

BEFORE THE SOUTH DAKOTA PUBLIC UTILITIES COMMISSION

DOCKET 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 IN  
GRANT COUNTY AND CODINGTON COUNTY, SOUTH DAKOTA, FOR THE  
DAKOTA RANGE WIND PROJECT

DIRECT TESTIMONY OF JON THURBER  
ON BEHALF OF THE COMMISSION STAFF  
MAY 4, 2018



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## **EXHIBITS**

Exhibit\_JT-1 Dakota Range's Responses to Commission Staff Discovery

Exhibit\_JT-2 Intervenor's Responses to Commission Staff Discovery

Exhibit\_JT-3 South Dakota Department of Health Letter

1 I. INTRODUCTION AND QUALIFICATIONS

2  
3 **Q. Please state your name and business address.**

4 A. Jon Thurber, Public Utilities Commission, State Capitol Building, 500 East Capitol  
5 Avenue, Pierre, South Dakota, 57501.  
6

7 **Q. By whom are you employed and in what capacity?**

8 A. I am a utility analyst for the South Dakota Public Utilities Commission (“Commission”). I  
9 am responsible for analyzing and presenting recommendations on utility dockets filed  
10 with the Commission.  
11

12 **Q. Please describe your educational and business background.**

13 A. I graduated summa cum laude from the University of Wisconsin – Stevens Point in  
14 December of 2006, with a Bachelors of Science Degree in Managerial Accounting,  
15 Computer Information Systems, Business Administration, and Mathematics. My  
16 regulated utility work experience began in 2008 as a utility analyst for the Commission.  
17 At the Commission, my responsibilities included analyzing and testifying on ratemaking  
18 matters arising in rate proceedings involving electric and natural gas utilities. In 2013, I  
19 joined Black Hills Corporation as Manager of Rates. During my time at Black Hills  
20 Corporation, I held various regulatory management roles and was responsible for the  
21 oversight of electric and natural gas filings in Wyoming, Montana, and South Dakota. In  
22 July of 2016, I returned to the Commission as a utility analyst. In addition to cost of  
23 service dockets, I work on transmission siting, energy conversion facility siting, wind  
24 energy facility siting, and Southwest Power Pool transmission cost allocation issues.  
25

26 In my nine years of regulatory experience, I have either reviewed or prepared over 170  
27 regulatory filings. These filings include two wind energy facility and two transmission  
28 facility siting dockets. I have provided written and oral testimony on the following topics:  
29 the appropriate test year, rate base, revenues, expenses, taxes, cost allocation, rate  
30 design, power cost adjustments, capital investment trackers, PURPA standards, avoided  
31 costs, and electric generation resource decisions.  
32

1 **Q. Are you familiar with Dakota Range I, LLC’s and Dakota Range II, LLC’s (“Dakota**  
2 **Range” or “Company”) application for a permit of a wind energy facility, Docket**  
3 **EL18-003?**

4 A. Yes. I have reviewed the Company’s prefiled testimony, appendixes, figures, and  
5 responses to data requests produced by all parties as it pertains to the issues that I am  
6 addressing.

7

8 **II. PURPOSE OF TESTIMONY**

9

10 **Q. What is the purpose of your direct testimony?**

11 A. The purpose of my direct testimony is to discuss the review performed by Commission  
12 Staff of the Application, identify any issues or concerns with the representations made in  
13 the Application or by the Applicant, and provide Commission Staff’s recommendation on  
14 whether the permit should be granted.

15

16 **III. REVIEW OF THE APPLICATION**

17

18 **Q. Please explain the review process performed by Commission Staff in Docket**  
19 **EL18-003.**

20 A. After receiving the Application, Staff completed a review of the contents as it relates to  
21 the Energy Facility Siting statutes, SDCL 49-41B, and Energy Facility Siting Rules,  
22 ARSD 20:10:22. Staff then identified information required by statute or rule that was  
23 either missing from the Application or unclear within the Application and requested  
24 Dakota Range to provide or clarify that information. Once interested individuals were  
25 granted party status, Commission Staff also issued discovery to the intervenors in order  
26 to understand what concerns they had with the project. Please see Exhibit\_JPT-1 for  
27 Dakota Range’s responses to Commission Staff discovery, and Exhibit\_JPT-2 for the  
28 Intervenors’ responses to Commission Staff discovery.

29

30 In addition, Commission Staff subpoenaed experts from State Agencies to assist  
31 Commission Staff with our review. Tom Kirschenmann, Deputy Director of the Wildlife  
32 Division and Chief of the Terrestrial Resources Section at the Game, Fish, and Parks,  
33 reviewed the potential impacts to wildlife and associated habitats. Paige Olson, Review

1 and Compliance Coordinator at the State Historic Preservation Office (SHPO), reviewed  
2 the project to ensure historic properties are taken into consideration.

3  
4 Further, Commission Staff hired two consultants to assist Commission Staff with our  
5 review. David Hessler, Vice President at Hessler Associates, Inc., reviewed the  
6 information on the noise emitted from the project. David Lawrence, real property  
7 appraiser with DAL Appraisal and Land Services, reviewed the information on potential  
8 value impacts to South Dakota real property.

9  
10 **Q. What is the purpose of Commission Staff's expert witnesses in this proceeding?**

11 A. Commission Staff sought experts within their respective fields to assess the merits and  
12 deficiencies of the Application. Commission Staff requested that the experts address  
13 whether the information submitted by Dakota Range aligns with industry best practices,  
14 and if they agreed with the conclusions Dakota Range made regarding the potential  
15 impacts from the project.

16  
17 **Q. Did Commission Staff reach out to any other State Agencies for input?**

18 A. Not for this docket. However, Commission Staff did reach out to the South Dakota  
19 Department of Health to find out if they had an opinion on the potential health impacts  
20 from wind turbines in Docket EL17-028.

21  
22 **Q. What was the South Dakota Department of Health's response?**

23 A. The South Dakota Department of Health provided Commission Staff with a letter stating  
24 that the Department of Health has not taken a formal position on the issue of wind  
25 turbines and human health. Further, they referenced the Massachusetts Department of  
26 Public Health and Minnesota Department of Health studies and identified those studies  
27 generally conclude that there is insufficient evidence to establish significant risk to  
28 human health. I included the Department of Health's letter as Exhibit\_JT-3.

29  
30 **Q. Did Commission Staff receive responses to discovery from all sixteen individuals  
31 granted party status?**

32 A. No. Commission Staff received responses to discovery from two individuals granted  
33 party status, Teresa Kaaz and Kristi Mogen, on April 27, 2018. Due to the timing of  
34 when the responses were provided, Commission Staff did not have time to consider the

1 issues raised by the Intervenor through discovery in our direct testimony. Commission  
2 Staff will be available to answer questions regarding the issues raised by the Intervenor  
3 at the evidentiary hearing.  
4

5 **Q. Was Dakota Range's Application considered complete at the time of filing?**

6 A. At the time of the filing, the application was generally complete. However, as identified  
7 above, Commission Staff requested further information, or clarification, from Dakota  
8 Range which Commission Staff believed was necessary in order to satisfy the  
9 requirements of SDCL 49-41B and ARSD 20:10:22. Dakota Range's responses to  
10 Commission Staff's information requests received to date are attached as Exhibit\_JT-1.  
11 Finally, I would also note that an applicant supplementing its original application with  
12 additional information as requested by Commission Staff is not unusual for siting  
13 dockets.  
14

15 **Q. Based on your review of the Application, responses to Commission Staff's data  
16 requests and Dakota Range's testimony, do you find the Application to be  
17 complete?**

18 A. Yes. Staff found that Dakota Range provided information that addressed the information  
19 required by ARSD Chapter 20:10:22 and SDCL 49-41B. However, at the time of writing  
20 this testimony, it is my opinion that Dakota Range should provide additional information  
21 to more-thoroughly address certain rules or to better understand the project's potential  
22 impacts. This opinion is based on Commission Staff's interpretation of the  
23 Commission's rules and the testimony submitted by Commission Staff.  
24

25 **Q. What issues and concerns does Commission Staff have with the Dakota Range  
26 wind energy facility?**

27 A. I will address the following issues on behalf of Commission Staff:

- 28
- 29 • Turbine Location Flexibility
- 30 • Voluntary Shadow Flicker Commitment
- 31 • Property Value Representations at the Public Input Hearing
- 32 • Punished Woman's Lake Setback
- 33 • Easement Language and Permit Conditions
- 34

1 Each Commission Staff expert witness identified issues or conditions that need to be  
2 addressed by the Applicant in their respective areas of noise, cultural resources,  
3 property value, and wildlife and associated habitats.  
4

5 **IV. TURBINE LOCATION FLEXIBILITY**  
6

7 **Q. Did the Company request turbine location flexibility?**

8 A. Yes. On Page 9-2 of the Application, the Applicant makes the following statements:  
9

10 "As a result of final micrositing, minor shifts in the turbine locations may be  
11 necessary to avoid newly identified cultural resources (cultural resource studies  
12 in coordination with the SWO are ongoing), or due to geotechnical evaluations of  
13 the wind turbine locations, landowner input, or other factors. Therefore, the  
14 Applicant requests that the permit allow turbines to be shifted within 500 feet of  
15 their current proposed location, so long as specified noise and shadow flicker  
16 thresholds are not exceeded, cultural resource impacts are avoided or minimized  
17 per the CRMMP, environmental setbacks are adhered to as agreed upon with  
18 USFWS and SDGFP, and wetland impacts are avoided to the extent practicable.  
19 If turbine shifts are greater than 500 feet, exceed the noted thresholds, or do not  
20 meet the other limitations specified, the Applicant would either use an alternate  
21 turbine location or obtain Commission approval of the proposed turbine change  
22 ...In all cases, the final turbine locations constructed will adhere to all applicable  
23 local, State, and Federal regulations and requirements."  
24

25 **Q. Did the Applicant provide justification for using 500 feet as the appropriate  
26 distance threshold to necessitate a Commission filing for a material deviation?**

27 A. In response to Staff Data Request 3-4(a), the Company stated "Apex believes a 500 foot  
28 move is reasonable, as the turbine will continue to meet all setback and sound  
29 requirements and will remain on the same parcel of land."  
30

31 **Q. What process does the Applicant envision to obtain Commission approval of a  
32 proposed turbine location change?**

33 A. In response to Staff Data Request 3-4(c), the Company proposed the following process  
34 to obtain approval of a proposed turbine location change that exceeds 500 feet:  
35

- 36 • Dakota Range would file with the Commission a request for approval of the  
37 change that includes:
  - 38 ○ An affidavit describing the proposed change, the reason for the  
39 change, the reason the change does not comply with one or more  
40 turbine flexibility proposal limitations set forth in the Application, and  
41 the documentation referenced below;

