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STATE OF SOUTH DAKOTA)
: SS
COUNTY OF CODINGTON)

IN CIRCUIT COURT
THIRD JUDICIAL CIRCUIT

<p>AMBER KAYE CHRISTENSON, ALLEN ROBISH, KRISTI MOGEN, AND PATRICK LYNCH</p> <p>Appellants</p> <p>vs.</p> <p>CROWNED RIDGE WIND, LLC AND SOUTH DAKOTA PUBLIC UTILITIES COMMISSION</p> <p>Appellees.</p>	<p>Case No. 14CIV19-000290</p> <p>NOTICE OF ENTRY OF ORDER AFFIRMING DECISION OF SOUTH DAKOTA PUBLIC UTILITIES COMMISSION</p>
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NOTICE IS HEREBY GIVEN that on April 20, 2020, the Honorable Carmen Means, Circuit Court Judge of the Third Judicial Circuit, signed an Order Affirming Decision of South Dakota Public Utilities Commission, which Order was entered and filed on April 20, 2020. Attached hereto and served herewith is a true and correct copy of said Order.

Dated this 23rd day of April 2020.

/s/ Amanda M. Reiss
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CERTIFICATE OF SERVICE

I, the undersigned, hereby certify that on the 23rd day of April, 2020, a true and correct copy of the foregoing *Notice of Entry of Order Affirming Decision of Public Utilities Commission, Order Affirming Decision of Public Utilities Commission, and Certificate of Service* was filed and served on all parties, through counsel for the parties via the Odyssey File & Serve system at their email addresses of record, upon the following:

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STATE OF SOUTH DAKOTA)
 : SS
COUNTY OF CODINGTON)

IN CIRCUIT COURT
THIRD JUDICIAL CIRCUIT

<p>AMBER KAYE CHRISTENSON, ALLEN ROBISH, KRISTI MOGEN, AND PATRICK LYNCH</p> <p>Appellants</p> <p>vs.</p> <p>CROWNED RIDGE WIND, LLC AND SOUTH DAKOTA PUBLIC UTILITIES COMMISSION</p> <p>Appellees.</p>	<p>Case No. 14CIV19-000290</p> <p>ORDER AFFIRMING DECISION OF SOUTH DAKOTA PUBLIC UTILITIES COMMISSION</p>
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Appellants, Amber Kay Christenson, Allen Robish, Kristi Mogen, and Patrick Lynch, having appealed from the South Dakota Public Utilities Commission's Final Decision and Order Granting Permit to Construct Facility in EL 18-003, and the parties having appeared by counsel of record, and the Court having considered the Briefs submitted by the parties and arguments of counsel, and the Court having issued its Memorandum Opinion on April 15, 2020, which is attached as Exhibit A and incorporated herein by this reference, it is hereby,

ORDERED, ADJUDGED and DECREED that the Decision and Order of the South Dakota Public Utilities Commission is affirmed.

Dated this _____ day of April, 2020.

Attest:
Hartley, Connie
Clerk/Deputy



ATTEST: Clerk of Courts

By: _____
Deputy

BY THE COURT:

Signed: 4/20/2020 10:42:34 AM

Handwritten signature of Carmen A. Means in black ink.

Honorable Carmen A. Means
Circuit Court Judge
Third Judicial Circuit

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STATE OF SOUTH DAKOTA)
 : SS
COUNTY OF CODINGTON)

IN CIRCUIT COURT
THIRD JUDICIAL CIRCUIT

AMBER KAY CHRISTENSON,)
ALLEN ROBISH, KRISTI MOGEN,)
And PATRICK LYNCH,)
)
Appellants,)
)
v.)
)
CROWNED RIDGE WIND, LLC, and)
SOUTH DAKOTA PUBLIC UTILITIES)
COMMISSION,)
)
Appellees.)

CIV 19-290

**MEMORANDUM
OPINION**

INTRODUCTION & STATEMENT OF FACTS

This matter comes before the circuit court on appeal by Appellants Amber Christenson, Allen Robish, Kristi Mogen, and Patrick Lynch (collectively "Appellants"), appealing the South Dakota Public Utilities Commission's ("the Commission's") Final Decision and Order Granting Permit to Construct Facility in EL 18-003 dated July 26, 2019. (AR 20684-714, Final Decision and Order Granting Permit to Construct Facilities and Notice of Entry with Permit Conditions).

Crowned Ridge Wind, LLC ("Crowned Ridge" or "Applicant") submitted its application for a facility permit for a 300 megawatt (MW) wind energy facility to consist of up to 130 wind turbines in Codington and Grant counties on January 30, 2019 ("the Project"). (AR 10-960). Within its application, Crowned Ridge submitted written testimony from five witnesses¹ (two of whom filed jointly). (AR 965-1023). On February 6, 2019, the Commission issued the Notice of Application; Order for and Notice of Public Input Hearing; and Notice for Opportunity to Apply

¹ The five witnesses included Kimberly Wells, Mark Thompson, Jay Haley, Tyler Wilhelm, and Sam Massey. (AR 961-2023).

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for Party Status. (AR 1026-27). Pursuant to SDCL §§ 49-41B-15 and 49-41B-16, the Commission scheduled a public input hearing on the Application on March 20, 2019, in Waverly, SD. (AR 1026-27). Five individuals intervened as parties before the April deadline and the Commission granted party status to each intervenor who filed before said deadline.² (AR 1070, 1322, 1463).

On April 9, 2019, Crowned Ridge filed written supplemental testimony for five witnesses (two of whom testified jointly).³ (AR 1467-1924). On April 10, 2019, Sarah Sappington adopted the direct testimony of Kimberly Wells. (AR 1925-44). On April 25, 2019, the intervenors filed a Motion to Deny and Dismiss the application. (AR 1957). A hearing on the Motion to Deny and Dismiss was held before the Commission on May 9, 2019. (AR 2055-91, Transcript of Ad Hoc Commission Meeting). On May 10, 2019, the Commission issued an Order Denying Motion to Deny and Dismiss and an Order to Amend Application. (AR 2092-93). Also on May 10, 2019, the Commission issued an Order for and Notice of Evidentiary Hearing, scheduling an evidentiary hearing for June 11-14, 2019 to be conducted in Room 413, State Capitol Building, Pierre, SD. (AR 2094-95). Further on May 10, 2019, the intervenors filed the testimony of John Thompson and Allen Robish (AR 2096-2104);⁴ while Commission Staff filed the direct testimony of Paige Olson, David Hessler, Tom Kirschenmann, and Darren Kearney (AR 2105-3505). Intervenors submitted a Second Motion to Deny and Dismiss and brief in support on May 17, 2019. (AR 3523-55). On May 24, 2019, Crowned Ridge submitted written rebuttal testimony for Mark Thompson, Dr. Chris Ollson, Andrew Baker, Dr. Robert McCunney, Richard Lampeter, Sarah Sappington, Jay Haley, Tyler Wilhelm, and Sam Massey. (AR 3698-4818). The second motion was heard by

² The Commission granted party status to Amber Christenson, Allen Robish, and Kristi Mogen on February 22, 2019. (AR 1070-71). On March 21, 2019, the Commission issued an order granting party status to Melissa Lynch. (AR 1322). On April 5, 2019, the Commission granted party status to Patrick Lynch and established a procedural schedule. (AR 1463-64).

³ The five witnesses included Chris Ollson, Jay Haley, Tyler Wilhelm, Sam Massey, and Mark Thompson.

⁴ During the evidentiary hearing, the intervenors did not move for their testimony to be made part of the evidentiary record, and, therefore, it is not part of the record. (AR 20686).

the Commission on June 6, 2019. (AR 12245-52, Motion Hearing Transcript). The Commission denied the second motion.

On June 6, 11, and 12, the Commission held evidentiary hearings, during which Crowned Ridge entered into the record its application, testimonies, and hearing exhibits. (AR 6944-11404). Among the exhibits submitted were Exhibits A43-1 and 56 (isoline maps) that confirmed the Project was demonstrated to be in compliance with the modeled sound and shadow flicker thresholds ultimately adopted by the Commission in its Order (AR 17225-31; 17821-34; 20697-98; 20708-710; 20712). At the hearing, Crowned Ridge and Commission Staff presented witness testimony. (AR 11928-12059, 12253-12504, 12521-12823). Appellants did not call any witnesses. The Hearing Examiner presided over the hearing and each of the Commissioners was present for the entirety of the hearing. On June 13, Tim and Linda Lindgren, represented by counsel, filed a Late Application for party status. (AR 20101-104) On June 25, 2019, the Commission heard the late-filed request for party status and voted 2-1 to deny the Lindgrens' request. (AR 20189-192, 20196-20209, 20222-23). The parties submitted post-hearing briefs on July 2, 2019. (AR 20257-20358, Intervenor-Appellants; 20445-491, Crowned Ridge; 20492-20510, Commission Staff).

On July 9, 2019, the Commission met to consider whether to issue a facility permit for the project. (AR 20565-20652). After consideration of the evidence of record, applicable law, and the briefs and oral arguments of the parties, the Commission voted unanimously to issue a Facility Permit for the Project, subject to certain conditions (AR 20554-20652). On July 26, 2019, the Commission issued its Final Decision and Order Granting Permit to Construct Facility; Notice of Entry with Permit Conditions (AR 20684-20714). The Facility Permit included 45 conditions, including sound and shadow flicker thresholds and avian monitoring and protection. *Id.* Appellants' issues on appeal were filed August 29, 2019, and an initial brief on November 8, 2019.

The Commission filed its response brief on December 19, 2019, and Appellee Crowned Ridge filed its brief on December 20, 2019. This court affirms the Commission's decision.

STANDARD OF REVIEW

SDCL § 49-41B-30 permits any party to a permit issuance proceeding aggrieved by the final decision of the Public Utilities Commission to obtain judicial review of that decision by filing a notice of appeal in circuit court. "The review procedures shall be the same as that for contested cases under Chapter 1-26 [the Administrative Procedures Act.]"⁵ *Id.* The review procedures are governed by SDCL § 1-26-36, which requires a reviewing court "to give great weight to the findings made and inferences drawn by an agency on questions of fact." SDCL § 1-26-36; *see also In re Otter Tail Power Co. ex rel. Big Stone II*, 2008 S.D. 5, ¶ 26, 744 N.W.2d 594, 602 (agency findings of fact are reviewed under the clearly erroneous standard).

Questions of law are reviewed de novo on appeal from an administrative agency's decision. *Anderson v. South Dakota Retirement System*, 2019 S.D. 11, ¶ 10, 924 N.W.2d 146, 149 (citing *Dakota Trailer Mfg., Inc. v. United Fire & Cas. Co.*, 2015 S.D. 55, ¶ 11, 866 N.W.2d 545, 548) (emphasis added). Matters of reviewable discretion are reviewed for abuse. *Id.* (citing SDCL § 1-26-36(6)) (emphasis added). "An agency's action is arbitrary, capricious or an abuse of discretion only when it is unsupported by substantial evidence and is unreasonable and arbitrary." *In re Midwest Motor Express*, 431 N.W.2d 160, 162 (S.D. 1988) (citing *Application of Dakota Transportation of Sioux Falls*, 291 N.W. 589 (S.D. 1940)) (emphasis added). *See also Sorensen v. Harbor Bar, LLC*, 2015 S.D. 88, ¶ 20, 871 N.W.2d 851, 856 ("An abuse of discretion 'is a

⁵ "The sections of Title 15 relating to practice and procedure in the circuit courts shall apply to procedure for taking and conducting appeals under this chapter so far as the same may be consistent and applicable, and unless a different provision is specifically made by this chapter or by the statute allowing such appeal." SDCL § 1-26-32.1; *see also* SDCL § 15-6-81(c) ("SDCL Ch. 15-6 does not supersede the provisions of statutes relating to appeals to the circuit courts.").

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fundamental error of judgment, a choice outside the range of permissible choices, a decision, which, on full consideration, is arbitrary or unreasonable.” (internal quotation omitted)). “Substantial evidence” is defined as “such relevant and competent evidence as a reasonable mind might accept as being sufficiently adequate to support a conclusion.” SDCL § 1-26-1(9). The agency’s factual findings are reviewed under the clearly erroneous standard. *Id.* (citing SDCL § 1-26-36(5)) (emphasis added). A decision is clearly erroneous if, after reviewing the entire record, the reviewing court is left with a definite and firm conviction that a mistake has been made. *Steinmetz v. State, DOC Star Academy*, 2008 S.D. 87, ¶ 6, 756 N.W.2d 392, 395 (internal citations omitted).

It is well settled that a court will not weigh the evidence or substitute its judgment for that of the Commission, rather, it is the court’s function to determine whether there was any substantial evidence in support of the Commission’s conclusion or finding. *See, e.g., Application of Svoboda*, 54 N.W.2d 325, 327 (S.D. 1952) (citing *Application of Dakota Transportation of Sioux Falls*, 291 N.W. 589 (S.D. 1940)). The court affords great weight to the findings made and inferences drawn by an agency on questions of fact. *See* SDCL § 1-26-36, providing in relevant part:

The court may reverse or modify the decision if substantial rights of the appellant have been prejudiced because the administrative findings, inferences, conclusions, or decisions are:

- (1) In violation of constitutional or statutory provisions;
- (2) In excess of the statutory authority of the agency;
- (3) Made upon unlawful procedure;
- (4) Affected by other error of law;
- (5) Clearly erroneous in light of the entire evidence in the record; or
- (6) Arbitrary or capricious or characterized by abuse of discretion or clearly unwarranted exercise of discretion.

The agency’s decision may be affirmed or remanded but cannot be reversed or modified absent a showing of prejudice. *Anderson*, 2019 S.D. 11 at ¶ 10, 924 N.W.2d at 149 (citing SDCL § 1-26-36) (emphasis added). Even if the court finds the Commission abused its discretion, the

Commission's decision may not be overturned unless the court also concludes that the abuse of discretion had prejudicial effect.⁶ *Sorensen*, 2015 S.D. 88, ¶ 20, 871 N.W.2d at 856 (emphasis added).

Here, Appellants primarily assert that the Commission abused its discretion when making certain findings and conclusions related to sound, shadow flicker, and avian impact—and ultimately in granting Crowned Ridge's application for a facility permit.⁷ The proper standard of review for findings of fact, however, is clearly erroneous. Appellants also challenge the agency's conclusion that the Crowned Ridge wind facility will not harm the social and economic condition of inhabitants in the wind energy facility siting area and that the facility will not substantially impair the health, safety, or welfare of the inhabitants within the siting area as clearly erroneous based upon the record in its entirety.⁸ This presents a mixed question of fact and law, reviewable de novo. *Johnson v. Light*, 2006 S.D. 88, ¶ 10, 723 N.W.2d 125, 127 (“Mixed questions of law and fact that require the reviewing Court to apply a legal standard are reviewable de novo.” (quoting *State ex rel. Bennett v. Peterson*, 2003 S.D. 16, ¶ 13, 657 N.W.2d 698, 701)).

