220. The Applicant did not provide details from the Applicant's completed geotechnical testing. (Thompson) June 11, 2019, page 324 line 13-22

**COL O.**

221. Applicant has not provided a written summary for the geotechnical features of the proposed wind energy project, and a description and the location of economic deposits. ARSD 20:10:22:14 (3)(4) Applicant has failed to meet its burden of proof under SDCL 49-41B-22 (1) (2)

**FOF P.**

222. The Applicant has not obtained a South Dakota General Permit for StormWater Discharges Associated with Construction Activity (SDRI 00000). (Sappington) June 11, 2019, page 192, lines 12-18

**COL P.**

223. The Applicant has not provided a completed SWPPP and has not provided planned measures to ameliorate negative total aquatic biological impacts as a result of construction and operation of the proposed facility. ARSD 20:10:22:17 and ARSD 20:10:22:20 Applicant has failed to meet its burden of proof under SDCL 49-41B-22 (1)

**FOF Q.**

224. The Applicant has not completed the Wildlife Conservation Strategy for the Project. See Exhibit A16, Exhibit 2-20 and (Sappington) June 11, 2019, page 201, lines 21-25

**COL Q.**

225. The Applicant has not completed the Wildlife Conservation Strategy that is required to provide planned measures to ameliorate negative biological impacts as a result of construction and operation of the proposed facility ARSD 20:10:22:16 and ARSD 20:10:22:13 Applicant has failed to meet its burden of proof under SDCL 49-41B-22 (1) (2)

**FOF R.**

226. Applicant failed to provide any Air Permits from the DENR. See Exhibit A16, 2-26.

**COL R.**

227. The Applicant failed to include on the list of permits, the need for DENR air permit and the list has not been updated. ARSD 20:10:22:05 The Applicant has not shown proposed facility will comply with all air quality standards. ARSD 20:10:22:21 Applicant has failed to meet its burden of proof under SDCL 49-41B-22 (1)

**FOF S.**

228. The Applicant has not identified the water source for the Project. See Exhibit A45, 5-10.

**COL S.**

229. The Applicant has failed to meet the requirement to provide a source of potable water supply or process water specifications of the aquifer to be used for the project. ARSD 20:10:22:15 (4) Applicant has failed to meet its burden of proof under SDCL 49-41B-22 (1) (2) (3)

**FOF T.**

230. The Applicant has failed to provide a US Army Corps of Engineers Determination (USACE) of Compliance Section 404 Clean Water Act. Exhibit A1, page 118.

**COL T.**

231. The list of permits required for this Application, does not state when a permit application will be/has been filed with USACE, the list has not been updated. ARSD 20:10:22:05  
Applicant has failed to meet its burden of proof under SDCL 49-41B-22 (1)

**FOF U.**

232. The Applicant has failed to provide for a NEPA Permit. Fed REGS. Exhibit A45-3

**COL U.**

233. The Applicant shall provide additional information necessary to meet burden of proof.  
ARSD 20:10:22:36 Applicant has failed to meet its burden of proof under SDCL 49-41B-22  
(1)

**FOF V.**

234. The Applicant has failed to provide for a South Dakota Aeronautics Commission Aeronautical (SDAC) Hazard Access Permit. Exhibit A1, page 118.

**COL V.**

235. The Applicant's list of permits required for this Application, does not state when the permit application will be/has been filed with SDAC, the list has not been updated. ARSD 20:10:22:05 Applicant has failed to meet its burden of proof under SDCL 49-41B-22 (1)

**FOF W.**

236. The Applicant has failed to provide for a SD DOT Highway Access Permit, Road Crossing Agreement, Utility Permit, Oversized/Overweight Permit. Exhibit A1, page 118.

**COL W.**

237. The Applicant's list of permits required for this Application, does not state when the permit application will be/has been filed with SD DOT, the list has not been updated. ARSD 20:10:22:05 Applicant has failed to meet its burden of proof under SDCL 49-41B-22 (1)

**FOF X.**

238. The Applicant has failed to provide for a Determination of Compliance South Dakota State Historical Society (SDSH) SDCL 1-19A-11.1. Exhibit A1, page 118.

**COL X.**

239. The Applicant's list of permits required for this Application, does not state when the permit application will be/has been filed with SDSHS the list has not been updated. ARSD 20:10:22:05 Applicant has failed to meet its burden of proof under SDCL 49-41B-22 (1) (2)

**FOF Y.**

240. The Applicant has failed to provide for a SD DOT Railroad ROW Utility Crossing Permit.

**COL Y.**

241. The Applicant failed to include on the list of permits the need for railroad utility crossing permit and the list has not been updated. ARSD 20:10:22:05 Applicant has failed to meet its burden of proof under SDCL 49-41B-22 (1)

**FOF Z.**

242. Applicant used outdated research information concerning rare plants in SD. The applicant admits “According to these sources, there are no records of federally or state-listed plant species in Codington or Grant Counties” the applicant did not provide a plant study. Exhibit A1, page 48. <https://gfp.sd.gov/rare-plants/> and <https://gfp.sd.gov/threatened-endangered/>