- 1                   ○ A map showing both the approved location and the proposed change
- 2                   (in different colors);
- 3                   ○ Documentation demonstrating compliance with local zoning
- 4                   requirements including setbacks from existing off-site residences,
- 5                   businesses, governmental buildings, and non-participating property
- 6                   lines, and the noise requirement at existing off-site residences; and
- 7                   ○ Documentation demonstrating compliance with voluntary
- 8                   commitments regarding cultural resources, wetlands, and sensitive
- 9                   species habitat; and
- 10                  ○ Documentation of compliance with or landowner waiver of voluntary
- 11                  setback commitments.
- 12                  • Once received, the information would be reviewed by Commission Staff, and
- 13                  a recommendation regarding the request provided to the Commission.
- 14                  • The Commission would then issue a decision regarding Dakota Range's
- 15                  request at its next regularly scheduled Commission meeting.
- 16

17 **Q. Are turbine location shifts that are not filed and approved by the Commission**  
18 **allowed by South Dakota administrative rules?**

19 A. ARSD 20:10:22:33.02 (1) requires the applicant to provide a configuration of the wind  
20 turbines. In Docket EL17-028, In the Matter of the Application by Crocker Wind Farm,  
21 LLC for a Permit of a Wind Energy Facility and a 345 kV Transmission Line in Clark  
22 County, South Dakota for Crocker Wind Farm, the Commission found that the  
23 Application failed generally in form and content because multiple wind turbine  
24 configurations were included instead of a singular configuration. Based on consultation  
25 with my attorney, it is unclear whether a turbine location shift that does not receive  
26 Commission approval would constitute a new configuration and not comply with a  
27 singular configuration as required by ARSD 20:10:22:33.01(1).

28  
29 **Q. Since the Commission's decision in Docket EL17-028 referenced above, have**  
30 **Applicants requested turbine location flexibility without Commission filings for**  
31 **approval?**

32 A. Yes, I am aware of two instances where the Applicant has requested to define what  
33 would constitute a material deviation for a turbine location change. One request was  
34 included in a motion for reconsideration that was not decided, and one request is  
35 pending. In Docket EL17-028, Crocker Wind Farm, LLC requested a condition that  
36 would allow non-material shifts in turbine locations of less than 325 feet without further  
37 Commission action in its motion to reconsider. Ultimately, the Commission did not hear  
38 evidence on this request as the motion was denied. Lastly, in Docket EL17-055,



1 Crocker Wind Farm, LLC has a pending request that the permit allow turbines to be  
2 shifted within 1,000 feet of the proposed location.

3  
4 **Q. The Applicant suggested that 500 feet is a reasonable distance to shift a turbine**  
5 **before a Commission filing is required because the turbine will remain on the**  
6 **same parcel of land if it is shifted 500 feet or less. Is this adequate support for**  
7 **using 500 feet as the appropriate distance?**

8 A. No, it is not. The project impacts may be different than what the Commission reviewed  
9 through the Application process even though turbines remain on the same parcel of  
10 land. While this 500-foot proposal may be based on the professional experience of the  
11 Applicant, the Company has not adequately explained and justified this request.  
12 Commission Staff submitted Staff Data Request 7-5 to ascertain how many turbine shifts  
13 have occurred at other wind energy facilities constructed by the Company, and the  
14 Company responded that this information is not readily available.

15  
16 **Q. Do you have any concerns with process proposed by the Applicant to obtain**  
17 **approval of a turbine location change that exceeds 500 feet?**

18 A. Yes. The process proposed by the Applicant does not allow an opportunity for  
19 individuals that were granted party status to make recommendations or object.  
20 Intervenors should have the opportunity to participate in all aspects of the docket,  
21 including requests for turbine location changes.

22  
23 **Q. To ensure compliance with ARSD 20:10:22:33.02(1), how would Staff propose to**  
24 **handle turbine shifts that occur?**

25 A. To allow for a review of the final turbine configuration, I recommend the following filing  
26 prior to starting construction:

- 27  
28 1) a list of turbine sites that changed;  
29 2) a map showing the new turbine location;  
30 3) justification for each turbine change; and  
31 4) an analysis on any impacts that occur because of that change.

32  
33 I further recommend that Commission allow 30 days for Staff, the intervenors, and the  
34 Commission to review any shifts in turbine locations and be afforded the opportunity to

1 raise concerns. If no concerns are raised by the parties or the Commission within 30  
2 days, then the turbine changes would be automatically approved. However, if a party (or  
3 the Commission) raises a concern with a turbine shift, then that turbine shift would be  
4 brought before the Commission for consideration and approval.  
5

6 **Q. Has an Applicant filed a request for a location deviation before the Commission in**  
7 **other siting dockets?**

8 A. Yes. The most recent material deviation requests were filed by Black Hills Power, Inc. to  
9 the Teckla-Osage-Rapid City transmission line in Docket EL14-061. The requests were  
10 for material deviations from the project centerline that was previously approved by the  
11 Commission, and were approved approximately 20 days after the filings were received.  
12 The Commission is familiar with a material deviation process, and the agency has  
13 expeditiously processed these filings if the appropriate support is included.  
14

15 I am also aware of three other siting dockets where the Applicant made filings before the  
16 Commission for facility location deviations:

- 17 • Docket EL13-028 - In the Matter of the Application of Montana-Dakota Utilities  
18 Co. and Otter Tail Power Company for a Permit to Construct the Big Stone South  
19 to Ellendale 345 kV Transmission Line;
- 20 • Docket EL12-063 – In the Matter of the Petition of Otter Tail Power Company for  
21 Order Accepting Certification of Permit Issued in Docket EL06-002 to Construct  
22 Big Stone Transmission Line and Substations in Grant and Deuel Counties; and
- 23 • Docket HP07-001 - In the Matter of the Application by TransCanada Keystone  
24 Pipeline, LP for a Permit under the South Dakota Energy Conversion and  
25 Transmission Facility Act to Construct the Keystone Pipeline Project.  
26

27 **Q. Should location deviations for wind energy facilities be treated differently than**  
28 **location deviations for transmission facilities and crude oil pipelines?**

29 A. The Applicant has not provided any justification for the different treatment of wind energy  
30 facilities.  
31  
32  
33

1 **Q. In Docket EL17-055, the Applicant has a pending request for turbine location**  
2 **flexibility. What is the status of that docket?**

3 A. Commission Staff does not agree with Crocker Wind Farm, LLC's request that the permit  
4 allow turbines to be shifted within 1,000 feet of the proposed location, and the issue is  
5 being litigated. Docket EL17-055 is scheduled for hearing beginning on May 9, 2018.  
6 The outcome of the turbine location flexibility request in Docket EL17-055 may impact  
7 Commission Staff's position in this docket. I will update my testimony, if necessary.

8

9

**V. SHADOW FLICKER**

10

11 **Q. Did Dakota Range make a voluntary commitment regarding shadow flicker?**

12 A. Yes. On Page 10-3 of the Application, Dakota Range made a voluntary commitment  
13 that "facility will not exceed a maximum of 30 hours of shadow flicker per year at any  
14 existing non-participating residence, business, or building owned and/or maintained by a  
15 governmental entity, unless otherwise agreed to by the landowner."

16

17 **Q. Did Dakota Range make this voluntary shadow flicker commitment for**  
18 **participating residences?**

19 A. No, the commitment is only for non-participating landowners.

20

21 **Q. Did the shadow flicker modeling identify any participating residences exceed 30**  
22 **hours per year?**

23 A. Yes. On Page 16-11 of the Application, the Applicant states, "While the modeling  
24 indicates that 11 participating residences could experience annual shadow flicker levels  
25 above 30 hours per year, since the modeling treated homes as "greenhouses" and  
26 assumed no vegetation or other existing structures, the "expected" levels are likely  
27 higher than actual levels will be. Dakota Range plans to discuss the results with  
28 participating landowners and, if concerns are raised, will conduct modeling using site-  
29 specific data to further refine results. Additionally, mitigation measures, such as  
30 vegetative screening or darkening shades, can be implemented to address shadow  
31 flicker concerns should they arise after the Project is operational."

32

1 **Q. Is Dakota Range willing to agree to a permit condition that requires the**  
2 **owner/operator of the wind project to mitigate for shadow flicker concerns if they**  
3 **arise during project operation?**

4 A. Yes. In response to Staff Data Request 2-16, Dakota Range “would agree to a permit  
5 condition that requires Dakota Range to take reasonable steps to mitigate shadow flicker  
6 concerns at the 11 residences that could experience shadow flicker levels above 30  
7 hours per year.”

8  
9 **Q. Do you have a response to Dakota Range’s proposed condition?**

10 A. While Dakota Range narrowed the condition to the 11 participating residences that could  
11 experience shadow flicker levels above 30 hours per year based on their modeling,  
12 Commission Staff prefers to have the condition applicable to any residences that  
13 experiences shadow flicker that exceeds 30 hours per year based on actual operation.  
14 Also, I am unsure what Dakota Range deems to be “reasonable steps.” Based on the  
15 Application, I would assume reasonable steps includes vegetative screening or  
16 darkening shades. Commission Staff is interested in putting greater definition around  
17 reasonable steps by the Company providing other acceptable mitigation measures for  
18 shadow flicker.

19

20 **VI. PROPERTY VALUE REPRESENTATIONS AT THE PUBLIC INPUT HEARING**

21

22 **Q. Did the Commission hold a public input hearing in this proceeding?**

23 A. Yes. The Commission held a public input hearing on the Application on March 21, 2018,  
24 in Waverly, SD. The purpose of the public hearing was to hear public comments  
25 regarding the Application and the project. Dakota Range presented a brief description of  
26 the project, followed by comments from interested persons. The hearing lasted over  
27 three hours, with comments made by approximately fifty interested persons.