APPLICABLE LAW AND ANALYSIS

A. Judicial Notice of the Dakota Range Proceedings

⁶ A reviewing court will reverse an administrative agency decision when the substantial rights of the appellant have been prejudiced because the administrative findings, inferences, conclusions or decisions are affected by error of law, are clearly erroneous in light of the entire evidence in the record, or are arbitrary and capricious, or are characterized by abuse of discretion, or are clearly an unwarranted exercise of discretion. SDCL § 1-26-36; *In re One-time Special Underground Assessment by Northern States Power Company in Sioux Falls*, 2001 S.D. 63, ¶ 8, 628 N.W.2d 332, 334. See also *Wise v. Brooks Const. Services*, 2006 S.D. 80, ¶ 16, 721 N.W.2d 461, 466; *Apland v. Butte County*, 2006 S.D. 53, ¶ 14, 716 N.W.2d 787, 791.

⁷ Appellants argue that certain findings and conclusions are an abuse of discretion on the part of the Commission. However, the ultimate decision (to grant the permit) would be reviewed under abuse of discretion, while the agency's findings of fact would be reviewed under the clearly erroneous standard. Despite these differences, the outcome is still the same: the appeal should be denied.

⁸ An applicant for a permit is required to establish that the facility “will not substantially impair the health, safety or welfare of the inhabitants” in accordance with SDCL § 49-41B-22(3).

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Appellants request that the court take judicial notice of exhibits and maps in the Dakota Range Proceedings.⁹ Appellants argue that although not a part of the record in this case, the exhibits and maps generated in the Dakota Range wind projects are relevant to the issues here and were a point of contention during the evidentiary hearings in the present case. SDCL § 19-19-201 governs judicial notice of adjudicative facts.¹⁰ That statute provides:

- (a) **Scope.** This section governs judicial notice of an adjudicative fact only, not a legislative fact.
- (b) **Kinds of facts that may be judicially noticed.** The court may judicially notice a fact that is not subject to reasonable dispute because it:
 - (1) Is generally known within the trial court's territorial jurisdiction; or
 - (2) Can be accurately and readily determined from sources whose accuracy cannot reasonably be questioned.
- (c) **Taking notice.** The court:
 - (1) May take judicial notice on its own; or
 - (2) Must take judicial notice if a party requests it and the court is supplied with the necessary information.
- (d) **Timing.** The court may take judicial notice at any stage of the proceeding.
- (e) **Opportunity to be heard.** On timely request, a party is entitled to be heard on the propriety of taking judicial notice and the nature of the fact to be noticed. If the court takes judicial notice before notifying a party, the party, on request, is still entitled to be heard.
- (f) **Instructing the jury.** In a civil case, the court must instruct the jury to accept the noticed fact as conclusive. In a criminal case, the court must instruct the jury that it may or may not accept the noticed fact as conclusive.

The general rule is that a fact judicially noticed must not be one subject to reasonable dispute. *See* SDCL § 19-19-201(b). It must be either generally known within the trial court's territorial jurisdiction, or capable of accurate and ready determination by resort to sources whose accuracy cannot be reasonably questioned. *Id.*

⁹ Commission Docket Nos. EL18-003, *In the Matter of the Application by Dakota Range I, LLC and Dakota Range II, LLC for a Permit of a Wind Energy Facility*, and EL18-046, *In the Matter of the Application by Dakota Range III for a Permit of a Wind Energy Facility*. These dockets are separate, but related, and in the same geographic area (within 25 miles) of the proposed Crowned Ridge wind facility.

¹⁰ "Adjudicative facts are those which relate to the immediate parties involved—the who, what, when, where, and why as between the parties." *Mendenhall v. Swanson*, 2017 S.D. 2, ¶ 9, 889 N.W.2d 416, 419 (quoting *In re Dorsey & Whitney Tr. Co.*, 2001 S.D. 35, ¶ 19, 623 N.W.2d 468, 474) (internal citations omitted).

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Appellants cite to *Sioux City Boat Club v. Mulhall* to support the assertion that courts will take judicial notice of the location of a manmade object on a map. 117 N.W.2d 92 (S.D. 1962). However, in *Sioux City Boat Club*, the issue involved the court recognizing geographic boundaries pertinent to an inquiry as to whether it had jurisdiction. The issue in *Sioux City Boat Club* is not analogous or instructive on Appellants' request that this court take judicial notice of turbine locations set forth in exhibits and maps from the Dakota Range proceedings.

The number of wind turbines in the Dakota Range facility and the geographic location of the turbines is not a matter of common knowledge generally known within the trial court's jurisdiction. See SDCL § 19-19-201(b)(1). Additionally, the exhibits and maps in the Dakota Range proceedings are subject to reasonable dispute. See SDCL § 19-19-201(b)(2). Further, Crowned Ridge was not a party to the Dakota Range proceedings and cannot verify the accuracy of the exhibits and maps.¹¹ Because there is no basis for a finding that the exhibits and maps from the Dakota Range proceedings are either generally known within the court's territorial jurisdiction or can be accurately and readily determined from sources whose accuracy cannot be reasonably questioned, this court declines to take judicial notice of the Dakota Range proceedings.

B. Appellants' Arguments Regarding Sound Studies

Appellants argue the Commission abused its discretion when it approved Crowned Ridge's application, alleging the Commission relied on incomplete and inaccurate information related to sound studies. However, on findings of fact the proper analysis is the clearly erroneous standard. Therefore, this court analyzes if the Commission's findings of fact were clearly erroneous based on the record as it pertains to sound studies. Here, the Commission's conclusion that the sound produced by the project would not substantially impair the health or welfare of the inhabitants was

¹¹ The exhibits and maps were submitted by Apex Clean Energy Holdings, LLC, a Dakota Range subsidiary wholly separate from and unrelated to Crowned Ridge.

supported by substantial evidence in the record, was reasonable and not arbitrary, therefore within their discretion.

SDCL § 49-41B-22 requires a permit applicant to establish:

...by a preponderance of the evidence that:

- (1) The proposed facility will comply with all applicable laws and rules;
- (2) The facility will not pose a threat of serious injury to the environment nor to the social and economic condition of inhabitants or expected inhabitants in the siting area. An applicant for an electric transmission line, a solar energy facility, or a wind energy facility that holds a conditional use permit from the applicable local units of government is determined not to threaten the social and economic condition of inhabitants or expected inhabitants in the siting area;
- (3) The facility will not substantially impair the health, safety or welfare of the inhabitants; and
- (4) The facility will not unduly interfere with the orderly development of the region with due consideration having been given the views of governing bodies of affected local units of government. An applicant for an electric transmission line, a solar energy facility, or a wind energy facility that holds a conditional use permit from the applicable local units of government is in compliance with this subdivision.¹²

The statute does not require *how* the applicant must establish the four elements: whether by maps, charts, random samplings, or otherwise. Here the Commission thoroughly considered the following information regarding sound (among other things):

The record demonstrates that Applicant has appropriately minimized the sound level produced from the Project to the following: (1) no more than 45 dBA at any non-participants' residence and (2) no more than 50 dBA at any participants' residence. These sound levels were modeled using the following conservative assumptions: (1) the wind turbines were assumed to be operating at maximum sound emission levels; (2) a 2 dBA adder was applied to the wind turbines sound

¹² However, this version of SDCL § 49-41B-22 has only been in effect since July 1, 2019. While the Commission issued its decision granting the facility permit for the project on July 26, 2019, all hearings were held prior to July 1, 2019. The prior version of SDCL § 49-41B-22, effective through June 30, 2019, reads as follows:

The applicant has the burden of proof to establish that:

- (1) The proposed facility will comply with all applicable laws and rules;
- (2) The facility will not pose a threat of serious injury to the environment nor to the social and economic condition of inhabitants or expected inhabitants in the siting area;
- (3) The facility will not substantially impair the health, safety or welfare of the inhabitants; and
- (4) The facility will not unduly interfere with the orderly development of the region with due consideration having been given the views of governing bodies of affected local units of government.

The 2019 update to the statute did not materially change the law, but instead clarified that wind energy facilities must comply with this statute.

emission levels; (3) the wind turbines were assumed to be downwind of the receptor; and (4) the atmospheric conditions were assumed to be the most favorable for sound to be transmitted. The Project will also not result in sound above 50 dBA at any non-participants' property boundaries for those residences in Codington County. Applicant modeled sound levels with consideration of the cumulative sound impacts from Dakota Range I and II and Crowned Ridge Wind, II, LLC wind projects. Further, Applicant agreed to further reduce certain non-participant sound levels, consistent with the Permit Condition agreed to by Staff and Applicant. Applicant agreed to a post-construction sound protocol to be used in the event the Commission orders post-construction sound monitoring.

* * * *

There is no record evidence that the Project will substantially impair human health or welfare. To the contrary, Crowned Ridge witnesses Dr. Robert McCunney and Dr. Christopher Ollson submitted evidence that demonstrates that there is no human health or welfare concern associated with the Project as designed and proposed by Applicant. Both Crowned Ridge witnesses analyzed the scientific peer-reviewed literature in the context of the proposed Project, and Dr. McCunney testified based on his experience and training as a medical doctor specializing in occupational health and the impact of sound on humans.

(AR 20697-20698, footnotes citing record evidence omitted).

In Attachment A to the Order, the Commission also conditioned the granting of the Facility Permit on Crowned Ridge complying with the sound thresholds of 45 dBA for sound within 25 feet of a non-participant's residence and 50 dBA for sound within 25 feet of a participant's residence. (AR 20708, Condition No. 26). See *Pesall v. Montana Dakota Utils., Co.*, 2015 S.D. 81, ¶ 8, 871 N.W.2d 649, 652 (Commission did not abuse its discretion when it granted a permit subject to conditions, rather than requiring re-submittal of the application to consider additional information.). The Commission's analysis went above and beyond what was required by SDCL § 49-41B and ARSD 20:10:22. ARSD 20:10:22:13 provides in part:

... The environmental effects shall be calculated to reveal and assess demonstrated or suspected 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 facilities, existing or under construction...

Even considering this administrative rule, if it applies to wind energy facilities, at the time of the application for the Project when the sound modeling was completed (as well as at the time the permit was issued) there were no energy conversion facilities or wind energy facilities operating or under construction in the area.¹³ Therefore, the sound modeling and the Commission's analysis went above and beyond the scope of review contemplated in the rule by factoring in the closest permitted wind turbines into the noise and shadow flicker analysis. The inclusion of the Dakota Range I and II wind turbines (which were approved by the Commission, but not yet constructed) was an additional conservative assumption in addition to several other conservative assumptions used by Crowned Ridge in its sound models.¹⁴ The reason the Dakota Ridge III wind turbines were not added as yet another conservative assumption was the fact that Commission had not granted Dakota Range III a facility permit at the time Crowned Ridge filed its application. Crowned Ridge witness Jay Haley's rebuttal testimony states that "the tables in Exhibit 3 of the supplemental testimony show the cumulative results from *all turbines* in CRW, Crowned Ridge Wind II, and Dakota Range I and II." (emphasis added) (AR 4703, Rebuttal Testimony of Jay Haley, 2:11-13).

Appellants make a number of incorrect and incomplete factual assumptions and inferences. Appellants allege that only 17 Dakota Range turbines were included in the sound study based on a review of the Crowned Ridge isoline maps. But the maps are not intended to show all turbines included in the study—rather, they are used to graphically illustrate compliance with the sound thresholds for participants and non-participants. Crowned Ridge clearly indicated on the record

¹³ The Dakota Range projects were not existing or under construction at this time. Because of this, even under the administrative rule Applicant was not required to include them in the modeling. Further, there is no legal requirement that the modeling of sound include every potential wind turbine that may or may not be constructed and operated.

¹⁴ The Commission cited the following conservative assumptions included: "(1) the wind turbines were assumed to be operating at maximum sound emission levels; (2) a 2 dBA adder was applied to the wind turbines sound emission levels; (3) the wind turbines were assumed to be downwind of the receptor; (4) the atmospheric conditions were assumed to be the most favorable for sound to be transmitted." (AR 20967). The omission also cited that "Applicant modeled sound levels with consideration of the cumulative sound impacts from Dakota Range I and II and Crowned Ridge Wind, II, LLC wind projects." *Id.*

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that all 97 of the Dakota Range I and II wind turbines were included in its sound studies (AR 1477, 2237). Further, the Commission's order recognized that Crowned Ridge included all the Dakota Range I and II turbines in its sound models (AR 20697). The fact that the map showed only the nearest 17 turbines appears to have led Appellants to the inaccurate conclusion that only 17 were included in the model. [Even so,] the Commission found that "Applicant modeled sound levels with consideration of the cumulative impacts from Dakota Range I and II and Crowned Ridge, II, LLC wind projects." (AR 20697, Finding of Fact 46).

Appellants also criticize witness Jay Haley's credentials and the use of the initials P.E. (indicating he is a professional engineer). At the evidentiary hearing, Appellants' trial attorney conducted a lengthy voir dire of Haley, after which Attorney Ganje objected to Haley's testimony on the grounds that the witness had held himself out to be a licensed professional engineer because of the initials behind his signature. Appellants' trial counsel also submitted a brief upon making an oral objection. Commission staff argued that credibility of a witness can be established by training, education, and experience, and licensing is not the end-all determination. (EH 352:15-20). Chairman Hanson stated that he agreed with Commission staff's argument. (EH 354:10-17). After taking argument from the parties, the Commission unanimously voted to overrule attorney Ganje's objection. (EH 355:7-9). The Commission's ruling on the admissibility of Haley's testimony is not an issue that was included within the Statement of Issues and is not subject to this appeal. *See* SDCL § 1-26-31.4.

The Commission's findings and conclusions that the sound produced by the project will not substantially impair the health or welfare of the inhabitants were reasonable, not arbitrary, and

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supported by substantial evidence.¹⁵ See SDCL § 1-26-1(9) (whether there is substantial evidence is determined by whether a reasonable mind might accept the evidence sufficiently adequate to supporting the conclusion). Based on the information in the administrative record, the Project will comply with the sound thresholds imposed by the Commission's Order (AR 20708, Condition No. 26).¹⁶ This court gives great deference to the Commission's findings pursuant to SDCL § 1-26-36. *Sorensen*, 2015 S.D. 88, ¶ 24, 871 N.W.2d at 856 (the court will not substitute its judgment for that of the agency when there is ample evidence in the record to support the agency's finding); *In re Application of Svoboda*, 54 N.W.2d 325, 328 (S.D. 1952) (reversing the circuit court and directing it to affirm a Commission order that was based on substantial evidence, concluding that "... the court's only function with respect to this issue is to determine whether there is any substantial evidence in support of the Commission's finding. The court will not weigh the evidence or substitute its judgment for that of the Commission.); *In re Application of Dakota Transportation of Sioux Falls*, 291 N.W. 589, 593-96 (S.D. 1940) (reversing circuit court and directing it to affirm a Commission order that was based on substantial evidence, was reasonable and was not arbitrary, concluding that "the ultimate question is whether there was substantial evidence to support the order of the Commission.") Commission's thorough and reasonable consideration of sound was within its discretion.