**COL Z.**

243. By admission, the Applicant failed to provide environmental studies on plants SDCL 49-41B-11 (11) The Applicant did not provide a description of the existing environment, estimate of the changes as a result of construction and operation, environmental effects revealing the demonstrated or suspected hazards to health and welfare of plant communities, which may be cumulative or synergistic consequences of siting the proposed facility in combination with any operating energy conversion facilities, existing or under construction. ARSD 20:10:22:13. The Applicant failed to provide information on the effect of the proposed facility including existing information resulting from biological surveys to identify and quantify the terrestrial flora potentially affected within the wind energy site, and an analysis of the impact of construction and operation of the proposed facility on the terrestrial biotic environment, *important species*, [emphasis added] the planned measures to ameliorate negative biological impacts as a result of construction and operation of the proposed facility ARSD 20:10:22:16 Applicant failed to meet its burden of proof under SDCL 49-41B-22 (1)(2)(3)

**FOF AA.**

244. The Applicant states the common species will inhabit the propose project area but still the Applicant failed to do a reptile and amphibian inventory and estimates of changes to animal communities, required by law. “Reptile and amphibian inventories have not been completed for the Project.” Exhibit A1, page 53 <https://www.sdherps.org/>

**COL AA.**

245. By admission, the Applicant failed to provide environmental studies on reptile and amphibian species SDCL 49-41B-11 (11) The Applicant did not provide a description of the existing environment, estimate of the changes as a result of construction and operation, environmental effects revealing the demonstrated or suspected hazards to health and welfare of animal communities, which may be cumulative or synergistic consequences of siting the proposed facility in combination with any operating energy conversion facilities, existing or under construction. ARSD 20:10:22:13. The Applicant failed to provide information on the effect of the proposed facility including existing information resulting from biological surveys to identify and quantify the terrestrial flora potentially affected within the wind energy site, and an analysis of the impact of construction and operation of the proposed facility on the terrestrial biotic environment, important species, the planned measures to ameliorate negative biological impacts as a result of construction and operation of the proposed facility ARSD 20:10:22:16 Applicant failed to meet its burden of proof under SDCL 49-41B-22 (1)(2)(3)

**FOF BB.**

246. The Applicant has failed to comply with the Western Area Power Administration (WAPA) letter of clearance on turbine placement. Exhibit A45-1.



**COL BB.**

247. The Applicant's list of permits required for this Application, does not state when the permit application will be/has been filed with WAPA, the list has not been updated, and the applicant did not provide notification was required by another government agency. ARSD 20:10:22:05 Applicant has failed to meet its burden of proof under SDCL 49-41B-22 (1)

**FOF CC.**

248. The Applicant has failed to comply with the RailRoad Crossing Agreement with Burlington Northern Santa Fe. Exhibit A16, 2-29.

**COL CC.**

249. The Applicant shall provide additional information necessary to meet burden of proof. ARSD 20:10:22:36 Applicant has failed to meet its burden of proof under SDCL 49-41B-22 (1)

**FOF DD.**

250. The Applicant discusses capital costs but not required construction costs. Exhibit A1, page 17.

**COL DD.**

251. The Applicant failed to provide a clear and basic requirement of the Application, the construction costs have not been provided. ARSD 20:20:22:09, Applicant has failed to meet its burden of proof under SDCL 49 - 41B-11 (1), SDCL 40-41B-22(1)

**CONCLUSION OF LAW #22** - *Failure of the Application to Comply with Applicable Law and Rules and Applicant's Failure to Meet Its Burden of Proof*

252. The Application does not meet the siting and legal criteria required by South Dakota Codified Laws. Construction of the Project does not meet the requirements of South Dakota Codified Law 49-41B. Applicant has not demonstrated that the proposed facility will comply with all applicable laws and rules. Applicant has not demonstrated that 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. Applicant has not demonstrated that the facility will not substantially impair the health, safety or welfare of the inhabitants.

253. The application process in this proceeding has denied and infringed upon Intervenor's due process rights including their opportunity to be heard at a meaningful time and in a meaningful manner. *Mathews v. Eldridge*, 424 U.S. 319, 333 (1976). The Applicant has failed to meet its burden of proof under SDCL 49-41B-22 and ARSD 20:10:01:15.01. The Application is denied. SDCL 49-41B-22 To the extent that any Finding of Fact set forth above is more appropriately a conclusion of law, that Finding of Fact is incorporated by reference as a Conclusion of Law.

**ORDER**

From the foregoing Findings of Fact and Conclusions of Law, it is therefore:

ORDERED, that the Application for the energy facility permit is denied.

Dated on \_\_\_\_\_

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**BEFORE THE SOUTH DAKOTA PUBLIC UTILITIES COMMISSION**

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

EL19-003

**CERTIFICATE OF SERVICE**

**EL19-003**

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I hereby certify that true and correct copies of the Intervenor's Proposed Findings of Fact and Conclusions of Law was served electronically on the above named parties on July, 2nd 2019.

/s/ David L Ganje 

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