28

29 **Q. Did the Applicant make any representations at the Public Input Hearing regarding**  
30 **property values as part of their description of the project?**

31 A. Yes. Mr. Mark Mauersberger, Senior Development Manager with Apex Clean Energy,  
32 Inc., made the following statements:

33

1           *"In addition to the aforementioned, Codington County representative actually*  
2           *reached out to their neighboring county's equalization office to discuss property*  
3           *values since Buffalo Ridge Wind Farm was built more than ten years ago. Brookings*  
4           *County told Codington County that they had just completed such an analysis on 243*  
5           *home sites that were in and around the Buffalo Ridge Wind Farm.*

6  
7           *Their conclusion? Over the past decade, 242 of the 243 homes around this nearby*  
8           *wind farm increased in value by an average of fifty eight percent. Now I understand*  
9           *that project opponents love to cite a flawed real estate study done in Canada.*  
10          *However, I would rely on South Dakota analysis done on an established wind farm in*  
11          *a nearby county as a better comparable."*  
12

13 **Q. Did Dakota Range submit the property value analysis performed by Brookings**  
14 **County to support their Application on January 24, 2018?**

15 A. No, Dakota Range did not submit this analysis as support when they filed their  
16 Application.  
17

18 **Q. The Applicant submitted supplemental direct testimony on property value impacts**  
19 **on Friday, April 6, over two weeks after the Public Input Hearing. Did Dakota**  
20 **Range submit the property value analysis performed by Brookings County as part**  
21 **of their supplemental direct testimony?**

22 A. No. Mr. Mike MaRous did not include this analysis as an exhibit, nor did Mr. MaRous  
23 mention this analysis in his direct testimony.  
24

25 **Q. Did Commission Staff request the property value analysis performed by Brookings**  
26 **County through discovery?**

27 A. Yes. On April 6, 2018, Commission Staff requested the analysis through Staff Data  
28 Request 2-19. On April 20, 2018, Mr. Mark Mauersberger responded with the following:  
29

30           *"At a recent Codington County Planning and Zoning meeting, Luke Muller, the*  
31           *Zoning Officer for Codington County and a First District Association of Local*  
32           *Governments' Staff Member, stated that he had contacted the Brookings County*  
33           *Equalization Office to ask about wind turbines and property values. According to Mr.*  
34           *Muller, the Brookings County Equalization Office said that they had compared*  
35           *property values before and after installation of the Buffalo Ridge wind projects, and*  
36           *property values in the area had increased by an average of 58 percent. We have*  
37           *requested additional specifics from Luke Muller."*  
38  
39

1 **Q. As of May 3, 2018, has Dakota Range supplemented its response to Staff Data**  
2 **Request 2-19 with the “additional specifics from Luke Muller”?**

3 A. No, Dakota Range has not.  
4

5 **Q. Has Commission Staff asked further discovery related to Mr. Mauersberger**  
6 **property value claims at the Public Input Hearing?**

7 A. Yes, Commission Staff asked for more information from Dakota Range in Staff Data  
8 Request 6-7. On April 30, 2018, the Applicant responded and generally referred  
9 Commission Staff to its response to Staff Data Request 2-19, which does not answer our  
10 questions. Commission Staff would appreciate an answer to Staff Data Requests 2-19  
11 and 6-7, including all subparts.  
12

13 **Q. What is your concern regarding the representation Mr. Mauersberger made**  
14 **regarding property value at the Public Input Hearing?**

15 A. I am concerned that the Applicant asked interested persons at the Public Input Hearing  
16 to rely on an analysis that is not submitted into this record and available for examination  
17 through this proceeding. An Applicant should not reference an analysis at a Public Input  
18 Hearing to support its Application if it is unwilling to make it part of the evidentiary record.  
19 The credibility of the Commission’s siting process is compromised if the Applicant does  
20 not adhere to an evidence-based approach.  
21

22 **Q. What resolution is Commission Staff seeking regarding the Applicant’s property**  
23 **value representations at the Public Input Hearing?**

24 A. Since the Applicant has not produced the Brookings County property value analysis  
25 requested and is in violation of the procedural schedule,<sup>1</sup> I do not believe this information  
26 will be produced as evidence in this proceeding.  
27

28 Commission Staff will defer to the Commission to determine the appropriate actions to  
29 restore the credibility of the Public Input Hearing process.  
30  
31  
32

---

<sup>1</sup> Order Granting Party Status and Establishing Procedural Schedule, “The responses to discovery are due ten business days after receipt.”

1 **VII. PUNISHED WOMAN'S LAKE SETBACK**

2  
3 **Q. Did Dakota Range make a commitment regarding a setback from Punished**  
4 **Woman's Lake?**

5 A. Yes. On Page 10-3 of the Application, Dakota Range made a voluntary commitment  
6 that "the turbines will be set back 2 miles from the shoreline of Punished Woman's  
7 Lake."

8  
9 **Q. Why did Dakota Range agree to this voluntary setback?**

10 A. According to Mr. Mark Mauersberger direct testimony, Page 6, lines 17 through 22,  
11 "Dakota Range met with the Punished Woman's Lake Association to discuss the Project  
12 and address concerns related to potential viewshed impacts at Punished Woman's Lake.  
13 To address the concern raised, as well as avoid areas of potential tribal resources near  
14 the lake and be a good neighbor to the nearby town of South Shore, Dakota Range  
15 agreed to a turbine setback of two miles from the shoreline of Punished Woman's Lake."

16  
17 **Q. What was Dakota Range's basis for adopting this voluntary setback?**

18 A. In response to Staff Data Request 3-6(a), the Company stated it "applied a rationale that  
19 was consistent with the lake setbacks imposed by Deuel County, South Dakota, during  
20 its recent zoning ordinance amendment process." Please see Exhibit\_JPT-1 for the  
21 Company's full response explaining its rationale. In summary, Deuel County established  
22 a 3-mile setback from Lake Cochrane, a 2-mile setback from Lake Alice, and a 1-mile  
23 setback from Bullhead Lake (referred to as a "lesser lake" at Deuel County meetings).

24  
25 **Q. How did Dakota Range determine two miles to be the appropriate setback for**  
26 **Punished Woman's Lake?**

27 A. In response to Staff Data Request 3-6(b), the Company stated, "Punished Woman's  
28 Lake falls between Lake Alice and a "lesser lake," and is not comparable to Lake  
29 Cochrane. In Apex's opinion, a 1-mile setback is probably the appropriate setback from  
30 Punished Woman's Lake; however, in the interest of being a good neighbor, Apex  
31 voluntarily imposed a 2-mile setback."

1 **Q. Does Dakota Range’s project boundary area border Punished Woman’s Lake**  
2 **shoreline?**

3 A. No, it does not. Based on Figure 2 and Figure 5 of the Application, it is unclear how  
4 much of Dakota Range’s project area is actually within 2 miles of the shoreline of  
5 Punished Woman’s Lake.

6

7 Commission Staff will submit discovery to Dakota Range to determine:

- 8 1. How much of the Project Area under lease is impacted by the voluntary 2-mile  
9 setback?
- 10 2. How many turbines needed to be moved or removed from previous layouts in order  
11 to accommodate the Punished Woman Lake setback; and
- 12 3. How much Buildable Area, as defined in Figure 5, was eliminated as a result of the  
13 Punished Woman Lake voluntary setback.

14

15 I will update my testimony regarding this information.

16

17 **Q. Is the land surrounding Punished Woman’s Lake under easement by another wind**  
18 **developer?**

19 A. Based on Exhibit DM-1 – Transmission Lines and Interconnection Map attached to the  
20 direct testimony of Daniel Mayer in Docket EL17-050, it appears that Crowned Ridge  
21 Wind, LLC has land under easement in between Dakota Range’s Project Area and parts  
22 of the Punished Woman’s Lake shoreline. I do not know whether Crowned Ridge Wind,  
23 LLC has agreed to a larger setback from the Punished Woman’s Lake shoreline than the  
24 1-mile setback required by Codington County.

25

26 **Q. What setback did the Punished Woman’s Lake Association request at the Public**  
27 **Input Hearing?**

28 A. The President of the Punished Woman’s Lake Association requested a 3-mile setback  
29 from the Punished Woman’s Lake shoreline.

30

31 **Q. What is your recommendation regarding the Punished Woman’s Lake setback?**

32 A. There is currently no evidence in the record to support a different setback than what  
33 Codington County has established, or Dakota Range has volunteered for its project. I’m  
34 unaware if other developers will agree to a larger setback than what Codington County



1 requires, so the 2-mile setback provided by Dakota Range may not be honored by other  
2 wind developers around Punished Woman's Lake.

3  
4 Based on Dakota Range's Project Area and Crowned Ridge's Project Area, it is unclear  
5 how, if at all, this voluntary setback altered the development of the Dakota Range  
6 project.

7  
8 **VIII. EASEMENT LANGUAGE AND PERMIT CONDITIONS**

9  
10 **Q. Did Commission Staff ask Dakota Range any questions regarding their wind  
11 energy easements?**

12 A. Yes. Commission Staff asked Dakota Range the following in Staff Data Request 4-1:  
13 "Are participating residents prohibited from filing a complaint before the South Dakota  
14 Public Utilities Commission or any other governmental entity regarding noise or any  
15 other concern due to language in their easement? Explain."

16  
17 **Q. What was Dakota Range's response to Commission Staff Data Request 4-1?**

18 A. Ms. Mollie Smith, outside legal counsel representing Dakota Range, responded "This  
19 request calls for a legal conclusion. That said, the leases do not specifically prohibit  
20 landowners from complaining to the Commission, but the leases do obligate participating  
21 landowners to cooperate with Dakota Range to obtain and maintain permits for the  
22 Project."

23  
24 **Q. Do you understand Dakota Range's response?**

25 A. The response is unclear to me. What Commission Staff thought was a simple, straight  
26 forward, yes or no question is apparently more complicated. In addition, the response is  
27 circular in nature because a complaint may be construed as uncooperative with Dakota  
28 Range's interest in maintaining a permit. Commission Staff will ask additional discovery  
29 on this issue to get a better understanding of the impact Dakota Range's wind energy  
30 easement has on permit conditions.