Even if this court were to find that the Commission abused its discretion in granting the permit, Appellants have failed to show that the Commission's actions had any prejudicial effect. See *Sorensen*, 2015 S.D. 88, ¶ 20, 871 N.W.2d 851, 856 ("...[E]ven if the agency did abuse its

¹⁵ The testimony of witnesses McCunney and Olsson showed that if the Project complied with the sound and shadow flicker thresholds implemented by the counties and self-imposed by Crowned Ridge the Project would not have a detrimental impact on the health and welfare of inhabitants. (AR 1563-1924, 3728-3917, 4132-4369).

¹⁶ The rebuttal testimony of witness Haley confirmed that the Project was in compliance with the county sound and shadow flicker thresholds, as well as a self-imposed sound threshold for the Project not to produce sound over 45 A-weighted decibels ("dBAs") sound within 50 feet of any nonparticipant's residence and over 50 dBA within 50 feet of any participant's residence. (AR 4701-4747).

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discretion, we will not overturn unless the abuse produced some prejudicial effect.” (internal citation omitted)). The record shows that the modeled sound level at 50 feet away from the residence of each of the Appellants is substantially below the 45 dBA non-participant threshold set forth in Condition 26.¹⁷ The sound produced from the Project has been modeled to be less than the sound experienced from a whisper at 3 feet for Christenson and Lynch, and less than the sound of a library for Mogen and Robish. (AR 184). The sound is below the 45 dBA threshold imposed by the Commission. Appellants have failed to demonstrate any prejudicial effect, and their appeal on this issue should be denied.

C. Appellants’ Arguments Regarding Shadow Flicker

Appellants argue that the Commission abused its discretion when it approved Crowned Ridge’s application for a permit without sound and shadow flicker studies that encompassed all occupied residences within the siting area.¹⁸ Applicant argues that Appellants failed to preserve this issue for appeal. It is well settled that if an Appellant does not object to the issue in the underlying proceeding, the issue is not preserved for appeal. *See, e.g., City of Watertown v. Dakota, Minnesota & E.R. Co.*, 1996 S.D. 82, ¶ 26, 551 N.W.2d 571, 577; *American Fed. Sav. & Loan Ass’n v. Kass*, 320 N.W.2d 800, 803 (S.D. 1982). This issue questions the veracity of Crowned Ridge hearing exhibits A67, A68, and A57, none of which Appellants objected to in the underlying proceeding. They also failed to preserve for appeal a challenge on the veracity of these exhibits. *See City of Watertown*, 1998 S.D. 82, ¶ 26, 551 N.W.2d at 577.

Applicant also argues that Appellants failed to include this issue in its Statement of Issues.¹⁹ Applicant argues that it is well settled that if an appellant’s Statement of Issues fails to set forth

¹⁷ Robish: 29.3 dBA, Christenson: 38.6 dBA, Mogen: 28.8 dBA, Lynch: 37.3 dBA (AR 17839).

¹⁸ As previously mentioned, however, the proper standard of review would be analyzing whether the factual findings and conclusions regarding shadow flicker were clearly erroneous.

¹⁹ See Statement of Issues, filed by Appellants on August 29, 2019, listing 31 separate issues.

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the reasons why the Commission's decision, ruling, or action should be reserved or modified, the argument is waived, citing *Lagler v. Menard, Inc.*, 2018 S.D. 53, ¶ 42, 915 N.W.2d 707, 719.

However, that is not necessarily what *Lagler* says. The cited paragraph reads as follows:

Once the circuit court's jurisdiction to review a particular decision, ruling, or action has been established—either through the filing of a notice of appeal or a notice of review—the question then becomes one of issue waiver. As indicated above, the appellant must file a statement of the issues to be presented on appeal, and the appellee may file such a statement as well. SDCL 1–26–31.4. In other words, once jurisdiction is established, the parties must preserve their arguments for review by stating their reasons why the agency decision, ruling, or action identified as the object of the appeal should be reversed or modified. *While the failure to specify a decision, ruling, or action in a notice of appeal or notice of review results in a lack of jurisdiction to review the same, the failure to file a statement of issues results in a waiver of argument.* And while either lack of jurisdiction or waiver of argument results in a denial of relief on appeal, they do so in fundamentally different ways (a lack of jurisdiction—which may be raised at any time—is a mandatory restraint on the court's power to act, but waiver is a restraint on a party's arguments that gives a court discretion to disregard them).

(emphasis added). This paragraph does not necessarily state that the failure to state the exact issue in the Statement of Issues constitutes a waiver, but rather, that the failure to file a Statement of Issues altogether results in a waiver of argument. Here, in Appellants' Statement of Issues, Issue 8 is “[w]hether the PUC acted arbitrarily and capriciously when it failed to consider testimony regarding trespass violations for shadow flicker and infrasound.”

The court finds that Appellants Issue 8 is sufficient enough to allow the court to consider this issue on appeal. While Appellants certainly would have been better served had they objected to the admission of Exhibits A57, A67, or A68. (EH 366, 579:10-12), the court will consider argument on this issue.

Appellants' factual assumption that Crowned Ridge did not analyze the impact of shadow flicker on residents of Stockholm and Waverly is incorrect and not supported by the record. Appellants fail to recognize that the sounds isoline map in Exhibit A56 and the shadow flicker

map in Exhibit A43-1 clearly show that all residences in Stockholm and Waverly are well below the sound threshold for nonparticipating residents of 45 dBA and the 30-hour shadow flicker annual threshold for all residents.²⁰ (AR 17225-17231, 17821-17834). Exhibit A43-1 is a map detailing shadow flicker isolines for the entire project area (AR 17225-17231). This map demonstrates that each town is well below the shadow flicker limit in the Final Order.

Further, no requirement exists in South Dakota law for sound and shadow flicker studies that include each and every structure in the siting area. Again, nowhere in the statute or the administrative rules is it mandated how an applicant must establish the four elements in SDCL § 49-41B-22: whether by isoline maps, all-inclusive charts, random samplings, or otherwise. Further, while ARSD 20:10:22:33.02(5) requires an applicant to provide information regarding anticipated operational sound, the rules contain no such requirement for a shadow flicker analysis. With respect to the impact of the Project's shadow flicker on inhabitants, the Commission concluded:

Similarly, the record also demonstrates that Applicant has appropriately minimized the shadow flicker for the Project to no more than 30 hours for participants and non-participants, with the understanding that there is one participant (CR1-C10-P) who is at 36:57 hours of shadow flicker. Applicant modeled the cumulative impacts of shadow flicker from Dakota Range I and II and Crowned Ridge Wind, II, LLC wind projects when calculating its total shadow flicker hours. Applicant also used conservative assumptions, such as greenhouse-mode, to model shadow flicker, which, in turn, produces conservative results.

²⁰ For example, the sound isoline map filed as Exhibit A56 shows that all the residents of Stockholm and Waverly are below 35 dBA, which is well below the non-participant threshold of 45 dBA. (AR 17832-17833). Stockholm's results are also confirmed by the stand alone non-participants (CR1-G36-NP and CR1-G37-NP) in the table of Exhibit A57, which are in close proximity to Stockholm, and yet their sound is modeled at 35.4 dBA and 36.5 dBA respectively. (AR 17837). The same holds true for Waverly, which is represented by CR1-C4-NP, which is modeled at 38.5 dBA. (AR 17239). Similarly, for shadow flicker, the isoline map filed as Exhibit A43-1 shows that the residences of Stockholm will experience less than 10 hours of shadow flicker annually (AR 17236) which is again confirmed when reviewing stand alone non-participants (CR1-G36-NP and CR1-G37-NP) in the table of Exhibit A67, both of which will experience zero hours of shadow flicker. (AR 17895). The same holds true for shadow flicker in Waverly; the isoline map in Exhibit A43-1 shows that the residences of Waverly will experience less than 10 hours of shadow flicker annually (AR 17237) which again is confirmed when reviewing CR1-C4-NP in the table of Exhibit A67 which will experience zero hours of shadow flicker. (AR 17893).

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(AR 20698) (footnotes citing record evidence omitted).

As with sound, the Commission cited the testimony of Drs. Ollson and McCunney showing no health or welfare impact from 30 hours of annual shadow flicker per year, and also imposed a compliance threshold that shadow flicker at a residence shall not exceed 30 hours of shadow flicker annually, unless waived. (AR 20698-20711). Therefore, similar to the Commission's rationale on sound, a reasonable mind might accept as sufficiently adequate the evidence submitted by Crowned Ridge (including conservative shadow flicker modeling assumptions and testimony of a medical doctor specializing in the field of occupational health) as supporting the findings and conclusion that the shadow flicker produced by the Project will not substantially impair the health or welfare of the inhabitants. See SDCL 1-26-1(9). Also, the Commission's findings, conclusions, and imposition of the shadow flicker thresholds in Condition No. 34 were within the range of permissible choices given the record, and therefore were reasonable and not arbitrary. The Commission's factual findings regarding the sound produced from the Project were not clearly erroneous and were supported by substantial evidence.

Even if this court were to find that the Commission abused its discretion in granting the permit, Appellants have failed to demonstrate prejudice. See *Sorensen*, 2015 S.D. 88, ¶ 20, 871 N.W.2d 851, 856 ("...[E]ven if the agency did abuse its discretion, we will not overturn unless the abuse produced some prejudicial effect." (internal citation omitted)). Appellants do not even argue that they are prejudiced. Any threat of prejudice is eradicated by the fact that the sound and shadow flicker conditions placed on the permit by the Commission account for actual, not modeled, sound and shadow flicker (AR 20708-20710, Condition 26). Additionally, each intervenor is well below

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the 30-hour annual compliance threshold for shadow flicker.²¹ As such, Appellants' arguments regarding shadow flicker are denied.

D. Appellants' Arguments Regarding Avian Use Studies

Finally, Appellants argue that the Commission could not have reasonably issued a decision in this matter because the avian use survey²² submitted by Applicant "did not include data from the northeast portion of the project area, the historic Cattle Ridge portion of the project, and that the Commission overlooked this missing information." These arguments are not supported by the record or by legal authority. The Commission directly addressed this issue in its Order, when pursuant to SDCL § 49-41B-22, it concluded that the project will not pose a threat of serious injury to the environment. Specifically, the Commission rejected the claim that the avian impact study was not adequate, concluding in relevant part:

31. Intervenor's argue that Crowned Ridge's application is materially incomplete since the Avian Use Survey did not include the portion of the Crowned Ridge Project Area that was formerly known as Cattle Ridge. Crowned Ridge's expert witness, Ms. Sarah Sappington, testified that while the avian use survey did not include the Cattle Ridge portion of the Project Area, the raptor nest surveys did include that area. Ms. Sappington further testified that Crowned Ridge did study the full extent of the Project Area as detailed in the Application and that shapefiles of the full extent of the Project Area were sent to SD GF & P. Staff's witness, Mr. Tom Kirschenmann from the SD GF&P, testified that the survey methods used by Crowned Ridge followed the USFWS guidelines, and were reasonable and appropriate. The Commission finds that the lack of an avian use survey in the Cattle Ridge portion of the Project Area is not fatal to the Application since Section 11.3 of the Application identified the Project's potential effects to wildlife for the entire Project Area, as testified to by Ms. Sappington, and that proper survey methods were used by Crowned Ridge, as testified to by Mr. Kirschenmann.

32. Crowned Ridge will also mitigate temporary impacts to habitat consistent with Mr. Kirschenmann's recommendations. There will be no turbines on game production areas, with the closest two turbines .24 mile and .35 mile away from a

²¹ Robish: zero hours, Christenson: 6:56 hours, Mogen: zero hours, Lynch: zero hours. (AR 17839).

²² SDCL § 49-41B-11(11) requires that an application for a permit include environmental studies relative to the proposed facility. One of the many required environmental studies required by applicant is an Avian Use Study. Avian use surveys are vital and required because impacts of wind energy facilities on avian species can be direct (e.g. turbine strike mortality) or indirect (e.g. loss of degradation of habitat). (AR7022). SWCA Environmental Consultants prepared an Avian Use Survey Report for Applicant summarizing the avian use surveys that were completed for the project area from April 1, 2017 through November 30, 2017 (AR 7017).

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game production area. Further, Applicant is required to conduct two years of independently-conducted post-construction avian and bat mortality monitoring for the Project. Applicant committed to file a Wildlife Conservation Strategy, which includes both direct and indirect effects as well as the wildlife mitigation measures set forth in the Application, prior to the start of construction. Applicant will file a Bird and Bat Conservation Strategy prior to the start of construction. Also, Mr. Kirschenmann testified that Applicant had appropriately coordinated with SD GF&P on the impact of the Project on wildlife.

(AR 20693-20694) (footnotes with citations to record evidence omitted). As evidenced by Findings of Fact 31 and 32, the Commission clearly recognized that Applicant did study the full extent of the Project Area, and that the survey methods utilized were reasonable and appropriate.

Additionally, in its final Order, the Commission imposed a number of conditions related to avian monitoring and protection:

10. Applicant shall promptly report to the Commission the presence of any critical habitat of threatened or endangered species in the Project Area that Applicant becomes aware of and that was not previously reported to the Commission.

29. Applicant agrees to undertake a minimum of two years of independently-conducted post-construction avian and bat mortality monitoring for the Project, and to provide a copy of the report and all further reports to the United States Fish and Wildlife Services, South Dakota Game, Fish, & Parks, and the Commission.

30. Applicant shall file a Bird and Bat Conservation Strategy (BBCS) prior to beginning construction of the Project. The BBCS shall be implemented during construction and operation of the Project.

(AR 20706, 20710, Condition Nos. 10, 29, 30). The Order's rationale and conditions clearly demonstrate the Commission addressed the Project's impact on avian species and in doing so cited substantial evidence that a reasonable mind might accept as being adequate as supporting the Commission's conclusion that the Project will not pose a threat of serious injury to the environment, including avian species. *See* SDCL § 1-26-1(9). Further, the Commission's findings, conclusions, and imposition of conditions related to avian species in light of the entire record were reasonable and not arbitrary. Thus, the Commission's findings and conclusions on the Project's

impact on avian species, including the imposition of numerous conditions on avian monitoring and protection, were within the Commission's discretion and are afforded great deference. *See Pesall*, 2015 S.D. 81, ¶ 8, 871 N.W.2d at 652.