31  
32 **Q. What is Commission Staff's concern regarding this issue?**

33 A. Commission Staff wants to ensure participating landowners have access to the  
34 Commission's complaint process as set forth in ARSD 20:10:01, and are not forced to

1 waive this right through signing Dakota Range’s wind energy lease. Participating  
2 landowners may be in the best position to notify the Commission of any violations of the  
3 permit due to proximity to the facility.  
4

5 Commission Staff has included the following permit condition in past stipulations for wind  
6 energy facilities:  
7

8 *“Applicant agrees that the Commission's complaint process as set forth in ARSD*  
9 *20:10:01 shall be available to landowners, other persons sustaining or threatened*  
10 *with damage as the result of Applicant's failure to abide by the conditions of the*  
11 *Permit or otherwise having standing to seek enforcement of the conditions of the*  
12 *Permit.”*  
13

14 Dakota Range should clearly and directly confirm that participating landowners have  
15 access to the Commission’s complaint process in its rebuttal testimony.  
16

17 **IX. COMMISSION STAFF’S PERMIT RECOMMENDATION**  
18

19 **Q. Does Commission Staff recommend the Application be denied or rejected**  
20 **because of Commission Staff’s issues and concerns?**

21 A. Not at this time. Because Dakota Range still has the opportunity to address outstanding  
22 issues on rebuttal and, to an extent, through the evidentiary hearing, Commission Staff  
23 reserves any position until such time as we have a complete record upon which to base  
24 the position. I would also note that some of the outstanding issues may be addressed  
25 through conditions should the Commission grant a permit.  
26

27 **Q. Does this conclude your testimony?**

28 A. Yes, this concludes my written testimony. However, I will supplement my written  
29 testimony with oral testimony at the hearing to respond to Intervenor testimony, Dakota  
30 Range’s rebuttal testimony, and responses to discovery.  
31

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

---

**IN THE MATTER OF THE  
APPLICATION BY DAKOTA RANGE  
I, LLC AND DAKOTA RANGE II, LLC  
FOR A PERMIT OF A WIND ENERGY  
FACILITY IN GRANT COUNTY AND  
CODINGTON COUNTY, SOUTH  
DAKOTA, FOR THE DAKOTA RANGE  
WIND PROJECT**

---

\* **DAKOTA RANGE I, LLC AND DAKOTA**  
\* **RANGE II, LLC RESPONSES TO**  
\* **STAFF'S FIRST SET OF DATA**  
\* **REQUESTS TO APPLICANT**  
\*  
\* **EL18-003**  
\*

Below, please find Dakota Range I, LLC and Dakota Range II, LLC (together Dakota Range or Applicant) responses to Staff's First Set of Data Requests to Applicant.

- 1-1) Should others be granted party status in this docket, provide copies of all data requests submitted by other parties to Applicant in this proceeding and copies of all responses provided to those data requests. Provide this information to date and on an ongoing basis.**

Response from Mollie Smith, Attorney, Fredrikson & Byron: No other data requests have been received to date. Dakota Range will provide the requested information to PUC Staff as received.

- 1-2) Has Applicant or its affiliates funded in whole or in part any studies relevant to this application which have not been provided or referenced in the application?**

Response from Mark Mauersberger, Senior Development Manager, Apex Clean Energy Holdings, LLC: In addition to the studies identified in Table 2-1 of the Application or referenced throughout the Application, the Applicant has funded the following studies relevant to this Application:

- Engineering Report Concerning the Effects Upon FCC Licensed Transmitting Facilities Due to Construction of the Dakota Range Wind Energy Project in Northeast South Dakota, dated November 25, 2015, prepared by Evans Engineering Solutions.
- Obstruction Evaluation Analysis, Dakota Range Wind Project, dated September 29, 2015, prepared by Capitol Airspace Group.

- 1-3) Applicant states on page 3-1 that the majority of the land directly affected by construction is cropland. How does Applicant define *cropland*?**

Response from Mark Mauersberger, Senior Development Manager, Apex Clean Energy Holdings, LLC: Cropland is defined by the Applicant as land in row crops or close-grown crops and also other cropland, such as hayland or pastureland, that is in a rotation with row crops or close-grown crops.

- 1-4) Will the project utilize an Aircraft Detection Lighting System or similar technology? If no, explain the reasoning.**

Response from Mark Mauersberger, Senior Development Manager, Apex Clean Energy Holdings, LLC: An Aircraft Detection Lighting System will not be employed for this Project. The lighting system to be employed is common in the industry, adheres to the specifications of the Federal Aviation Administration's (FAA) circular and lighting plan, and meets all County, State, and Federal requirements. A link to the Flash Technology website, a well-known supplier of systems similar to the one to be used for the Project, is provided: <https://www.flashtechology.com/wind-power-lighting/>.

- 1-5) On page 7-2, Applicant discusses a study conducted by Vaisala showing that wind speeds are the highest in November and December, and lowest in July and August. How does this correspond to the peak and shoulder months of Xcel, whom Applicant indicates is purchasing the power?**

Response from Mark Mauersberger, Senior Development Manager, Apex Clean Energy Holdings, LLC: The Northern States Power Company d/b/a Xcel Energy System demand and energy peaks are typically in the summer months of July and August and winter months of December and January.

- 1-6) On page 7-3, Applicant states that states including South Dakota have renewable portfolio standards requiring utilities to sell a specified percentage or amount of renewable electricity annually. Please cite the legal mandate to backup this statement as it applies to South Dakota.**

Response from Mollie Smith, Attorney, Fredrikson & Byron: The reference to South Dakota having a renewable portfolio standard was an inadvertent error. The text should have stated that South Dakota established a renewable, recycled, and conserved energy objective, which is set forth in SDCL 49-34A-101.

- 1-7) Applicant states on page 7-3 that the cost of energy from wind has declined by over 66 percent in the past seven years. Does this calculation account for PTCs? How, if at all, does this amount account for the intermittency of the resource?**

Response from Mark Mauersberger, Senior Development Manager, Apex Clean Energy Holdings, LLC: This calculation does not account for PTCs or intermittency. As stated in the report on the bottom of Page 1, “While prior versions of this study have presented the LCOE inclusive of the U.S. Federal Investment Tax Credit and Production Tax Credit, Versions 6.0-10.0 present the LCOE on an unsubsidized basis, except as noted on the page titled ‘Levelized Cost of Energy—Sensitivity to U.S. Federal Tax Subsidies’.” On Page 2, Lazard states that “Certain Alternative Energy generation technologies are cost-competitive with conventional generation technologies under some scenarios; such observation does not take into account potential... reliability or intermittency-related considerations (e.g., transmission and back-up generation costs) associated with certain Alternative Energy technologies.”

**1-8) Referring to section 9.1, Applicant states that the project will include underground electric collector lines. How will Applicant ensure field tile is protected and/or repaired as such facilities are installed?**

Response from Mark Mauersberger, Senior Development Manager, Apex Clean Energy Holdings, LLC: Based on the county information obtained to date, there is a small amount of existing drain tile within the footprint of the Project. The Applicant requested drain tile maps from landowners to help in the design of underground collection facilities. Where damage to drain tile from the Project will be unavoidable, the Applicant will be responsible for locating and repairing drain tile that is damaged during construction or the operational life of the Project.

**1-9) On page 9-4, Applicant states that temporary crane paths may be needed for construction. Will Applicant commit to ensuring appropriate soil decompaction measures are taken?**

Response from Mark Mauersberger, Senior Development Manager, Apex Clean Energy Holdings, LLC: In their zoning ordinances, Codington County and Grant County each require Dakota Range to implement measures to minimize compaction associated with the Project. In addition, crane paths will only occur on land which has a signed Wind Energy Lease. Landowners whose land is impacted by a crane path will be compensated for crop damages. Dakota Range will work with landowners on decompaction efforts in addition to compensating for crop damage.

**1-10) When undertaking any necessary reseeding, will Applicant consult with NRCS?**

Response from Mark Mauersberger, Senior Development Manager, Apex Clean Energy Holdings, LLC: In the Application, it states: “Temporarily disturbed uncultivated areas will be reseeded with certified weed-free seed mixes to blend in with existing vegetation” (see page 3-3). Dakota Range will consult with agencies, as necessary, to ensure reseeding complies with this commitment.

**1-11) What percentage of the agricultural land discussed in 14.1.1 is utilized for grazing? What percentage is utilized for cultivated crops?**

Response from Mark Mauersberger, Senior Development Manager, Apex Clean Energy Holdings, LLC: There are approximately 39,080 acres of agricultural land within the Project Area. Of this total acreage, approximately 36.8 percent is utilized for grazing and 63.2 percent is utilized for cultivated crops. Grazing lands correspond with the land use classification “Pasturelands and rangelands” on Figure 12 of the Application, and cultivated crops correspond with the land use classifications “Haylands,” “Irrigated Lands,” and “Land used primarily for row and nonrow crops in rotation.”

**1-12) Provide copies of written communications with other government agencies including but not limited to US Fish and Wildlife.**

**a. Were any recommendations provided by US Fish and Wildlife which Applicant chose not to accept? If so, please explain.**

Response from Dave, Vice President of Environmental, Apex Clean Energy Holdings, LLC: Written communications between the Applicant and U.S. Fish and Wildlife Service (USFWS), South Dakota Game, Fish and Parks (SDGFP), South Dakota State Historic Preservation Office (SHPO), and South Dakota Department of Environment & Natural Resources (SDDENR) is included in Appendix B of the Application. All additional substantive written communication with government agencies is attached and includes:

- February 14, 2018 letter from SHPO concurring with the results of the archaeological and architectural survey reports and in support of the project;
- February 22, 2017 and July 10, 2017 documentation of communication between the Applicant and SDGFP pertaining to grouse lek avoidance; and

The Applicant accepted the majority of USFWS recommendations, with the exception of voluntarily mitigating for impacts to grassland habitats through easement or fee acquisition to offset displacement impacts to grassland birds, as very few studies are available to understand this potential effect and quantify the benefit of such mitigation.

The Applicant clarified that current research shows that displacement appears to occur for some species at some projects, but not all, and displacement does not occur for other species (actually for some species density increases near turbines). Nonetheless, the Applicant has addressed this recommendation by avoiding and minimizing impacts on grasslands to the maximum extent practicable to substantially reduce potential displacement impacts to birds that may be caused by construction or operation of the Project. Both USFWS and SDGFP agreed that the avoidance/minimization measures discussed during the September 25, 2017 meeting were appropriate to reduce potential impacts to species of concern, and both agencies voiced appreciation of the steps the Applicant had taken to focus facilities on disturbed agricultural lands and avoid higher risk areas (e.g., USFWS easements, leks, nests, untilled grasslands).

Dated this 2<sup>nd</sup> day of March 2018.



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Mark Mauersberger



February 14, 2018

Ms. Jennie Geiger  
Dakota Range, LLC  
C/o Apex Clean Energy, Inc.  
310 4<sup>th</sup> Street NE, Suite 200  
Charlottesville, VA 22902

**RE: SDCL 1-19A-11.1 Consultation**

Project: 180205002S – Dakota Range I Wind, LLC Project in Grant and Codington Counties, South Dakota

Location: Multiple Counties  
(PUC)

Dear Ms. Geiger:

Thank you for the opportunity to comment on the above referenced project pursuant to South Dakota Codified Law (SDCL) 1-19A-11.1. The South Dakota Office of the State Historic Preservation Officer (SHPO) would like to provide the following comments concerning the effect of the proposed project on the non-renewable cultural resources of South Dakota.

On February 5, 2018, we received your letter, the archaeology survey report entitled “Level III Archaeological Inventory of the Dakota Range I Wind Project, Archaeological High Probability Areas, Codington and Grant Counties, South Dakota,” prepared by Mark Carpenter, and the architectural survey report entitled “Reconnaissance Level Architectural Survey of the Dakota Range I Wind, LLC Project, Grant and Codington Counties, South Dakota, T119N, R51 & 52W; T120N, R51 & 52W; T121N, R51 & 52W,” prepared by Brenna Moloney.