Appellants cite no legal authority that an application must contain an avian use survey covering the *entire* project area. SDCL § 49-41B-11(11) does require an application for a permit to include environmental studies relative to the proposed facility, and ARSD 20:10:22:16 requires an Applicant provide information resulting from surveys to identify and quantify terrestrial ecosystems within the siting area. However, similarly to the issues regarding sound and shadow above, SDCL § 49-41B-22 does not specify how an Applicant must meet this burden. While an avian use survey is often used to assess avian species and populations within a project area, it is just one tool that an applicant can utilize to meet the filing content requirements of SDCL 49-41B-11(11) and ARSD 20:10:22:16. This court is unaware of, and Appellants do not cite, any other statute or administrative rule which mandates Applicant must file a *complete* avian use survey to meet its burden of proof.

Applicant errs in the assessment that the Commission overlooked the fact that the Avian Use Survey Report (Survey) the Applicant filed with its Application failed to include data from the Cattle Ridge area. In fact, the Survey included a map that was clearly marked and clearly identified the portion of the project area the Applicant studied to prepare the survey. (AR 7271). The scope of the Survey was discussed at length and on numerous occasions before the Commission. During the evidentiary hearing, Ms. Sappington specifically answered questions about the Survey and its scope and contents (AR 12317-12318). While Ms. Sappington agreed with Appellants' cross-examination questions that the Survey did not include data collected from the Cattle Ridge area, Ms. Sappington also indicated that applicant did conduct other studies within

the Cattle Ridge area and utilized the data collected to prepare Section 11.3 of the Application. (AR 12317-12318). Following the evidentiary hearing, Appellants addressed the lack of data collection in the Cattle Ridge area in Intervenor's post-hearing brief filed on July 2, 2019. (AR 2265). This matter was again discussed before the Commission at the July 9, 2019 Commission meeting, during which, the Commission heard oral arguments of each party, asked additional questions of the parties, and issued its oral decision. (AR 20565-2652??). Of the Permit, but found Section 11.3 of the Application identified the project's potential effects to wildlife for the entire project. (AR 20694). Clearly the Commission did not overlook Appellants' concerns about the scope of the Survey.

The record also clearly shows that the Commission made a reasonable determination that the Applicant submitted sufficient evidence to meet the environmental information requirements in SDCL 49-41B-11(11) and ARSD 20:10:22:16 and to meet the Applicant's ultimate burden of proof. This evidence is concisely explained in Findings of Fact V. B. 31 and 32 of the Commission's permit which state (). As evidence in Finding of Fact 31 and 32, the Applicant presented ample environmental and wildlife evidence to supplement any deficiencies in the avian use survey.

Even assuming *arguendo* that the Commission erred when it relied on the Survey, Appellants make no argument that they were prejudiced by the Commission's decision to grant the Permit. Additionally, the Commission included a number of conditions on the Permit, applicable to the entire project area, to further ensure that the facility does not adversely affect wildlife in the project area (AR 20710 and 20714, Conditions 29, 30, and 45). Given that there is no specific requirement that an Applicant submit an avian use survey of the entire project area to meet its burden of proof, the Commission's decision to issue a permit based on the totality of the

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evidence presented was not an abuse of discretion. In conclusion, Appellants have also not shown any prejudicial effect from the Commission's action on avian protections, and, therefore, even if the Court were to find that the Commission abused its discretion, which it did not, the court should not overturn the Commission's order. *See Sorensen*, 2015 S.D. 88, ¶ 20, 871 N.W.2d at 856. As such, the appeal on this issue is denied.

CONCLUSION

The decision of the South Dakota Public Utilities Commission is hereby affirmed. This court gives great weight to the findings made and inferences drawn by the agency on questions of fact in accordance with SDCL § 1-26-36.


Judicial notice of exhibits and maps from the Dakota Range proceedings is not proper, as the number of wind turbines in the Dakota Range facility is not a matter of common knowledge generally known within the trial court's jurisdiction, and the exhibits and maps in the Dakota Range proceedings are subject to reasonable dispute. This court declines to take the judicial notice requested by Appellants.

The decision to grant the permit to Crowned Ridge was within the Commission's sound discretion, and extensive factual findings and conclusions of law were made that were supported by the administrative record. These factual findings were not clearly erroneous, and this court reviews those factual findings with great deference to the Commission. Applicant met the burden of submitting a complete application which demonstrated that the Crowned Ridge Project 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 footprint area, and further, that it will not substantially impair the health, safety, or welfare of the inhabitants in the siting area in accordance with SDCL § 49-41B-22.

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Counsel for Appellees is directed to file an Order affirming the decision of the Public Utilities Commission.

BY THE COURT:



Carmen A. Means
Circuit Court Judge
Third Judicial Circuit

FILED

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SOUTH DAKOTA UNIFIED JUDICIAL SYSTEM
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STATE OF SOUTH DAKOTA)	IN CIRCUIT COURT
)	
COUNTY OF CODINGTON)	THIRD JUDICIAL CIRCUIT
_____)	
Amber Kay Christenson, and)	
Allen Robish,)	
)	
Appellants,)	Appeal Hearing
)	
vs.)	Civ. 19-290
)	
Crowned Ridge Wind, LLC, and)	
South dakota Public)	
Utilities Commission,)	
)	
Appellees.		

BEFORE: THE HONORABLE CARMEN MEANS
Circuit Court Judge
Watertown, South Dakota
January 16, 2020

APPEARANCES:

For the Plaintiff:	Mr. Jared Gass Gass Law Office PO Box 486 Brookings, SD 57006
For the Defendant:	Ms. Amanda Reiss Public Utilities Commission 500 E. Capitol Pierre, SD 57501
	Mr. Miles Schumacher Lynn, Jackson Shultz & Lebrun 110 N. Minnesota #400 Sioux Falls, SD 57101 For Crowned Ridge Win

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1 THE COURT: All right. This is the time and place
2 scheduled for attorneys to make oral argument in an appeal
3 entitled Amber Christenson, Allen Robish, Kristi Mogen, and
4 Patrick Lynch versus Crowned Ridge Wind, LLC and the South
5 Dakota Public Utilities Commission. Let's have counsel come
6 forward. All right. And so Mr. Gass, you represent the
7 appellants in this matter, is that correct.

8 MR. GASS: Correct, judge.

9 THE COURT: I just want to assure everybody I've read
10 all of your briefs so I'm familiar with the case, I don't want a
11 rehash of things that are in the brief if you can avoid that,
12 but I'm going to give you pretty much free reign as to the
13 issues you want to discuss. Mr. Gass, from my perspective the
14 things I'd like to hear from you about are, you asked me to take
15 judicial notice and as I see it I'm a reviewing court here as
16 opposed to a trial court level in this matter and so what
17 authority do you have for me to expand the record on appeal? Do
18 you have any statutory authority that would authorize me to do
19 that, and then I'd also like to hear from you the appellees are
20 claiming that you waived issue 2 and I'd like you to address
21 those matters specifically, but I'll go ahead and give you free
22 reign as to what you want to talk about.

23 MR. GASS: Sure. Thank you, your Honor, I will
24 address those two issues as I get into it. First I can address
25 the judicial notice issue right away. With regard to specific

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1 statutory authority for a reviewing court, I have none, but I
2 don't think that will matter and I can probably walk back my
3 request for judicial notice specifically related to the exact
4 locations of the Dakota Range wind turbines, I think there's
5 certainly enough in the record in this case to establish that
6 there are other wind farms specifically Dakota Range and Crowned
7 Ridge II in the near geographic proximity of this particular
8 Crowned Ridge wind farm to establish what I need in terms of the
9 Court's knowledge of the geographic area related to those wind
10 farms. So I'm not asking the Court take judicial notice of
11 specific locations of the Dakota Range towers, just that there
12 are, and perhaps it's not even judicial notice request anymore,
13 but the record I certainly believe establishes that there are
14 other wind energy facilities in the same geographic proximity.

15 THE COURT: Very good.

16 MR. GASS: I'll get into the waiver issue as I go
17 through my arguments on my other issues. Judge, first and
18 foremost with regard to the standard of review in this court,
19 it's clear that administrative agencies' factual findings are
20 reviewed under a clearly erroneous standard. The finding may be
21 supported by substantial evidence but still set aside by
22 reviewing court if the Court determines it is clearly erroneous.
23 A reviewing court should set aside findings as clearly erroneous
24 when they are against the clear weight of the evidence or and
25 this is key I believe in this case when the Court is left with a

App. B-3

1 firm and definite conviction that a mistake has been made. As
2 noted in appellants' brief a mistake has been made in granting
3 this PUC permit, I don't need to rehash all the arguments made
4 in appellants' brief but I will address some of the responsive
5 arguments made by the Commission as well as Crowned Right.
6 First, judge, the first issue that appellants bring to the
7 Court's attention is related to the sound studies submitted to
8 the PUC and whether the PUC abused its discretion and approved
9 the application using incomplete and inaccurate information
10 related to those sound studies, specifically the sound study
11 work of Jay Haley were scrutinized. In the judicial notice
12 portion of the Crowned Ridge brief, Crowned Ridge acknowledges
13 that the accuracy of Dakota Range exhibits and maps are subject
14 to question, Crowned Ridge is not in a position to verify the
15 accuracy of those exhibits and maps and there is no basis for a
16 finding that the exhibits and maps can be accurately and readily
17 determined from sources whose accuracy cannot be reasonably
18 questioned. Essentially Crowned Ridge has admitted that they
19 have no idea where the Dakota Range towers are, nor are they
20 able to verify the accuracy of the Dakota Range maps and turbine
21 locations. All of these arguments of course beg the question
22 how did Crowned Ridge verify the accuracy of maps and turbine
23 locations when it purported through its sound expert Jay Haley
24 to analyze the cumulative effect of all of the Dakota Range
25 turbines. How can Mr. Haley do an accurate sound study analysis

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1 on 114 wind turbines in a 25 mile radius without knowing the
2 locations of those wind turbines? I believe you can't. That
3 was the first mistake that was made.

4 THE COURT: So Mr. Gass, is it your position then that
5 when a new wind turbine facility starts to begin construction it
6 has to wait until the previous one is fully constructed to give
7 accurate sound studies?

8 MR. GASS: I don't know that it needs to be fully
9 constructed, judge, but the position Crowned Ridge has taken is
10 they can't verify the locations, they don't know, certainly
11 there are maps submitted and I know wind towers can change
12 locations depending on how things pan out, but generally
13 speaking the overall footprint of a wind project is determined
14 and certainly it's our position that the overall footprint of
15 the Dakota Range project was determined prior to or during the
16 time that the PUC was hearing the Crowned Ridge case.

17 THE COURT: All right, go ahead.

18 MR. GASS: The Commission in their responsive brief
19 argues that the applicant Crowned Ridge isn't required by law or
20 rule to assess cumulative impacts. In my opinion that argument
21 loses the forest for the trees, it loses sight of the larger
22 issue, that being that Crowned Ridge is required to comply with
23 all applicable laws and rules pursuant to SDCL 49-41(b)-22, of
24 course that includes county sound thresholds. That's why it's
25 vital to assessment cumulative impacts, not because there's an

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1 express code or administrative rule that requires it, but to
2 determine the effects of the citizens of the county, with
3 hundreds of wind turbines constantly spinning at the same time
4 in a small geographic area. I think it's important to examine
5 Mr. Haley's testimony very carefully. Both the commission and
6 Crowned Ridge rely on Haley's supplemental written testimony
7 found at page 1478 of the administrative record where he states
8 upon questioning that he did analyze all of the wind turbines
9 from Crowned Ridge II and Dakota Range. It's important to note
10 that this testimony was submitted after he updated the initial
11 sound study. The initial sound study that Mr. Haley submitted
12 was submitted to the PUC on January 30, 2019 and Mr. Haley's
13 executive summary found on page 397 of the administrative record
14 Mr. Haley acknowledges the computer models built for his sound
15 study combining the digital elevation information supplied by
16 Crowned Ridge Wind, LLC to generate models for the sight. He
17 got all of his analysis information from Crowned Ridge, he makes
18 no mention of any analysis information from Dakota Range or any
19 other wind farms in the geographic area. As I discussed earlier
20 Crowned Ridge in their responsive brief acknowledges that they
21 don't know, they don't acknowledge that they know where these
22 wind towers are in Dakota Range and so there's no way that they
23 could have provided that information to Mr. Haley. Also of
24 significance in Mr. Haley's report, this is found on page 403 of
25 the administrative record, he directly states in his initial

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1 sound study that he analyzed the cumulative effects of Crowned
2 Ridge II but he makes no mention of Dakota Range. Certainly if
3 he would have analyzed the Dakota Range towers in his initial
4 report he would have made mention of that. I believe that fact
5 is clear. The phrase Dakota Range quote unquote is simply not
6 found in his initial sound study report therefore it's
7 reasonable to conclude that Dakota Range and the cumulative
8 effects of the Dakota Range project were not analyzed in the
9 initial report. Now we get to the updated sound study and this
10 relates to his written testimony, at page 1476 of the
11 administrative record Mr. Haley is asked about any updates to
12 the sound study since it was filed on January 30, 2019.
13 Mr. Haley's response is that he updated -- excuse me, updates
14 were made to participating land owner information and that sound
15 study tables were updated to reflect the land update, land owner
16 information. Mr. Haley makes no mention about being the sound
17 study be related to Dakota Range turbines and any cumulative
18 effect they might have. He makes no mention of Dakota Range
19 what so ever when asked what updates he made to the sound study.
20 Now two pages later at 1478 which is the quote that the
21 Commission and Crowned Ridge both rely heavily on where
22 Mr. Haley testifies that he did analyze the cumulative effects
23 of both Crowned Ridge II and Dakota Range. This is where I get
24 a little confused because it wasn't clearly part of the initial
25 sound study and when asked what updates he made he didn't

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1 mention Dakota Range, so the question is when did he analyze
2 that information and how -- and what information did he use to
3 analyze the Dakota Range turbines? Going further in his
4 response to that question as to the cumulative effects he
5 testifies that his prior conclusions which I take to believe his
6 prior conclusions from the initial sound study were not changed
7 as a result of impacts from the cumulative effects of Dakota
8 Range. This of course leads us to believe that he analyzed
9 Dakota Range after the initial sound study was submitted which
10 is what he testified -- excuse me he didn't testify as to the
11 time when he analyzed Dakota Range, but that statement there
12 that his initial conclusions were unchanged leads me to believe
13 that he supposedly analyzed the effects of Dakota Range after
14 the initial sound study was submitted. Now, this is problematic
15 because Haley acknowledges on direct testimony and this is at
16 page 12,588 of the administrative record that sound from the
17 Dakota Range wind towers impacts appellant Allen Robish's
18 property in spite of his property being 20 to 25 miles away from
19 Dakota Range. Haley says no impact related to cumulative
20 effects in his written testimony but when he's questioned by the
21 PUC in direct testimony he says that there are sound impacts
22 from towers 20 to 25 miles away yet these same effects are not
23 existent in his updated sound study, he says there was no
24 change. This is incredibly conflicting testimony that should
25 not be overlooked. All of this, judge, related to Mr. Haley's