According to the reports, 20 newly recorded and four previously recorded archaeological properties and 55 architectural properties were identified and recorded during the various surveys. Based on the information provided in the reports, we concur with the following recommendations.

- Previously recorded archaeological properties 39GT0089, 39GT0090, 39GT0117 and 39GT0118 are considered eligible for listing in the National Register of Historic Places (National Register) under Criterion A.
- Newly recorded archaeological properties 39GT0242, 39GT0258, 39GT0259 and 39GT0261 do not meet any of the Criteria for listing in the National Register.



- Newly recorded archaeological properties 39GT0243, 39GT0244, 39GT0245, 39GT0246, 39GT0247, 39GT0248, 39GT0249, 39GT0250, 39GT0251, 39GT0252, 39GT0253, 39GT0254, 39GT0255, 39GT0256, 39GT0257 and 39GT0260 have not been fully evaluated for listing in the National Register.
- Three structures, CD00000066, CD00000617 and GT00000411, out of the 55 recorded are considered eligible for listing in the National Register under Criterion C.

Given the above, we have determined that the proposed project will not encroach upon, damage or destroy any property that is list in the State or National Register of Historic Places or the environs of such property pursuant to SDCL 1-19A-11.1.

However, we recommend that all eligible and unevaluated archaeological properties be avoided by construction activities. We also recommend working with local Tribal Historic Preservation Officers to identify and avoid any sensitive areas that maybe associated with their tribes.

We appreciate Dakota Range I, LLC's efforts to take into consideration the effects of the project on the non-renewable cultural resources of South Dakota. If you have any questions or concerns, please contact Paige Olson at [Paige.Olson@state.sd.us](mailto:Paige.Olson@state.sd.us) or (605) 773-6004.

Sincerely,

Jay D. Vogt  
State Historic Preservation Officer



Paige Olson  
Review and Compliance Coordinator

Cc: Jane Watts and Terri Bruce, Archaeological Research Center  
Dianne Desrosiers, Sisseton Wahpeton Oyate Tribal Historic Preservation Officer

## Jennie Geiger

---

**From:** Jennie Geiger  
**Sent:** Monday, July 10, 2017 12:24 PM  
**To:** Silka Kempema (silka.kempema@state.sd.us)  
**Cc:** Dave Phillips (dave.phillips@apexcleanenergy.com); Mark Mauersberger (mark.mauersberger@apexcleanenergy.com); Nate Pedder  
**Subject:** BUSINESS CONFIDENTIAL: Dakota Range Wind Lek Report  
**Attachments:** DKR\_2017 Grouse Lek Survey\_2017-06-28.pdf

Hi Silka –

Attached is a copy of our 2017 lek survey report for current project boundary, which we revised as discussed to focus on areas of lower sensitivity. One active and one potential sharp-tailed grouse (STGR) lek were found.

We are able to avoid the potential lek location by 1 mile with all turbines; however, given other siting constraints, we will need to put some turbines within 1 mile of the lek documented as active. There will be no turbines placed to the east of the lek location, and the nearest turbine to the west will be no closer than 0.3 miles. The appropriateness of this setback is supported by a three year study conducted by Nebraska Game and Parks on impacts to STGR from the Ainsworth Wind Energy Facility, which found that all leks remained active and the number of birds remained stable with turbine setbacks ranging from 0.3-1.6 miles.

We will adhere to SDGFP's recommended restriction on construction activities between March 1 and June 30 for both the active and potential lek to the extent practicable (out to 2 miles); where not practicable, disruptive activities will be conducted between three hours after sunrise and one hour before sunset so as to not interfere with lekking behavior. With these proposed measures we do not anticipate any adverse impacts to the local area population in response to the project during construction or the operating lifetime of the facility (per PUC Siting Requirements).

Please let me know if you would like to discuss further.

Thanks,  
Jennie

JENNIE GEIGER  
Environmental Permitting Manager

Apex Clean Energy, Inc.  
310 4th St. NE, Suite 200, Charlottesville, VA 22902  
office: 434-260-6982 | cell: 720-320-9450 | fax: 434-220-3712  
[jennie.geiger@apexcleanenergy.com](mailto:jennie.geiger@apexcleanenergy.com) | [www.apexcleanenergy.com](http://www.apexcleanenergy.com)



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**ENVIRONMENTAL & STATISTICAL CONSULTANTS**

4007 State Street, Suite 109, Bismarck, ND 58503  
Phone: 701-250-1756 ♦ www.west-inc.com ♦ Fax: 701-250-1761

## **TECHNICAL MEMORANDUM**

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**Date:** June 28, 2017  
**To:** Jennie Geiger, Apex Clean Energy Management, LLC  
**From:** Western EcoSystems Technology, Inc.  
**Subject:** Dakota Range I Wind Project – Prairie Grouse Lek Survey Memo

---

### **Introduction**

In 2016, Western EcoSystems Technology, Inc. completed an aerial-based survey for sharp-tailed grouse and greater prairie-chicken leks for the Dakota Range I Wind Project (Project). The Project boundary was modified since the 2016 surveys to include additional area; therefore, the unsurveyed portion of the Project was evaluated in 2017 using a ground-based methodology. In addition, previously documented leks from 2016 were revisited to evaluate 2017 status (Figure 1).

### **Methods**

Surveys were completed three times between April 8 and May 9, 2017, in the areas shown in Figure 1, and two times in a small portion of this area because it was added in late April. The 2017 survey area included the unsurveyed portions of the Project and a 0.5-mile buffer. Public roads were driven by a biologist from 30 minutes prior to sunrise until approximately two hours after sunrise. The biologist stopped for a minimum of five minutes approximately every half-mile (more often in hilly terrain, less in flat) to listen and look for displaying birds. If a lek was located, the observer would then map the location (to the best of their ability from the road) and record the number of males, females, and birds of unknown sex attending the lek. When possible, surveys were completed on relatively calm mornings with little to no rain. Leks documented in 2016 that were outside the 2017 survey area were also visited to evaluate 2017 status.

Leks were classified as “potential” when three or more birds were observed in one location during the morning surveys. Leks were classified as “confirmed” if the biologists observed males engaged in lek attendance behavior (e.g., dancing, calling) more than one time. Leks were classified as “historic” if they were known leks that could not be found during the surveys.

### **Results**

One confirmed (Lek 3) and one potential (Lek 4) sharp-tailed grouse lek was documented within the 2017 survey area. Lek 4 was a potential sharp-tailed grouse lek with a maximum of seven birds (3 male, 4 unknown sex) observed during the first survey; however, no males were

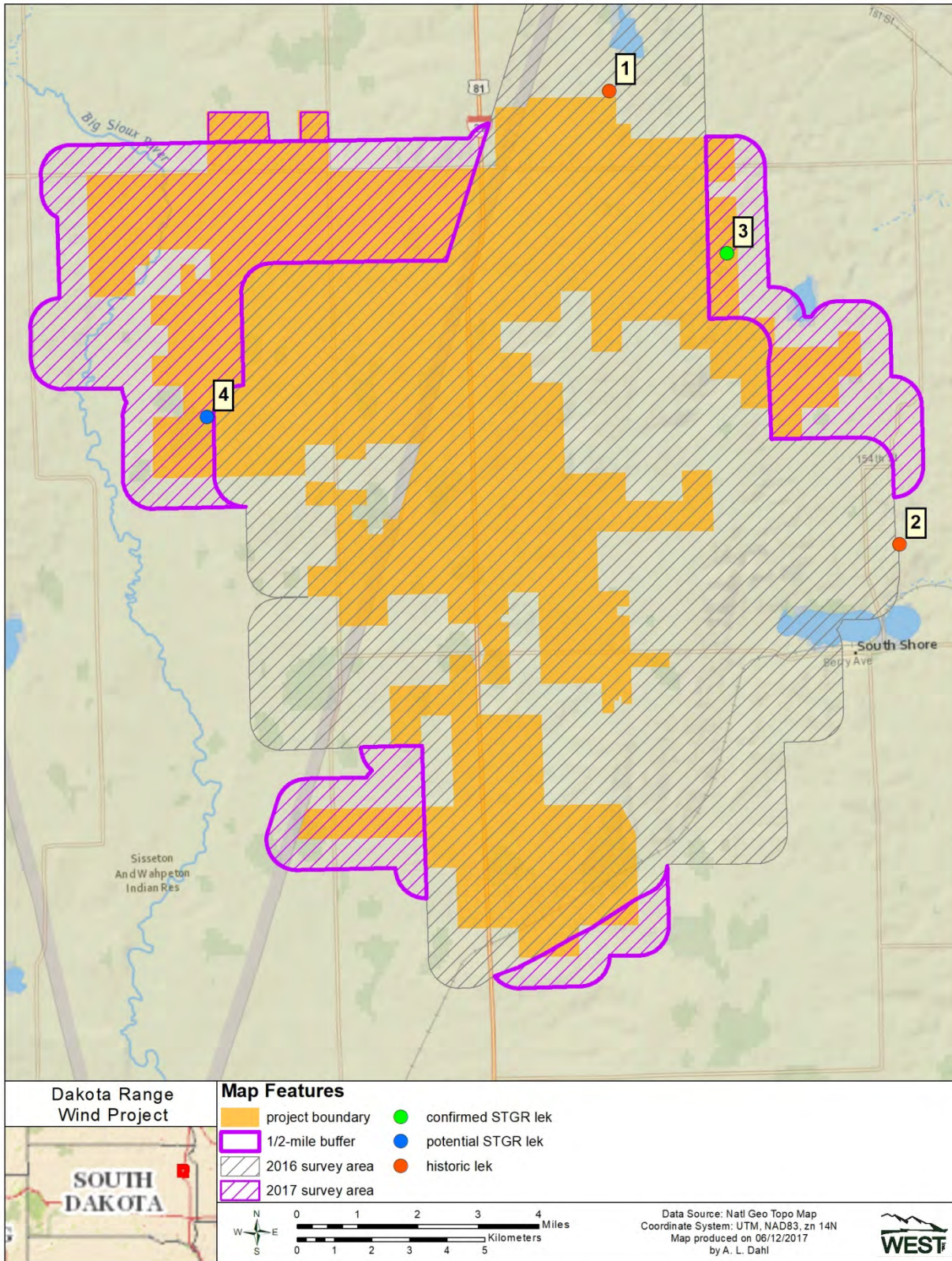
exhibiting courtship behavior. Two previously documented leks (Leks 1 and 2) were not located in 2017 and classified as historic. Survey results are shown in Table 1 and Figure 2.