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1 testimony leads me to believe that a mistake has been made, that
2 the full cumulative effects of the Dakota Range project within
3 the close proximity of the Crowned Ridge project and those
4 inhabitants of the County living in that area were not fully
5 realized. The only evidence that Crowned Ridge presented to the
6 Commission related to sound studies was from Mr. Haley, the
7 Commission relied solely on Mr. Haley's testimony. As mentioned
8 in appellant's brief Mr. Haley is not a professional engineer
9 all though he purports to be one. He's not bound by any code of
10 professional conduct, his license I believe expired in 2016,
11 that's in the record, if I'm wrong on the year I apologize, but
12 it's in the record that he was not a licensed engineer at the
13 time he was testifying and submitted this report to the PUC.
14 Mr. Haley even includes a liability waiver on his sound study
15 maps and makes no warranties with respect to the use of the
16 information on those drawings. Judge, based on the forgoing I'm
17 convinced that the Commission made its decision to grant this
18 permit based on faulty sound studies that gave an inaccurate
19 picture of the cumulative effects of the Dakota Range turbines
20 on the inhabitants within the Crowned Ridge footprint. Now,
21 Crowned Ridge argues that even if the Court determines that the
22 PUC made a mistake the appellant can't show prejudice. Crowned
23 Ridge cites sound levels at appellant's homes being below the 45
24 DBA required nonparticipant threshold. Of course all this could
25 change, the sound levels could change if the cumulative effects

App. B-9

1 of the Dakota Range turbines were fully realized. Crowned Ridge
2 in their responsive brief was nice enough to give us some
3 context, the effect at Christenson and Lynch properties is like
4 a whisper they say, the effect at the Mogan and Robish
5 properties is that of a library, a constant hum, a library. I
6 would like to give the Court some additional context. Judge, as
7 you probably know these turbines do not stop. The noise they
8 produce is a constant unwelcome noise whether it's a whisper or
9 jet air liner. What Crowned Ridge fails to grasp or more likely
10 ignores is that the constant noise is a major issue. It's easy
11 to say it's just a whisper, you can put up with a whisper, but a
12 constant whisper, judge, that's different. An unwelcome whisper
13 on a rare occasion may not be prejudice, but the constant woosh
14 woosh woosh of the blades imposed on nonparticipants is
15 prejudice enough. The findings of the Commission should be set
16 aside based on the faulty sound studies and the prejudice is
17 clear. It doesn't -- this is a constant, judge, these wind
18 towers do not stop unless there's no wind and as we know that's
19 a rare occasion in this part of the country. Switching gears,
20 judge, to issue number 2 and this is the issue that both the PUC
21 and Crowned Ridge claim was waived. First, judge, I argue that
22 the issue was preserved, the issues of appeal that I submitted
23 were broad and deliberately so, specifically I believe this
24 issue is preserved in paragraphs 5 and 9 of the issues of appeal
25 filed by appellants. It's the PUC has to determine, judge,

App. B-10

1 whether the Crowned Ridge project would not substantially impair
2 the health, safety, or welfare of the inhabitants of the
3 citizens of the county and the towns within the project
4 footprint and so I believe it's our position that this issue has
5 been preserved through the issues of appeal in paragraphs 5 and
6 9. Would you like me to stop at that issue or would you like me
7 to keep going?

8 THE COURT: You can go ahead.

9 MR. GASS: Thank you. Judge, there's no
10 administrative rule or South Dakota law that allows for an and
11 exception to leave residences out of a sound study or shadow
12 flicker study whether that residence is located in the
13 municipality or the county. The Commission points out in their
14 responsive brief that there is no requirement in South Dakota
15 law that sound and shadow flicker studies need to be completed
16 on each and every structure. That may be, but in the next
17 paragraph the Commission accurately points out that South Dakota
18 law requires the applicant to comply with all laws and rules, of
19 course this includes county zoning rules which require sound and
20 shadow flicker thresholds to be measured at participating and
21 nonparticipating residence. If Crowned Ridge measured sound and
22 shadow flicker at all occupied residence in project footprint --
23 excuse me if they do not, if they do not measure sound and
24 shadow flicker at all occupied residence in the footprint how
25 can they insure to the PUC that they will comply with all

App. B-11

1 applicable laws and rules including county zoning rules related
2 to sound and shadow flicker. Of course this always comes down
3 to time and money. Crowned Ridge of course has the resources
4 and expertise to analyze the homes in Waverly and Stockholm, but
5 they chose not to and unfortunately the Commission looked the
6 other way. Not to be overlooked, judge, is the percentage of
7 occupants in the footprint that are participating versus
8 nonparticipating. It is certainly in Crowned Ridge's best
9 interest and also I believe in the Commission's best interest in
10 the matter of public opinion to have more participating land
11 owners than nonparticipating. By skipping over the towns of
12 Waverly and Stockholm Crowned Ridge artificially inflated the
13 percentage of participating land owners in the project
14 footprint. This is another mistake that was made, judge, the
15 findings should be set aside for failure to analyze the occupied
16 structures in the towns of Waverly and Stockholm. The third
17 issue, judge, is whether the PUC abused its discretion when it
18 approved the application without a complete avian use study. It
19 is undisputed that an avian use survey that was submitted did
20 not include the Cattle Ridge portion of the project which
21 encompasses approximately 15,000 acres of the 53,000 acre
22 Crowned Ridge footprint. The PUC unfortunately concluded that
23 what Crowned Ridge submitted was good enough and again it comes
24 down to time and money. Crowned Ridge purchased the Cattle
25 Ridge portion of the project too late to conclude an avian use

APP. B-12

1 study for that area. I forget the gentleman's name that
2 testified at the PUC, but he testified I believe it was a Game,
3 Fish and Parks gentleman testified that Crowned Ridge would not
4 have time to complete an appropriate avian use study for the
5 Cattle Ridge portion of the project. Instead of delaying the
6 application for a proper environmental study which the
7 Commission should have done, it approved the application knowing
8 avian use study was not done for approximately 38 percent of the
9 project area. That's a large area. As I said an area of
10 approximately 15,000 acres. The Commission and Crowned Ridge
11 rely on conditions imposed related to avian monitoring and
12 protection to get past this issue, they skirt the study
13 requirements and say the Commission imposed conditions to
14 monitor this after the fact. Certainly that was within the
15 Commission's discretion to impose, conditions to save avian
16 species, but how can findings and conclusions be entered related
17 to the project's impact on avian species if an avian use study
18 hasn't been completed for approximately 38 percent of the
19 project footprint? Appellants are not asking the Court to
20 substitute its judgment for that of the commission, appellants
21 are simply asking the Court to recognize the Commission's error
22 in pushing the application through without being informed as to
23 the impact on avian species throughout the project footprint.
24 It was pointed out I think it was in Crowned Ridge's responsive
25 brief that raptor nesting studies were done for the whole area

App. B-13

1 but according to the avian use study that was completed for the
2 southern portion of the project, there are 23 other nonraptor
3 avian species in the area that were studied. The Commission
4 simply has no knowledge of those 23 species and potentially
5 others how they may be impacted by the Crowned Ridge project in
6 the 15,000 acres left out of the avian use study. There's
7 simply just no information. This too, judge, was a mistake.
8 The findings should also be set aside for lack of a thorough
9 environmental study related to avian species for a large portion
10 of the project footprint. Judge, mistakes have been made in the
11 granting of this PUC permit to Crowned Ridge, as such the
12 appellants are asking the Court to set aside the Commission's
13 findings as clearly erroneous. Thank you.

14 THE COURT: All right. Attorney for the Commission
15 may speak.

16 MS. REISS: Thank you, your Honor, this is Amanda
17 Reiss on behalf of the Public Utilities Commission. I'd like to
18 just briefly respond to the appellants' arguments before I step
19 into a brief statement. Appellants note that Crowned Ridge did
20 not include the location of Dakota Range turbines within its
21 sound studies, specifically that there was a question as to
22 where these turbines could be built. I would just note that
23 Dakota Range has not been constructed at this point, there's
24 always the possibility of turbines to shift and the two projects
25 have different ownership, so there was not the ability to have

App. B-14

1 is no regulatory or statutory requirement that it be
2 specifically an avian study that meets the applicants burden in
3 this regard. The record is clear that the Commission felt the
4 burden was met through expert testimony and the concurrence of
5 the witness from the South Dakota Game, Fish and Parks
6 Department, and with regard to this issue, your Honor, there's
7 not even an attempt at establishing the requirement of
8 demonstrating prejudice to any of the intervenors. So for those
9 reasons, your Honor, we feel that the decision of the South
10 Dakota Public Utilities Commission should be upheld.

11 THE COURT: Thank you. Mr. Gass, I'll give you 5
12 minutes to respond to the arguments made today.

13 MR. GASS: Thank you, your Honor. With regard to the
14 sound studies and the Dakota Range turbines, my understanding is
15 that the Dakota Range turbines were permitted by the PUC in
16 approximately March of 2018, certainly when this permit was
17 being litigated at the PUC the Dakota Range project was
18 permitted and certainly there would have been some accurate
19 information as to the location of the wind towers in the Dakota
20 Range project. Judge, it's easy to argue that there are so many
21 unknowns related to other wind projects in the area that we just
22 throw our hands up, there's so many unknowns we don't know where
23 these towers are, we can't analyze the sound appropriately.
24 That's an easy argument to make and I think it's hurtful to the
25 people in the community that live in the county where these

App. B-15

1 towers are constructed. The biggest issue I have with the sound
2 studies is there's no mention of Dakota Range in the initial
3 sound study, when he was asked, Mr. Haley was asked about
4 updates made to the sound study, he does not mention Dakota
5 Range. The only time Dakota Range is mentioned is when he's
6 asked did you analyze the effects of Crowned Ridge II and Dakota
7 Range and he says yes I did, but they didn't have any effect on
8 my previous study. But later in direct testimony he testifies
9 that there is effect, specifically at the Robish property there
10 is an effect, Commissioner Nelson specifically asked him,
11 because it changed a little bit at the Robish property, where
12 did that change come from? Oh, that's from the Dakota Range
13 project, there's some sound remnants there, but it affected the
14 DBA level at the Robish property and Commissioner Nelson
15 specifically asked Mr. Haley about that and then kind of dropped
16 it, they didn't explore that any further which is troubling
17 because he testified that there was no change in the sound
18 studies when he analyzed Dakota Range related to the Crowned
19 Ridge sound emissions. Judge, in looking at administrative rule
20 20-10-2213, that's the environmental requirement, that sets
21 forth that there needs to be -- existing environmental
22 conditions need to be established and certainly there are many
23 environmental studies that could be used, it's troubling that
24 they used an avian use survey for the southern portion to
25 establish environmental effects but neglected 15,000 acres just

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1 because they didn't have time to do it. Had the PUC hearings
2 been months or years later they would have done it, they would
3 have time, but it comes down to time and money and they
4 shouldn't get passed for not including an avian use survey in
5 the Cattle Ridge portion. That's all I have, judge. Thank you.

6 THE COURT: All right, I thank counsel for their
7 arguments here, this is obviously a voluminous record at the PUC
8 level and I'd like to take some more time to review that record
9 before issuing my decision in this matter, so I will issue a
10 written decision after reviewing those documents. We'll be in
11 recess for today.

12 MR. SCHUMACHER: Thank you, your Honor.

13 (Proceeding concluded.)
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25

App. B-17

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

**IN THE MATTER OF THE APPLICATION OF
CROWNED RIDGE, LLC FOR A FACILITIES PERMIT TO
CONSTRUCTION 300 MEGAWATT WIND FACILITY**

Docket No. EL19-

**DIRECT TESTIMONY
OF JAY HALEY**

January 28, 2019

INTRODUCTION AND QUALIFICATIONS

1
2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Jay Haley. My business address is 3100 DeMers Ave., Grand Forks, ND, 58201.

4

5 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

6 A. I am a Partner in EAPC Wind Energy and work as a Wind Engineer.

7

8 **Q. WHAT ARE YOUR RESPONSIBILITIES?**

9 A. My responsibility was to conduct the sound and shadow flicker studies for Crowned Ridge
10 Wind, LLC ("CRW").

11

12 **Q. PLEASE DESCRIBE YOUR BACKGROUND AND QUALIFICATIONS**

13 A. I have more than 30 years of experience in wind farm design. My experience includes financial
14 feasibility studies, technical due diligence, wind farm design, energy assessments, visual
15 simulations, ice throw studies, noise studies, and shadow flicker studies. I have performed more
16 than 60 noise impact assessments and shadow flicker studies in over 15 states across the U.S.
17 I have also worked on wind energy projects in Australia, Puerto Rico, Argentina, Chile,
18 Uruguay and Venezuela. I am also the North and South American sales and support
19 representative for windPRO, which is the world's leading software tool used for the design of
20 wind farms including noise and shadow flicker studies. I have trained hundreds of engineers
21 and environmental consultants on the proper use of windPRO with regard to wind farm design,
22 energy assessments, visual simulations, and noise and shadow flicker studies. I have provided
23 expert witness testimony on noise impacts, shadow flicker issues, ice throw and visual impacts
24 in adjudicatory hearings front of local boards and in judicial proceedings.

25

26 I have a Bachelor of Science degree in Mechanical Engineering from the University of North
27 Dakota. I am a participating member of the International Electrotechnical Commission (IEC)
28 Technical Committee TC88, Working Group 15 as a Technical Advisor for the U.S. National
29 Committee. The purpose of this group is to develop an International Standard for the

000966

APP. C-2

1 assessment of wind resource, energy yield, and site suitability input conditions for wind power
2 plants.

3

4 **Q. HAS THIS TESTIMONY BEEN PREPARED BY YOU OR UNDER YOUR
5 DIRECT SUPERVISION?**

6 A. Yes.

7

8 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE SOUTH DAKOTA
9 PUBLIC UTILITIES COMMISSION?**

10 A. No.

11

PURPOSE OF TESTIMONY

12 **Q. PLEASE DESCRIBE THE PURPOSE OF YOUR TESTIMONY.**

13 A. The purpose is to provide a description of the sound and shadow/flicker studies conducted
14 for CRW and to set forth the results of the studies.

15

16

SOUND STUDY

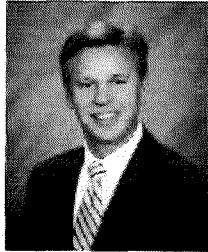
17 **Q. PLEASE DESCRIBE THE SOUND STUDY THAT WAS CONDUCTED FOR
18 CRW.**

19 A. Wind turbine noise can originate from a number of sources, but primarily from mechanical
20 sound from the interaction of turbine components, and aerodynamic sound produced by the
21 airflow over the rotor blades. In addition to the turbines, the transformer located at a wind
22 project's substation will also emit sound.

23

24 Wind turbine sound pressure levels are measured using a sound level meter and a microphone.
25 Sound level meters used for monitoring can pick up sounds perfectly, but the human ear is not
26 as precise. The human ear cannot hear very low or very high frequencies. The sensitivity range
27 of the human ear is approximately 20 to 20,000 Hz. Weighting networks are used in noise
28 monitors in order to adjust specific frequencies in the audio spectrum to attempt to duplicate
29 the response of the human ear.

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Jay Haley, PE
Partner

Project Assignment

Mechanical Engineer, Wind Engineering Consultant

Registrations

Registered Mechanical Engineer - North Dakota, Minnesota

Educational Background

1985: Bachelor of Science, Mechanical Engineering
University of North Dakota, Grand Forks, ND

Work History

- 2000-Present: Mechanical Engineer/Partner, EAPC, Grand Forks, ND
- 1998-2000: Mechanical Engineer, EAPC, Grand Forks, ND
- 1989-1998: Senior Design Engineer, Energy and Environmental Research Center, Grand Forks, ND
- 1985-1989: Director of Engineering, Ideal Aerosmith, Inc., East Grand Forks, MN

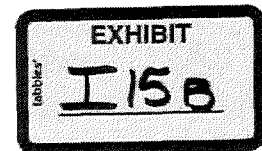
Professional Experience

Mr. Haley has been involved in wind energy since 1983. He's performed or supervised the wind resource assessments and energy assessments for hundreds of projects totaling more than 40,000 MW, of which, more than 8,000 MW are currently in operation. He has also provided Independent Engineering reviews of other consultant's wind assessment reports for various potential investors on 50+ projects totaling more than 5,000 MW.

He is also a certified WAsP user as well as a WindPRO training instructor, and has conducted more than 40 training courses and trained more than 500 wind industry personnel in the proper use of WindPRO and WAsP as it relates to wind resource and energy assessment and site suitability.

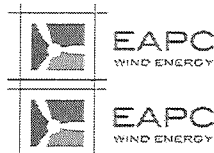
He's been involved in the planning, permitting, design, construction, and operation of wind farms. He's made hundreds of public presentations on wind energy and has been the wind industry's primary spokesperson in ND. Mr. Haley has been a member of the National Wind Coordinating Committee, the North Dakota Wind Coordinating Committee, Co-Chair of the Energy Cluster of ND's New Economy Initiative, Vice-Chairman of the ND Renewable Energy Partnership, Founding Executive Board member of the ND SEED Coalition, a member of U.S. Senator Dorgan's wind conference planning committee, and is also the founding Chairman of the Wind Energy Council, a regional trade organization in the upper Midwest.

Mr. Haley is an appointed technical expert representing the U.S. delegation on the International Standards Committee IEC 61400-15 - *Assessment of Wind Resource, Energy Yield and Site Suitability Input Conditions for Wind Power Plants.*



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p. 2

Relevant Experience – Wind Resource and Energy Assessment and Wind Farm Design – Selected Projects

2018 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, YPF Energía Eléctrica S.A., Fray Guen Wind Farm, 100 MW

2018 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, Eólica Rionegrina S.A., PE Cerro Policia Wind Farm, 600 MW

2018 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, Sequoia Energy, Assiniboia Wind Farm, 200MW

2018 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, Allete Clean Energy, South Peak Wind Farm, 100 MW

2017 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, Allete Clean Energy, Bowman Wind Farm, 208 MW

2017 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, Allete Clean Energy, Top of Iowa Repower, 80 MW

2017 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, Allete Clean Energy, Storm Lake I Repower, 309 MW

2016 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, TradeWind Energy, Cedar Run Wind Farm, 200 MW

2016 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, TradeWind Energy, Seven Cowboy Wind Farm, 300 MW

2016 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, Minnesota Power, Tri County South Wind Farm, 104 MW

2015 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, Bluestem Energy, West Liberty Wind Farm, 4 MW

2015 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, AV3 WindPower, Green Hills Wind Farm, 60 MW

2015 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, TradeWind Energy, Lindahl West, 300 MW

2015 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, TradeWind Energy, Thunder Ranch Wind Farm, 300 MW

2014 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, Allete Clean Energy, Chanarambie/Viking Repower, 97 MW

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- 2014 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, TradeWind Energy, Rose Rock, 108 MW
- 2014 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, NRG Patagonia, Valle Hermosa, 12 MW
- 2013 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, Allete Clean Energy, Clean Energy I Wind Farm, 102.4 MW
- 2013 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, Minnesota Power, Bison IV Wind Farm, 204.8 MW
- 2012 - Wind Resource and Energy Assessment, Project Resources Corp., Lakeswind Wind Farm, 50 MW
- 2011 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, Minnesota Power, Bison III Wind Farm, 105 MW
- 2011 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, Minnesota Power, Bison II Wind Farm, 105 MW
- 2010 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, Basin Electric, PrairieWinds SD I Wind Farm, 162 MW
- 2010 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, Minnesota Power, Bison IB Wind Farm, 45 MW
- 2010 - Wind Resource and Energy Assessment, Site Suitability, Wind Farm Design, and CFD Analysis, PowerWorks, Sawtooth Wind Farm, 22.4 MW
- 2009 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, Minnesota Power, Bison IA Wind Farm, 36.9 MW
- 2008 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, Basin Electric, PrairieWinds ND I Wind Farm, 115.5 MW
- 2006 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, Trimont Area Wind Farm, TAWF-II, 100.5 MW
- 2004 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, PPM Energy, Rugby Wind Farm, 150 MW
- 2003 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, FPL Energy, ND Wind I & II, 61.5 MW
- 2003 - Wind Resource and Energy Assessment, Site Suitability and Wind Farm Design, FPL Energy, SD Wind Energy Center, 40.5 MW

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Relevant Experience – Noise and Shadow Flicker Studies – Selected Projects

2018 – Noise and Shadow Flicker Studies, Terra-Gen, TG High Prairie Wind Farm, LLC, 387.4MW

2018 – Noise and Shadow Flicker Studies, Project Resources Corp., Red Barn, LLC, 129.5 MW

2018 – Shadow Flicker Study, Geronimo Energy, Blazing Star Wind Farm, 200MW

2017 – Noise Study, Project Resources Corp., Lakeswind Wind Farm, 50 MW

2017 – Shadow Flicker Study, Capital Power, Black Fork Wind Farm, 200 MW

2017 – Shadow Flicker Study, Tenaska, Inc., Nobles 2 Wind Farm, 250 MW

2017 – Noise and Shadow Flicker Studies, Invenergy, Freeborn Wind Farm, 100MW

2017 – Shadow Flicker Study, Geronimo Energy, Blazing Star II Wind Farm, 200MW

2016 – Noise Study, Project Resources Group, Rock Aetna Wind Farm, 24 MW

2016 – Shadow Flicker Study, Orion Renewable Energy Group, Jordan Creek Wind Farm, 298 MW

2016 – Shadow Flicker Study, Geronimo Energy, Blazing Star Wind Farm, 200 MW

2016 – Shadow Flicker Study, Tenaska, Inc., Nobles 2 Wind Farm, 250 MW

2016 - Noise and Shadow Flicker Studies, Orion Renewable Energy Group, Charlie Creek Wind Farm, 271 MW

2016 – Noise and Shadow Flicker Studies, EDF Renewables, Red Pine Wind Farm, 200 MW

2016 – Shadow Flicker Study, TradeWind Energy, Cedar Run Wind Farm, 200 MW

2016 - Noise and Shadow Flicker Studies, Minnesota Power, Tri-County South Wind Farm, 104 MW

2016 – Shadow Flicker Study, Starwood Energy Group, Trishe Wind Energy Project, 115 MW

2016 – Noise and Shadow Flicker Studies, TradeWind Energy, Alta Farms II Wind Farm, 200 MW

2015 – Noise and Shadow Flicker Studies, Bluestem Energy, West Liberty Wind Farm, 4 MW



Jay Haley, PE
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- 2015 – Noise and Shadow Flicker Studies, TradeWind Energy, Chisholm II Expansion, 65 MW
- 2015 – Noise and Shadow Flicker Studies, AV3 WindPower, Green Hills Wind Farm, 60 MW
- 2015 – Noise and Shadow Flicker Studies, TradeWind Energy, Lindahl West Wind Farm, 300 MW
- 2015 – Noise and Shadow Flicker Studies, TradeWind Energy, Limestone Bluff Wind Farm, 356 MW
- 2015 – Noise and Shadow Flicker Studies, TradeWind Energy, Red Dirt Wind Farm, 300 MW
- 2015 – Noise and Shadow Flicker Studies, TradeWind Energy, Hallam NE Volkswind, 200 MW
- 2015 – Noise and Shadow Flicker Studies, TradeWind Energy, Blue Star Wind Farm, 150 MW
- 2015 – Noise and Shadow Flicker Studies, TradeWind Energy, Wild Plains Wind Farm, 300 MW
- 2015 – Noise and Shadow Flicker Studies, TradeWind Energy, Diamond Vista Wind Farm, 300 MW
- 2015 – Noise and Shadow Flicker Studies, TradeWind Energy, Armadillo Flats Wind Farm, 235 MW
- 2015 – Noise and Shadow Flicker Studies, TradeWind Energy, Thunder Ranch Wind Farm, 300 MW
- 2015 – Noise and Shadow Flicker Studies, TradeWind Energy, Sundance Wind Farm, 200 MW
- 2015 – Noise and Shadow Flicker Studies, TradeWind Energy, Cimarron Bend Wind Farm, 200 MW
- 2015 – Noise and Shadow Flicker Studies, TradeWind Energy, Rock Creek Wind Farm, 300 MW
- 2015 – Noise and Shadow Flicker Studies, TradeWind Energy, English Farms Wind Farm, 170 MW
- 2015 – Noise and Shadow Flicker Studies, TradeWind Energy, Sunwind Doyle Wind Farm, 200 MW

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MINNESOTA BOARD OF ARCHITECTURE • ENGINEERING • LAND SURVEYING LANDSCAPE ARCHITECTURE • GEOSCIENCE • INTERIOR DESIGN

Affidavit of Identification

STATE OF MINNESOTA)
COUNTY OF RAMSEY)

Matt Kaehler, being first duly sworn on oath, deposes and states as follows:

- 1. This Affidavit is made in response to a request to produce confirmation of the status of Mr. Jay Haley's Minnesota professional engineer licensè.
2. I hereby confirm Mr. Haley was issued licensè number 25237 on April 7, 1997 and his licensè expired on June 30, 2016.
3. I am an Investigator for the Minnesota Board of Architecture, Engineering, Land Surveying, Landscape Architecture, Geoscience, and Interior Design (AELSLAGID), a custodian of the records of the Board, and I have first-hand knowledge of the above-captioned matter.

FURTHER YOUR AFFIRANT SAYETH NOT.

Dated: May 29th, 2019

Matt Kaehler
Investigator
Minnesota Board of AELSLAGID
85 East Seventh Place, Suite 160
Saint Paul, Minnesota 55101

Sworn and subscribed to before me on this

29th day of May, 2019.

Victoria E. Dehlein
Notary Public



85 East 7th Place, Suite 160, St. Paul, MN 55101-2113
AN EQUAL OPPORTUNITY EMPLOYER



App. C-9




**Final Report
Crowned Ridge Wind Farm
Sound Study
Codington and Grant Counties, SD**

Submitted To:
SWCA Environmental Consultants
116 North 4th Street, Suite 200
Bismarck, North Dakota 58501
Tel: 701.258.6622
E-mail: SBaer@swca.com

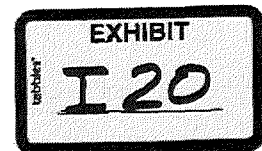
Submitted By:
Jay Haley, P.E., Partner
EAPC Wind Energy
3100 DeMers Ave.
Grand Forks, ND, 58201
Tel: 701-775-3000
E-mail: jhaley@eapc.net

January 22,
2019

Author:


Jay Haley, P.E., Partner

X



App. C-10




**Final Report
Crowned Ridge Wind Farm
Shadow Flicker Study
Codington and Grant Counties, SD**

Submitted To:
SWCA Environmental Consultants
116 North 4th Street, Suite 200
Bismarck, North Dakota 58501
Tel: 701.258.6622
E-mail: 58aer@swca.com

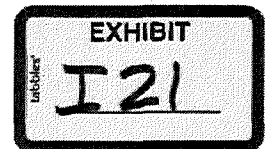
Submitted By:
Jay Haley, P.E., Partner
EAPC Wind Energy
3100 DeMers Ave.
Grand Forks, ND, 58201
Tel: 701-775-3000
E-mail: jhaley@eapc.net

January 22,
2019

Author:

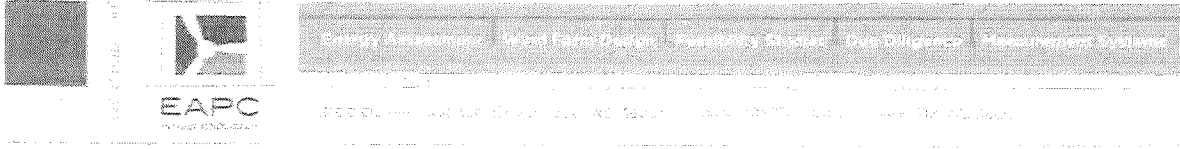

Jay Haley, P.E., Partner

X



020054

App. C-11



February 19, 2019

Tyler Wilhelm
Project Manager
NextEra Energy Resources, LLC
700 Universe Boulevard
Juno Beach, FL 33408
Office: (561) 694-3193
Tyler.Wilhelm@nee.com

Subject: Crowned Ridge additional structures

Dear Mr. Wilhelm,

This letter is intended to provide updated landowner participation status information that was not included in the original report titled: "Final Report, Crowned Ridge Wind Farm Sound Study, Codington and Grant Counties, SD", dated February 6, 2019, submitted by EAPC Wind Energy.

After the report was submitted, I was made aware of updated land parcel and farmstead status databases. There were a number of changes in landowner participation status from the original report. Most were changed from non-participating to participating, with a few that changed from participating to non-participating.

There were no changes in compliance with Codington or Grant County requirements for noise limits.

I have attached updated maps and results tables that reflect the changes in participation status for the noise receptors.