Lek 3 was the only confirmed lek with a maximum of 15 sharp-tailed grouse observed during the second and third survey.

### **Summary**

Results of the 2016 and 2017 surveys indicate that both sharp-tailed grouse and greater prairie chickens are present at low density in and within 0.5 mile of the Project.





**Figure 1. Location of grouse lek survey areas and lek locations for unsurveyed portions of the Dakota Range Wind Project. Surveys occurred from April 8 to May 9, 2017.**

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

---

**IN THE MATTER OF THE  
APPLICATION BY DAKOTA RANGE  
I, LLC AND DAKOTA RANGE II, LLC  
FOR A PERMIT OF A WIND ENERGY  
FACILITY IN GRANT COUNTY AND  
CODINGTON COUNTY, SOUTH  
DAKOTA, FOR THE DAKOTA RANGE  
WIND PROJECT**

---

\*                   **APPLICANTS’ RESPONSES TO**  
\*                   **STAFF’S SECOND SET OF DATA**  
\*                   **REQUESTS**  
\*                     
\*                   **EL18-003**  
\*                     
\*

Below, please find Applicants’ Responses to Staff’s Second Set of Data Requests.

- 2-1) Referring to section 6.0 of the Application, please explain why Xcel Energy is not listed as the proposed rights of ownership for the Project.

Mollie Smith: Xcel Energy is not listed as the owner of the Project for two reasons. First, while Northern States Power Company, d/b/a Xcel Energy has entered into a Purchase and Sale Agreement with Apex Clean Energy Holdings, LLC, to acquire Dakota Range I, LLC, and Dakota Range II, LLC, the sale has not been finalized. Second, even after the sale is finalized, the Project will still be owned by Dakota Range I, LLC, and Dakota Range II, LLC.

- 2-2) Does the Applicant agree that the statement in Section 7.3, “[d]elay could force Xcel to re-analyze its source of new generation, removing significant savings for Xcel’s customers and guaranteeing a higher cost of energy,” is based on forecasts with certain assumptions that may change in the future?

Mollie Smith: The quoted sentence is referencing the fact that receipt of the federal Production Tax Credit is contingent on completing construction within a specified time period. In other words, if the Project were delayed so as to affect receipt of the Production Tax Credit, then the cost of the Project’s output would be higher. Thus, the statement is referencing Production Tax Credit benefits, as opposed to forecasts.

- 2-3) Referring to section 9.0, it is identified that “Figure 12 shows the locations of cemeteries, places of historical significance, and other community facilities (i.e. schools, religious facilities) within or near the project area.” Please identify how these locations are displayed on Figure 12.

Jennifer Bell: One church and an associated cemetery are located within the Project Area. This church and associated cemetery is displayed on Figure 12 as a “Public, commercial, and institutional use” indicated by a purple hexagon. Note that the church and cemetery is the easternmost purple hexagon shown on Figure 12. The church and associated cemetery is also displayed on Figure 13 as a “Church and Cemetery” indicated by a turquoise triangle.

- 2-4) Please provide Figures 12 and 13 with the proposed turbine layout included.

Jennifer Bell: Please see attached Figures 12 and 13 with proposed turbine layout included.

- 2-5) Referring to section 10.1 of the Application, please provide a discussion on how the constraints and factors identified were measured and weighed.

Mark Mauersberger: Dakota Range went through a thorough review process before selecting the Dakota Range Project site. The factors that were taken into consideration are outlined in 10.1. How these factors were measured and weighed correspond to how each would impact the viability of the Project. For instance, one reason that the site was selected is because of the new Big Stone to Ellendale 345kV line. Transmission capacity is very scarce in South Dakota and North Dakota in the MISO market. This was one, if not the only, site that could inject 300 MW into the MISO network with almost no network upgrades. Currently, other projects in SD connecting to the MISO grid behind the Dakota Range Project are seeing significant upgrades that may or may not make the Projects viable. Dakota Range looked at this point of injection and then analyzed other factors, such as wind resource, environmental compatibility, and community support. In looking at the general area surrounding the point of injection, we found that the area where Dakota Range is currently sited was the best location to minimize the length of the transmission line, while meeting the other factors.

- 2-6) Referring to section 14.2.2 of the Application, please provide a more detailed description of the wetland impact for each of the five areas. Further, please explain if any mitigation will be done for these impacts.

Jennie Geiger: Permanent wetland impacts for the five areas would result from access road construction through emergent wetlands. The following table identifies the location and permanent impact acreage for each of the five areas.



<b>Area</b>	<b>Waters of the U.S. Type</b>	<b>Proposed Facility</b>	<b>Location</b>	<b>Permanent Impact</b>
1	Wetland	Access Road	From turbine 64 to 155th St	0.01 acre
2	Wetland	Access Road	From turbine A25 to 461st Ave	0.01 acre
3	Wetland	Access Road	From turbine 69 to 459th Ave	0.01 acre
4	Wetland	Access Road	From turbine 40 to 151st St	0.03 acre
5	Wetland	Access Road	From turbine A21 to 152nd St	0.02 acre

The permanent wetland impacts would be authorized under the U.S. Army Corps of Engineers Nationwide Permit 12, and therefore no mitigation is planned for wetland impacts.

- 2-7) Referring to section 14.3.2.3 of the Application, please identify what other wind sites where used to compare raptor use data and to form the conclusion raptor use is low in the Project Area.

Jennie Geiger: Raptor use data from the Dakota Range Wind Project were compared to data from the adjacent proposed Summit Wind Farm, which is publicly available and includes a comparison of data collected from 49 other wind projects in the central and western U.S. with similar study seasons (WEST 2014, Figure 3). When compared to other wind projects, mean raptor use at the proposed Summit Wind Project was near the lower end of the range of values (ranked 46th out of 49). When compared to the proposed Summit Wind Farm, species composition and mean detection rates at the Dakota Range Wind Project were found to be similar, therefore supporting the conclusion that raptor use is low within the Project Area. Direct impacts to raptor species from the operation of the Project are also expected to be low, as evidenced by data from 38 operating projects sited in similar habitats, 7 of which are in South Dakota (see Appendix C of the Avian Use Survey Report [Appendix F of the Application]).

- 2-8) Referring to section 14.3.2.4 of the Application, please explain what exactly is “feathering the turbines to manufacturer’s cut in speed.”

Mark Mauersberger: In accordance with at least one protocol of the operator’s control algorithm: as each blade approaches the tower base, it may be feathered to regulate its power loading. To offset resultant loss of torque, the remaining blades may be correspondingly pitched toward power (i.e. feathered into/away from the wind) to balance and/or smooth out the overall rotor torque curve, and thus to avoid torque ripples. This contributes to maximizing power production while minimizing stress on the turbine’s components.

- 2-9) Referring to section 16.5 of the Application, was a letter sent to the FCC for review to confirm no impact to licensed systems? If so, please provide the FCC’s response.

Mark Mauersberger: A formal request was sent to the National Telecommunications and Information Administration (NTIA) on November 12, 2015. The NTIA then passed the information on to several Federal agencies, including the FCC for any potential comments or concerns. On January 7, 2016, we received the attached letter back from the NTIA that no Federal agencies, other than Western Area Power Administration, had any concerns with the Dakota Range Project. Dakota Range has reached out to Western Area Power Administration to discuss further.

- 2-10) Referring to section 21.5.2 of the Application, when will the final review be completed by SWO and any associated recommendations be known?

Jennie Geiger: Apex has coordinated with SWO throughout the design of the Project and has incorporated all recommendations provided to date. Additional cultural surveys will be completed throughout the Project footprint this spring in coordination with SWO to ensure tribal concerns are addressed.

- 2-11) Referring to Table 21-2 of the Application, pursuant to ARSD 20:10:22:24 please provide the estimated annual employment expenditures. Further, please provide the same data for the first 10 years of commercial operation in one-year intervals.

Brenna Gunderson: The estimated annual employment expenditures are provided in the table below, and would be the same for each of the 10 years of commercial operation:

<b>Job Title</b>	<b>Number</b>	<b>Annual Salary</b>
Facility Manager	1	\$100,000.00
Deputy Facility Manager	1	\$90,000.00
Wind Turbine Technicians	8	\$408,000.00
Lead Technician	1	\$69,360.00
Site Admin	1	\$24,480.00
<b>Total Per Year</b>		<b>\$691,840.00</b>

- 2-12) Referring to page 8 of the Decommissioning Plan (Appendix P), please provide the following:
- i) explain how removing project components to a depth of 4 feet below grade would impact the expected costs provided in the Plan;

DNV GL: DNV GL would expect a minor increase in expected costs due the increase in labor and time needed to carry out the additional material associated with the greater decommissioning depth.

- ii) explain why crane pad restoration will not occur at decommissioning if cranes are needed for turbine removal;

DNV GL: Our report assumes crane pad restoration will occur following construction. During decommissioning, there are a variety of options related to crane use and potential impacts. It is possible that that hard stands would be used for the cranes, which would minimize the restoration requirements following decommissioning activities.

- iii) identify if labor costs associated with stripping materials from the project components, segregating materials, and other prepping of materials for salvage of raw materials is included in the analysis.

DNV GL: Most labor costs would be associated with the disassembly and removal of components. The report assumes that labor associated with loading the material into transport trucks is included; therefore, further labor time is not accounted for.

- 2-13) Has Dakota Range reached out to the local telecommunications companies to discuss any concerns regarding interference on their systems? If so, please identify any concerns those companies had and how Dakota Range plans to address those concerns.

Mark Mauersberger: Apex reached out to Interstate Telecommunications Cooperative, Inc. (ITC) to discuss concerns regarding interference on their system. Dakota Range entered into the attached agreement with ITC to address their concerns.

- 2-14) Has Otter Tail Power Company determined the location of the switching station? If so, please identify if the location for the project substation has been decided yet.

Mark Mauersberger: Otter Tail Power Company (OTP) is still in the process of determining the location of the switching station. Per a 4-16-18 conference call between OTP & Apex staff, OTP informed Apex they have reduced their list of prospective switchyard hosts to two. OTP hopes to identify their final selection this spring. Apex will notify the PUC once we have been formally notified that OTP has made their official selection.

- 2-15) Referring to O'Neal's testimony, page 11, lines 21-23, please provide a summary of the discussions Dakota Range had with the 11 participating residences. If additional, site-specific, modeling was conducted, please provide the results of that modeling.

Mark Mauersberger/Brenna Gunderson: Dakota Range plans to discuss the results with the owners of the 11 participating residences in the next couple of weeks. Dakota Range had planned to discuss the results with those landowners at a recent Project open house, but those landowners were not able to attend.

- 2-16) Would Dakota Range agree to a permit condition that requires the owner/operator of the wind project to mitigate for shadow flicker concerns if they arise during project operation?

Mark Mauersberger: Consistent with the Direct Testimony of Rob O’Neal, Dakota Range would agree to a permit condition that requires Dakota Range to take reasonable steps to mitigate shadow flicker concerns at the 11 residences that could experience shadow flicker levels above 30 hours per year.

- 2-17) During the public input hearing, one commenter had concerns regarding the possible adverse effects of the wind turbine’s spinning motion and blinking light on autistic children. Please provide Dakota Range’s response to this concern and any supporting information.

Mollie Smith: Please see the Direct Testimony of Dr. Mark Roberts.

- 2-18) During the public input meeting, it was stated that townships were sent draft letters to sign. Were such letters sent out? If yes, which governmental entities were sent these letters (eg township, municipality, county)? Which of these entities responded and how?

Mark Mauersberger: Dakota Range received the attached letters of support from Grant County and Codington County. Dakota Range requested a letter of support from the Punished Woman’s Lake Association after agreeing to a voluntary two-mile setback from the shoreline of the lake, but the Association did not provide a letter. Dakota Range did not solicit letters of support from townships.

- 2-19) Also at the public input meeting, Applicant stated that a representative from Brookings County stated that property values went up. Provide documentation and/or correspondence?
- i) Over what time period did property values increase?
  - ii) What type of property was included in this study?

Mark Mauersberger: At a recent Codington County Planning and Zoning meeting, Luke Muller, the Zoning Officer for Codington County and a First District Association of Local Governments’ Staff Member, stated that he had contacted the Brookings County

Equalization Office to ask about wind turbines and property values. According to Mr. Muller, the Brookings County Equalization Office said that they had compared property values before and after installation of the Buffalo Ridge wind projects, and property values in the area had increased by an average of 58 percent. We have requested additional specifics from Luke Muller.

2-20) Please provide GIS shapefiles for the project layout and boundary.

Jennifer Bell: Please see attached GIS shapefiles for the project layout and boundary.

By /s/ Mollie M. Smith  
Mollie M. Smith  
Lisa A. Agrimonti  
FREDRIKSON & BYRON, P.A.  
Attorneys for Applicants  
200 South Sixth Street, Suite 4000  
Minneapolis, MN 55402  
Phone: (612) 492-7270  
Fax: (612) 492-7077

## Jennie Geiger

---

**From:** Kempema, Silka <Silka.Kempema@state.sd.us>  
**Sent:** Wednesday, February 22, 2017 5:38 PM  
**To:** Dave Phillips  
**Cc:** Jennie Geiger  
**Subject:** RE: Apex-Dakota Range Wind project

I checked with our upland bird biologist. There is a sharp-tailed grouse lek in TRS-119N\_052W\_28. That is on the west side of the original boundary.

Silka

---

**From:** Kempema, Silka  
**Sent:** Wednesday, February 22, 2017 2:28 PM  
**To:** 'Dave Phillips'  
**Cc:** Jennie Geiger  
**Subject:** RE: Apex-Dakota Range Wind project

Hi Dave,

We do not have any records of known lek locations in the extended project area.

I've attached the grouse lek avoidance recommendation document.

Silka

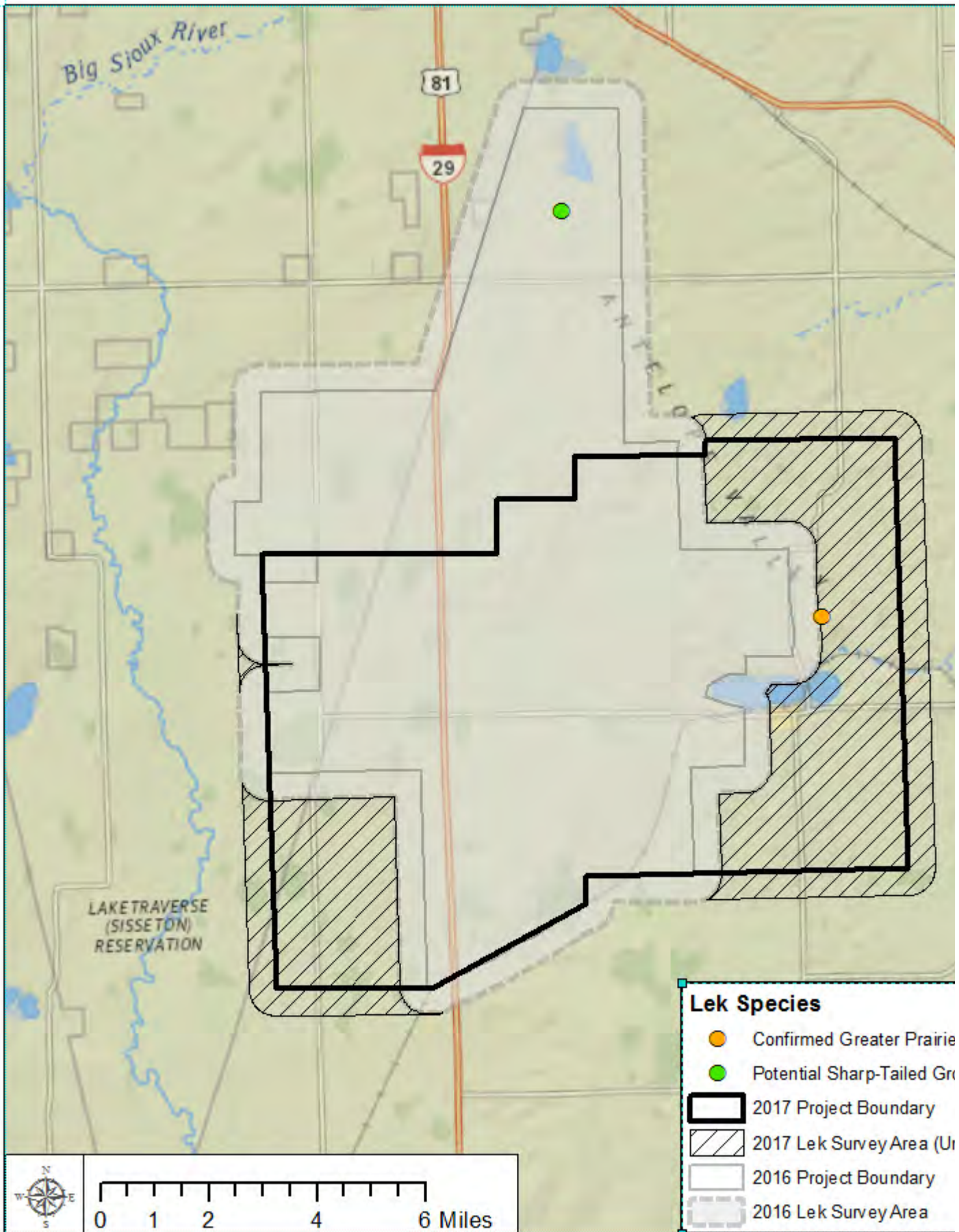
---

**From:** Dave Phillips [<mailto:dave.phillips@apexcleanenergy.com>]  
**Sent:** Thursday, February 16, 2017 7:32 PM  
**To:** Kempema, Silka  
**Cc:** Jennie Geiger  
**Subject:** Apex-Dakota Range Wind project

Hello Silka, It's been a while since we last discussed our Dakota Range project. Since we last spoke, we've modified our boundary a bit. At some point I'd like to meet with you and Natalie and talk through the changes and survey results from last year. However, in the mean time I was hoping you might be available for a short call to discuss leks, lek surveys and impact avoidance measures.

Attached is a copy of our lek survey report from last year on the old project boundary. Also attached is a figure showing the revised project area relative to the area surveyed for leks last year. Would you have time for a 15-minute call tomorrow (Friday 2/17) to discuss?

Thanks, Dave



---

DAVE PHILLIPS  
Director, Environmental and Wildlife Permitting

Apex Clean Energy, Inc.  
246 E. High Street, Charlottesville, VA 22902  
W: 434-906-9127  
[Dave.Phillips@apexcleanenergy.com](mailto:Dave.Phillips@apexcleanenergy.com) | [www.apexcleanenergy.com](http://www.apexcleanenergy.com)



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## Recommendations for Grouse Lek Buffers

### Definitions

For the purposes of this document, the following definitions have been adopted:

No-surface Occupancy (NSO): Use or occupancy of the land surface for wind development and associated infrastructure is prohibited in order to protect identified resource values. The NSO distance will be measured from the center of leks.

Timing Limitation: Use and disturbance of the land surface are prohibited during specified time periods to protect identified resource values.

Lek: The traditional display area where two or more male grouse have attended in two or more of the previous five years.

### Recommendations

The NSO recommendation for Sharp-tailed Grouse is at least 1.6 km (1.0 mi), based on life-history information. No new construction in this buffer is recommended.

The recommended timing limitation during the construction year is 1 March to 30 June, for a distance of 3.2 km (2.0 mi), in order to protect leks and nests. No activity in this buffer during this time is recommended.

The recommended timing limitation during the post-construction (operational) period is 3 hours after sunrise between 1 March to 30 June, for a distance of 3.2 km (2.0 mi), to protect leks. No activity in this buffer is recommended.