Sincerely,

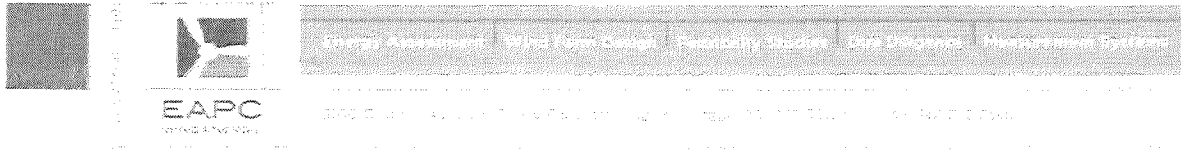
Jay Haley, P.E., Partner
For EAPC Wind Energy

Attachments:

- Appendix A – Crowned Ridge Energy Project Site Overview Map
- Appendix B – Wind Turbine Coordinates
- Appendix C – Table of Sound Results
- Appendix D – Standard Resolution Sound Maps



APP. C-12



February 19, 2019

Tyler Wilhelm
 Project Manager
 NextEra Energy Resources, LLC
 700 Universe Boulevard
 Juno Beach, FL 33408
 Office: (561) 694-3193
 Tyler.Wilhelm@nee.com

Subject: Crowned Ridge additional structures

Dear Mr. Wilhelm,

This letter is intended to provide updated landowner participation status information that was not included in the original report titled: "Final Report, Crowned Ridge Wind Farm Shadow Flicker Study, Codington and Grant Counties, SD", dated February 6, 2019, submitted by EAPC Wind Energy.

After the report was submitted, I was made aware of updated land parcel and farmstead status databases. There were a number of changes in landowner participation status from the original report. Most were changed from non-participating to participating, with a few that changed from participating to non-participating.

There were no changes in compliance with Codington or Grant County requirements for shadow flicker limits.

I have attached updated maps and results tables that reflect the changes in participation status for the shadow flicker receptors.

Sincerely,

Jay Haley, P.E., Partner
 For EAPC Wind Energy

Attachments:

- Appendix A – Crowned Ridge Energy Project Site Overview Map
- Appendix B – Wind Turbine Coordinates
- Appendix C – Table of Sound Results
- Appendix D – Standard Resolution Sound Maps
- Appendix C – Table of Shadow Flicker Results
- Appendix D – Standard Resolution Shadow Flicker Maps



App. C-13



February 26, 2019

Tyler Wilhelm
 Project Manager
 NextEra Energy Resources, LLC
 700 Universe Boulevard
 Juno Beach, FL 33408
 Office: (561) 694-3193
 Tyler.Wilhelm@nee.com

Subject: Crowned Ridge participation status changes

Dear Mr. Wilhelm,

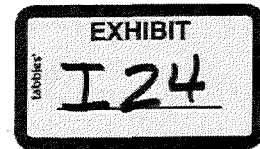
This letter is intended to provide updated landowner participation status information that was not included in the original report titled: "Final Report, Crowned Ridge Wind Farm Sound Study, Codington and Grant Counties, SD", dated February 6, 2019, submitted by EAPC Wind Energy.

After the report was submitted, I was made aware of updated land parcel and farmstead status databases. There were a number of changes in landowner participation status from the original report. Most were changed from non-participating to participating, with a few that changed from participating to non-participating.

The following receptors were changed from non-participating to participating.

Receptors with Participation Status Change			
Receptor	First Name	Last Name	Sound (dBA)
CR1-G81-P	Nelson E	Ransom	40.7
CR1-G125-P	Dalton H & Barbara J	Rude	42.8
CR1-G126-P	Marilyn R	Stemsrud	39.4
CR1-G127-P	Henry C & Betty Lou	Erickson	38.8
CR1-G128-P	Ronald & Mindy	Marko	42.9
CR1-G129-P	Dennis M & Deloris D	Redeen	36.3
CR1-G130-P	Dalton H & Barbara J	Rude	39.3
CR1-G131-P	Richard	Hansen	42.9
CR1-G132-P	Eric	Hansen	40.6
CR1-G133-P	Laverna	Moldenhauer	38.3
CR1-G135-P	Richard	Hansen	42.6
CR1-G136-P	Duane	Fish	42.2
CR1-G137-P	Richard	Fish	41.6
CR1-G138-P	Harold	Capp	41.8
CR1-G139-P	Donald	Haacke	39.8

There were no changes in sound pressure results or compliance with Codington or Grant County requirements for sound pressure limits.



App. C-14



February 26, 2019

Tyler Wilhelm
 Project Manager
 NextEra Energy Resources, LLC
 700 Universe Boulevard
 Juno Beach, FL 33408
 Office: (561) 694-3193
 Tyler.Wilhelm@nee.com

Subject: Crowned Ridge participation status changes

Dear Mr. Wilhelm,

This letter is intended to provide updated landowner participation status information that was not included in the original report titled: "Final Report, Crowned Ridge Wind Farm Shadow Flicker Study, Codington and Grant Counties, SD", dated February 6, 2019, submitted by EAPC Wind Energy.

After the report was submitted, I was made aware of updated land parcel and farmstead status databases. There were a number of changes in landowner participation status from the original report. Most were changed from non-participating to participating, with a few that changed from participating to non-participating.

The following receptors were changed from non-participating to participating.

Receptors with Participation Status Change			
Receptor	First Name	Last Name	Shadow (hr/yr)
CR1-G81-P	Nelson E	Ransom	0:00
CR1-G125-P	Dalton H & Barbara J	Rude	15:48
CR1-G126-P	Marilyn R	Stemsrud	3:21
CR1-G127-P	Henry C & Betty Lou	Erickson	2:23
CR1-G128-P	Ronald & Mindy	Marko	14:58
CR1-G129-P	Dennis M & Delcris D	Redeen	2:27
CR1-G130-P	Dalton H & Barbara J	Rude	0:00
CR1-G131-P	Richard	Hansen	1:31
CR1-G132-P	Eric	Hansen	7:38
CR1-G133-P	Laverna	Moldenhauer	3:26
CR1-G135-P	Richard	Hansen	8:10
CR1-G136-P	Duane	Fish	10:34
CR1-G137-P	Richard	Fish	18:36
CR1-G138-P	Harold	Capp	25:18
CR1-G139-P	Donald	Haacke	8:05

There were no changes in shadow flicker results or compliance with Codington or Grant County requirements for shadow flicker limits.



App. C-15



February 19, 2019

Tyler Wilhelm
Project Manager
NextEra Energy Resources, LLC
700 Universe Boulevard
Juno Beach, FL 33408
Office: (561) 694-3193
Tyler.Wilhelm@nee.com

Subject: Crowned Ridge additional structures

Dear Mr. Wilhelm,

This letter is intended to provide updated landowner participation status information that was not included in the original report titled: "Final Report, Crowned Ridge Wind Farm Sound Study, Codington and Grant Counties, SD", dated February 6, 2019, submitted by EAPC Wind Energy.

After the report was submitted, I was made aware of updated land parcel and farmstead status databases. There were a number of changes in landowner participation status from the original report. Most were changed from non-participating to participating, with a few that changed from participating to non-participating.

There were no changes in compliance with Codington or Grant County requirements for noise limits.

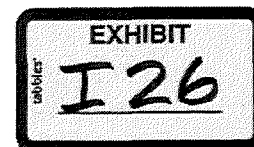
I have attached updated maps and results tables that reflect the changes in participation status for the noise receptors.

Sincerely,

Jay Haley, P.E., Partner
For EAPC Wind Energy

Attachments:

- Appendix A - Crowned Ridge Energy Project Site Overview Map
- Appendix B - Wind Turbine Coordinates
- Appendix C - Table of Sound Results
- Appendix D - Standard Resolution Sound Maps



App. C-16



EAPC
AND ENERGY



February 19, 2019

Tyler Wilhelm
Project Manager
NextEra Energy Resources, LLC
700 Universe Boulevard
Juno Beach, FL 33408
Office: (561) 694-3193
Tyler.Wilhelm@nee.com

Subject: Crowned Ridge additional structures

Dear Mr. Wilhelm,

This letter is intended to provide updated landowner participation status information that was not included in the original report titled: "Final Report, Crowned Ridge Wind Farm Shadow Flicker Study, Codington and Grant Counties, SD", dated February 6, 2019, submitted by EAPC Wind Energy.

After the report was submitted, I was made aware of updated land parcel and farmstead status databases. There were a number of changes in landowner participation status from the original report. Most were changed from non-participating to participating, with a few that changed from participating to non-participating.

There were no changes in compliance with Codington or Grant County requirements for shadow flicker limits.

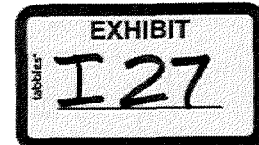
I have attached updated maps and results tables that reflect the changes in participation status for the shadow flicker receptors.

Sincerely,

Jay Haley, P.E., Partner
For EAPC Wind Energy

Attachments:

- Appendix A – Crowned Ridge Energy Project Site Overview Map
- Appendix B – Wind Turbine Coordinates
- Appendix C – Table of Sound Results
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- Appendix C – Table of Shadow Flicker Results
- Appendix D – Standard Resolution Shadow Flicker Maps



App. C-17

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

IN THE MATTER OF THE APPLICATION)	NOTICE OF APPLICATION; ORDER
BY CROWNED RIDGE WIND, LLC FOR A)	FOR AND NOTICE OF PUBLIC
PERMIT OF A WIND ENERGY FACILITY)	INPUT HEARING; NOTICE OF
IN GRANT AND CODINGTON COUNTIES)	OPPORTUNITY TO APPLY
)	FOR PARTY STATUS
)	
)	
)	EL19-003

On January 30, 2019, the South Dakota Public Utilities Commission (Commission) received an Application for an Energy Facility Permit (Application) from Crowned Ridge Wind, LLC (Crowned Ridge or Applicant), a wholly-owned, indirect subsidiary of NextEra Energy Resources, LLC. Crowned Ridge proposes to construct a wind energy conversion facility to be located in Grant County and Codington County, South Dakota (Project). The Project would be situated on approximately 53,186-acres in the townships of Waverly, Rauville, Leola, Germantown, Troy, Stockholm, Twin Brooks, and Mazeppa, South Dakota (Project Area). The total installed capacity of the Project would not exceed 300 megawatts (MW) of nameplate capacity. The proposed Project includes up to 130 wind turbine generators, access roads to turbines and associated facilities, underground 34.5-kilovolt (kV) electrical collector lines, underground fiber-optic cable, a 34.5-kV to 345-kV collection substation, one permanent meteorological tower, and an operations and maintenance facility. The Project will utilize the Crowned Ridge 34-mile 230-kV generation tie line and a new reactive power compensation substation to transmit the generation from the Project's collector substation to the Project's point of interconnection located at the Big Stone South 230-kV Substation, which is owned by Otter Tail Power Company. Applicant has executed a power purchase agreement with Northern States Power Company (NSP) to sell NSP the full output of the Project. The Project is expected to be completed in 2020. Applicant estimates the total cost of the Project to be \$400 million.

The Commission has jurisdiction over this matter pursuant to SDCL Chapters 1-26 and 49-41B and ARSD Chapter 20:10:22.

Pursuant to SDCL 49-41B-15 and 49-41B-16, the Commission will hold a public input hearing on the Application on Wednesday, March 20, 2019, at 5:30 p.m., CDT, at Waverly-South Shore School Gymnasium, 319 Mary Place, Waverly, S.D.

The purpose of the public input hearing will be to hear public comments regarding the Application and the Project. At the hearing, Crowned Ridge will present a brief description of the Project, after which interested persons may appear and present their views, comments, and questions regarding the Application. A copy of the Application is on file with the Grant and Codington County Auditors pursuant to SDCL 49-41B-15(5) and at the Commission's office in Pierre. The Application and all other documents in the case, including detailed maps of the Project, may be accessed on the Commission's web site at www.puc.sd.gov under Commission Actions, Commission Dockets, Electric Dockets, 2019 Electric Dockets, EL19-003 or by contacting the Commission in person at the Capitol Building, 500 E. Capitol Ave., Pierre, SD, or by phone at (605) 773-3201 or (800) 332-1782.

Pursuant to SDCL 49-41B-17 and ARSD 20:10:22:40, the parties to this proceeding are currently the Applicant and the Commission. Any person residing in the area of the Project; each municipality, county, and governmental agency in the area where the Project is proposed to be sited; any non-profit organization formed in whole or in part to promote conservation or natural beauty, to protect the environment, personal health or other biological values, to preserve historical sites, to promote consumer interests, to represent commercial and industrial groups, or to promote the orderly development of the area in which the Project is to be sited; or any interested person,

001026

App. C-18

may be granted party status in this proceeding by making written application to the Commission. Applications for party status will be available at the public input hearing or may be obtained from the Commission's web site or by contacting the Commission. **Applications for party status should be filed with the Commission on or before 5:00 p.m., CDT, April 1, 2019.** The Commission will also be accepting comments in writing from anyone, either by mail, personal delivery, or e-mailing the Commission right up until the time of the decision. You only need to apply for party status if you want to participate formally in the case by putting on actual testimony or other factual evidence, conducting discovery, cross-examining witnesses, making legal arguments, and to preserve your right to appeal to the courts if you do not believe the Commission's decision is legally correct.

Following the public input hearing, the Commission may schedule a formal evidentiary hearing conforming to SDCL Chapter 1-26 to consider any issues raised by any intervening party, the Commission's staff, or the Commission itself. At such a formal hearing, all parties will have the opportunity to appear, present evidence, cross-examine the other parties' witnesses, and exercise all other rights afforded by SDCL Chapters 1-26, 49-1, and 49-41B and ARSD Chapters 20:10:01 and 20:10:22, including rights of appeal to the courts.

For approval, Crowned Ridge must show that the proposed Project will comply with all applicable laws and rules, 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, will not substantially impair the health, safety or welfare of the inhabitants, and will not unduly interfere with the orderly development of the region with due consideration having been given to the views of governing bodies of affected local units of government. Based upon these factors, the Commission will decide whether a permit to construct should be granted, denied, or granted upon such terms, conditions, or modifications of the construction, operation, or maintenance as the Commission finds appropriate. It is therefore

ORDERED, that the Commission will hold a public input hearing on the Application and Project on **Wednesday, March 20, 2019, at 5:30 p.m., CDT, at Waverly-South Shore School Gymnasium, 319 Mary Place, Waverly, S.D.** It is further

ORDERED, that pursuant to SDCL 49-41B-17 and ARSD 20:10:22:40, **applications for party status should be filed on or before 5:00 p.m., CDT, on April 1, 2019.**

Pursuant to the Americans with Disabilities Act, these hearings will be held in physically accessible locations. Please contact the Public Utilities Commission at (605) 773-3201 or (800) 332-1782 at least 48 hours prior to the hearing if you have special needs so arrangements can be made to accommodate you.

Dated at Pierre, South Dakota, this 6th day of February 2019.

CERTIFICATE OF SERVICE
The undersigned hereby certifies that this document has been served today upon all parties of record in this docket, as listed on the docket service list, electronically or by mail.
By: <u>Karen E. Cremer</u>
Date: <u>02/06/19</u>
(OFFICIAL SEAL)

BY ORDER OF THE COMMISSION:

Gary Hanson
GARY HANSON, Chairman

Chris Nelson
CHRIS NELSON, Commissioner

Kristie Fiegen
KRISTIE FIEGEN, Commissioner

App. C-19

Haley

Transcript of PUC Public Input Hearing 3/20/19, Waverly, SD

Page 28

1 a year. Not a lot, but I did hear testimony at the
2 Codrington County public hearing that this also can cause
3 sleep disturbance. It is my belief that I should not have to
4 live or raise my children in an environment where we are
5 unable to sleep soundly or possibly suffer any long-term
6 health impacts.

7 My second topic is the violation of my property
8 rights. I, ultimately, desire to move my home into a
9 different area on my property. Unfortunately, this would be
10 moving my family into an area where I would experience even
11 more noise and shadow flicker according to the maps. I
12 believe I have the right to enjoy my entire property to its
13 fullest. I feel the turbine projecting noise and flicker
14 onto my land and affecting the way I use it is an illegal
15 taking of my property rights.

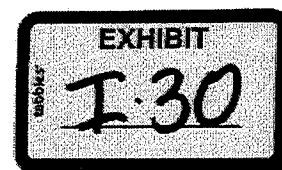
16 I ask that you either deny the permit or curtail
17 the placement of turbines so that all the non-participating
18 property owners should experience zero shadow flicker and
19 noise levels of less than 30 dB(A).

20 And then, also, going back to the sound study in
21 the noise and flicker maps, is somebody from E-A-P-C here?

22 MR. WILHELM: Jay.

23 MR. LYNCH: Jay. Jay, are you a P-E, a
24 professional engineer? Are you certified?

25 MR. HALEY: I'm a professional engineer.



Haley

Transcript of PUC Public Input Hearing 3/20/19, Waverly, SD

THE APPLICATION BY CROWNED RIDGE WIND FOR A PERMIT OF A WIND ENERGY FACILITY IN GRANT AND CODINGTON COUNTY, SD

PUBLIC INPUT HEARING
March 20, 2019

Page 29

1 MR. LYNCH: Okay. And did you --
 2 I'm allowed to ask him these questions, right?
 3 And did you stamp these drawings or did you put
 4 your professional engineer -- is there a copy that's stamped?
 5 MR. HALEY: To answer your first question, yes, I
 6 am a registered professional engineer. No, I did not stamp
 7 those studies because it's not a requirement.
 8 MR. LYNCH: Okay. So, in my experience, when the
 9 companies I have worked for, when we were doing structural or
 10 electrical drawings and we wanted to know that they were
 11 being done correctly and certified, we send them to a P-E and
 12 the P-E puts their stamp on them. And what that basically
 13 means is that they're guaranteeing or betting, you know, to
 14 the best of their ability, that those drawings are correct
 15 and accurate.
 16 I see in very fine print on all these drawings at
 17 the bottom of these, it says, neither E-A-P-C nor any person
 18 acting on their behalf makes any warranty, expressed or
 19 implied, with respect to the use of any information disclosed
 20 on this drawing or assumes any liability with respect to the
 21 use of any information or methods disclosed on the drawing.
 22 So, I just take that to mean that the drawing
 23 doesn't have to be accurate and it doesn't have to be a
 24 correct representation. They can, basically, put whatever
 25 they want out there and it doesn't really mean anything.

Page 31

1 COMMISSIONER NELSON: Okay. Thank you. Another
 2 questions at this juncture?
 3 Just for your information, when the applicant comes
 4 before us for the evidentiary hearing, they are required to
 5 take an oath swearing to that their testimony is accurate and
 6 go through that process just as if they were in a courtroom.
 7 So, they will -- I appreciate that question because it's --
 8 of your concern because it's very important that everything
 9 is, from a standpoint of qualifying as evidence as if it --
 10 as an evidentiary hearing because that's what it is. So,
 11 it's a good point and we appreciate that.
 12 MR. LYNCH: I appreciate that.
 13 COMMISSIONER NELSON: Yes, sir.
 14 Other questions or concerns, please come on down
 15 and -- I see a familiar face up there raising a hand. Come
 16 on down.
 17 Good morning. Or excuse me, good evening, sir.
 18 MR. EHLEBRACHT: Good evening. My name is
 19 Garry Ehlebracht, E-h-l-e-b-r-a-c-h-t, I'm from Goodwin,
 20 South Dakota, and I'm reading the comments here from
 21 Isaac Orr.
 22 "Dear Esteemed Commissioners of the South Dakota
 23 Public Utilities Commission. My name is Isaac Orr, and I am
 24 a policy fellow specializing in energy and environmental
 25 policies at [the] Center of American Experiment, a thank tank

020134
App. C-21

Exhibit A30

LAW OFFICES

Lynn, Jackson, Shultz & Lebrun, P.C.

LAWYERS ALSO ADMITTED IN MINNESOTA, IOWA, NORTH DAKOTA, AND WYOMING

110 N. MINNESOTA AVENUE
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909 ST. JOSEPH STREET
SUITE 800
RAPID CITY, SD 57701-3301
605-342-2592
FAX 605-342-5185

REPLY TO: Sioux Falls 605-332-5999

From the office of Miles F. Schumacher
e-mail address: mschumacher@lynnjackson.com

May 17, 2019

Via Electronic Filing

Ms. Patricia Van Gerpen
Executive Director
South Dakota Public Utilities Commission
500 East Capitol Avenue
Pierre, SD 57501

Re: Docket #EL19-003
Application to the SD PUC for a Facility Permit to Construct
A 300 megawatt Wind Facility

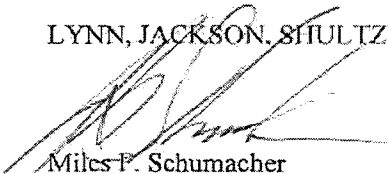
Dear Ms. Van Gerpen:

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.

Thank you.

Yours very truly,

LYNN, JACKSON, SHULTZ & LEBRUN, P.C.



Miles F. Schumacher
MFS:kab
cc: Brian Murphy

Page 000001
010027

App. D

1 MS. CREMER: Thank you.

2 You may step down. Thank you.

3 (The witness is excused.)

4 MS. CREMER: Please call your next witness.

5 * MR. SCHUMACHER: The Applicant calls Sarah
6 Sappington.

7 (The oath is administered by the court reporter.)

8 * MR. GANJE: Madam Examiner, may I lodge an
9 objection at this time?

10 MS. CREMER: To what?

11 MR. GANJE: Well, I'm going to object to the
12 testimony presented by this witness on several grounds.
13 This witness is -- by way of offer of proof, this witness
14 will be testifying to matters involving conclusions and
15 opinions that were created by another party that is an
16 employee of the Applicant and that is hearsay, if there
17 is another party that created conclusions and opinions.
18 And I will cite the pages by way of offer of proof.

19 Ms. Wells is an employee, I believe, of the
20 Applicant, if I'm not mistaken. And Ms. Wells provided
21 the preliminary testimony. And this witness is the
22 substitute witness for Ms. Wells.

23 Well, the problem is, on page 6 of Ms. Wells's
24 testimony, which this witness would be testifying to,
25 there is an opinion with regard to impact or anticipated

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App. D-1

1 results. On page 6, line 10, there is an opinion
2 regarding any possible or nonadverse impact. On page 7,
3 there is an opinion or a conclusion with regard to no
4 impact regarding the project.

5 On page 9, there is a statement by Ms. Wells
6 that there are no impacts expected. On page 9, there is
7 another statement about the proposed activity that will
8 be undertaken by the Applicant in order to secure the
9 property from any damage or destruction; in other words,
10 a representation.

11 On page 10, there is another opinion or
12 conclusion with regard to impacts that will be either
13 avoided or not -- do not exist.

14 I could go on, but that's the point of my offer
15 of proof.

16 CHAIRMAN HANSON: Mr. Ganje, excuse me, as
17 you're going through those, if you could touch on not
18 just the page but the line as well.

19 MR. GANJE: I will do that. And I will stop my
20 examples there and I will start over for the benefit of
21 the Commission. And again, I apologize for rushing
22 through.

23 What we have here is --

24 MS. CREMER: And I'm going to interrupt you at
25 this point.

1 Crowned Ridge, do you have a response? I think
2 we know where he's going.

3 MR. SCHUMACHER: Yes, I do. Thank you.

4 Ms. Sappington's testimony will demonstrate that
5 she is clearly qualified and participated in the work
6 that led to these conclusions and able to make those
7 conclusions on her own.

8 MS. CREMER: And, Mr. Ganje, I can let you go
9 further, but I will say that we frequently allow expert
10 witnesses to adopt the testimony of others.

11 Now you can ask her questions throughout, you
12 know, what she based her opinion on and flush that out,
13 but at this point I'm going to allow her to testify.

14 MR. GANJE: With all due respect, Madam
15 Examiner, then I would ask that this matter be appealed
16 to the decision of the Commission. And I am glad to
17 provide further clarification of the points where we have
18 what is called a double hearsay and a denial of due
19 process.

20 Because this witness is coming in here when the
21 Applicant could bring the other party here. The other
22 party is an employee. The other party is the principal
23 party that came to various conclusions about impact and
24 other consequential things affecting the Application. I
25 don't get an opportunity to examine that other party, the

012302

App. D-3

1 author of significant events or significant opinions.

2 So this is not a situation where we have an
3 expert testifying based on a study done by the University
4 of Chicago professor or so forth. This is a witness who
5 is going to be testifying as a substitute for somebody
6 that did a substantial amount of alleged work in support
7 of this Application and who we should have a right to
8 cross-examine under the concepts of due process and under
9 the concepts of hearsay, if not double hearsay.

10 That's the basis of my concern. And in that
11 regard, I respectfully appeal the examiner's decision and
12 ask that the Commission would rule on my objection to
13 this witness.

14 COMMISSIONER NELSON: Overruled.

15 CHAIRMAN HANSON: Just one minute.

16 We heard testimony from Mr. Hessler, and I was
17 trying to remember from all the things that I've read in
18 this docket -- I know that he testified on noise, but I
19 don't know that he testified on shadow flicker at all. I
20 don't think he did.

21 MR. MIKAL HANSON: No. No.

22 CHAIRMAN HANSON: It was all noise.

23 MR. MIKAL HANSON: No, he did not.

24 CHAIRMAN HANSON: Thank you.

25 Do you plan to testify -- I didn't see it in

1 yours -- noise. I see shadow flicker and such. She's
2 not here to testify on noise?

3 MR. SCHUMACHER: She is not, Commissioner. She
4 is here to testify on environmental impact.

5 CHAIRMAN HANSON: I was just considering that
6 from the standpoint of Mr. Hessler having said he was
7 traveling today and not available and I wanted to make
8 certain that Intervenors weren't undercut from that
9 standpoint.

10 I'm going to overrule only on the basis that
11 there is the opportunity, if there is a specific item
12 that comes up as testimony as presented as we go through
13 the process and there's a question you wish to ask, you
14 have that opportunity at that time.

15 I need to know, are you able to have Wells
16 participate?

17 MR. SCHUMACHER: Thank you for asking,
18 Mr. Chairman. This was a reason why we sought an
19 additional hearing day, so that we could have Ms. Wells
20 here to testify.

21 We did not receive any support from Mr. Ganje in
22 attempting to find another time to bring Ms. Wells in to
23 testify. The very tight schedule of the Commission
24 precluded setting an additional day for her to be here.

25 We did have numerous conversations with Staff

012304

App. D-5

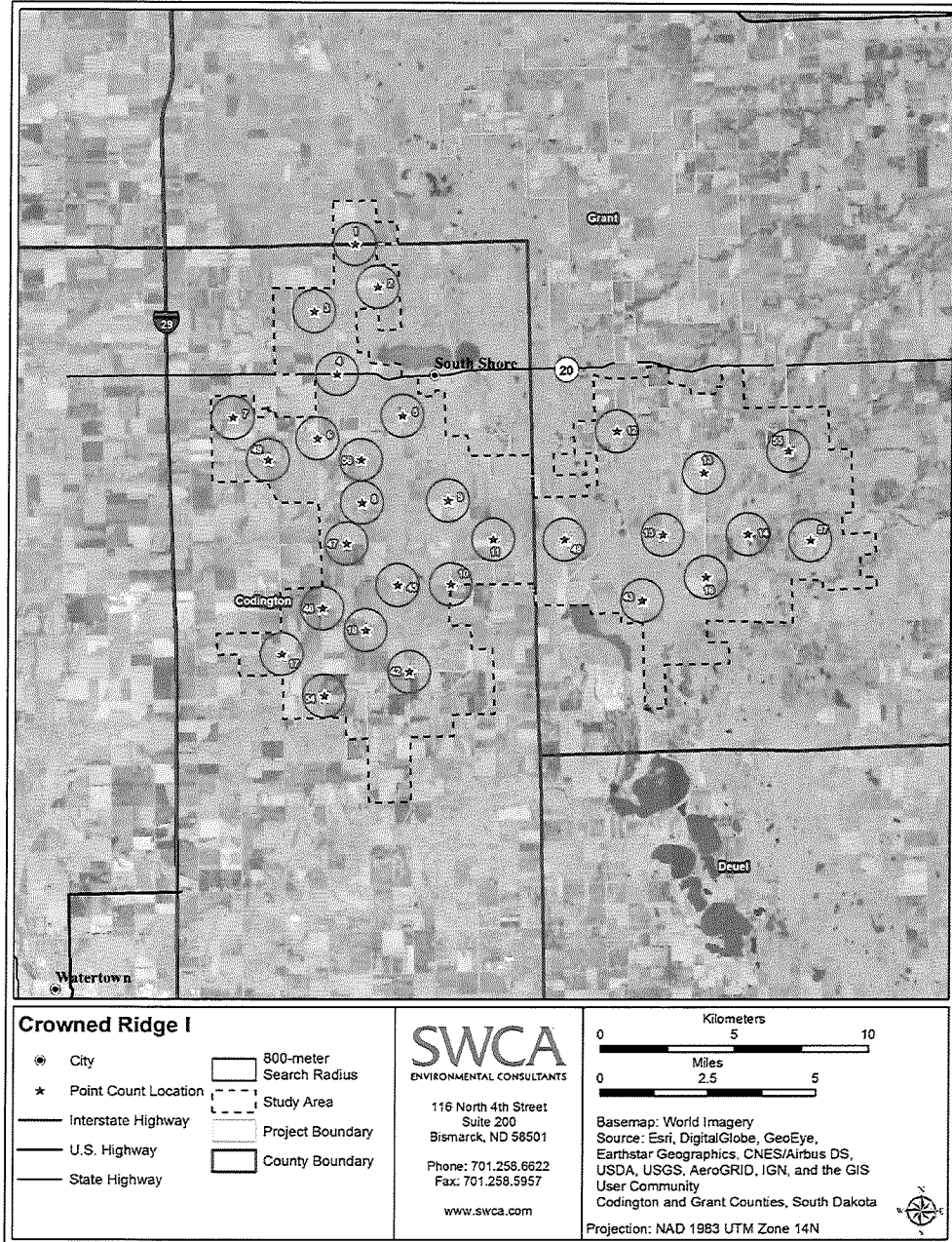


Figure 1. Project location and study area showing point count survey plots.