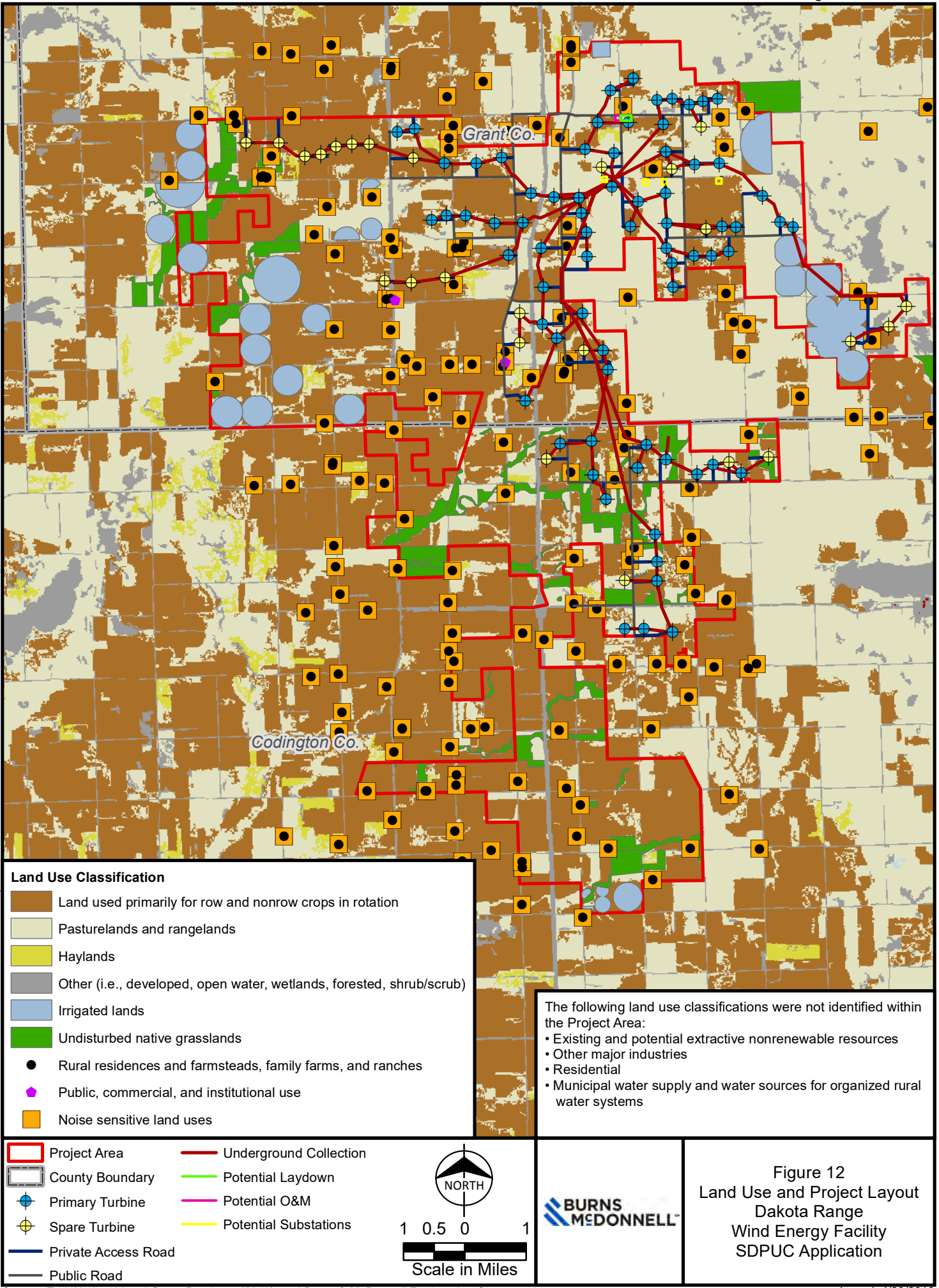
Avoid placing wind developments in large, contiguous blocks of grassland. Blocks are considered fragmented by any human-derived feature (e.g., agricultural uses, fences, transmission lines, roads, burned areas) that subdivides them. Maintaining habitat connectivity between leks is important because both males and females use multiple leks throughout the breeding season.

For Greater Prairie-Chickens, the values reported for minimum area requirements, home range, and area needed for successful reintroductions range from 5.1 – 61.4 km<sup>2</sup> (2 – 23.7 mi<sup>2</sup>) (Svedarsky et al. *unpublished data*). For Sharp-tailed Grouse, reported home range values range from 0.32 – 2 km<sup>2</sup> (0.12 – 0.7 mi<sup>2</sup>) (Connelly et al. 1998). Area needed for successful reintroductions is 33 km<sup>2</sup> (12.7 mi<sup>2</sup>). In recent study in central South Dakota, the average home range size for prairie grouse (Greater Prairie Chickens and Sharp-tailed Grouse) was 13.9 km<sup>2</sup> (5.4 mi<sup>2</sup>; Runia and Solem 2015).

Minimize road densities and traffic volume. Use existing roads when possible. Limit construction of new roads.

Close and re-vegetate travel ways where appropriate. Re-vegetate closed roads with a suitable seeding mixture for the type of disturbed habitat (e.g. native prairie, or planted grassland).

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 COPYRIGHT © 2018 BURNS & McDONNELL ENGINEERING COMPANY, INC.



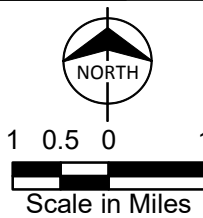
**Land Use Classification**

- Land used primarily for row and nonrow crops in rotation
- Pasturelands and rangelands
- Haylands
- Other (i.e., developed, open water, wetlands, forested, shrub/scrub)
- Irrigated lands
- Undisturbed native grasslands
- Rural residences and farmsteads, family farms, and ranches
- Public, commercial, and institutional use
- Noise sensitive land uses

The following land use classifications were not identified within the Project Area:

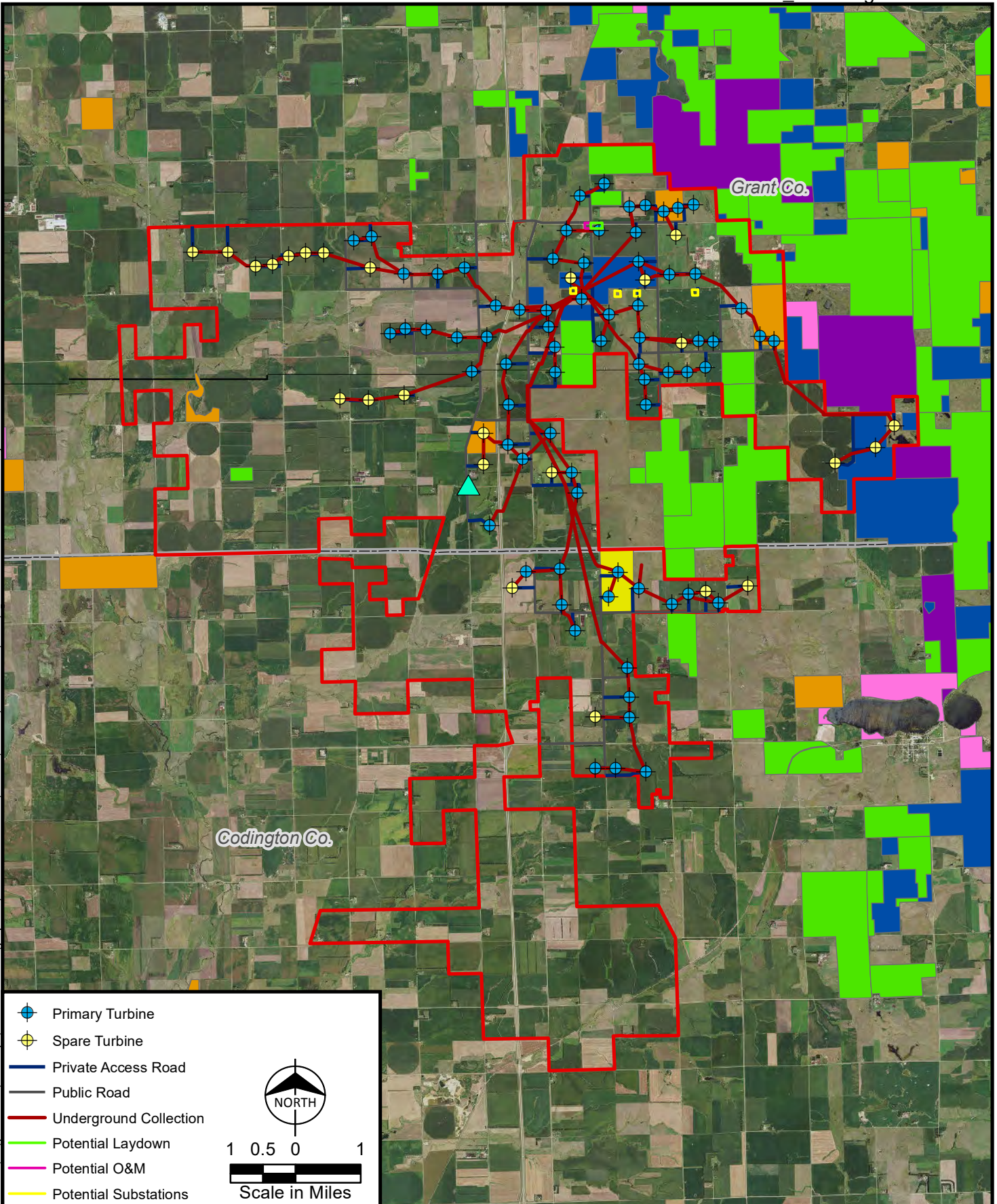
- Existing and potential extractive nonrenewable resources
- Other major industries
- Residential
- Municipal water supply and water sources for organized rural water systems

- Project Area
- County Boundary
- Primary Turbine
- Spare Turbine
- Private Access Road
- Public Road
- Underground Collection
- Potential Laydown
- Potential O&M
- Potential Substations



**Figure 12**  
 Land Use and Project Layout  
 Dakota Range  
 Wind Energy Facility  
 SDPUC Application

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 Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Project Area	<b>Public Lands and Facilities</b>
County Boundary	USFWS Wetland Easements
SDGFP Game Production Areas	USFWS Grassland Easements
SDGFP Walk-In-Areas	USFWS Conservation Easements
Church and Cemetery	Waterfowl Production Areas



**Figure 13**  
 Public Lands and Facilities  
 and Project Layout  
 Dakota Range  
 Wind Energy Facility  
 SDPUC Application

GRANT COUNTY



SOUTH DAKOTA

OFFICE OF COUNTY COMMISSIONERS

210 East 5<sup>th</sup> Avenue  
Milbank, SD 57252-2499  
Phone: 605-432-6711  
Fax: 605-432-9004

October 4, 2017

To: The SD Public Utilities Commission

RE: Letter of Support

The Grant County Commission understands the need for the county to find new and creative business solutions to generate additional revenue. The County has noticed the benefits of South Dakota's strong wind resource and the exceptional economic opportunities it has delivered to communities (across the Midwest) and is excited to hear that APEX has entered into an agreement with Xcel Energy. Grant County is pleased to have been working closely with Apex Clean Energy on their plans to develop Dakota Range Wind. As such, the County endorses the project and looks forward to continuing our partnership with Apex to ensure Grant County's first wind farm is a success.

We believe Dakota Range Wind will significantly benefit our county for the next thirty years or more. After working with the Apex team, we are confident this development will be completed with minimal impacts to the natural environment and minimal disturbance to citizens. The Commission endorses this project and looks forward to the benefits that Grant County will experience upon completion of the project.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink that reads "Marty Buttke". The signature is written in a cursive, slightly slanted style.

Marty Buttke, Vice-Chairman  
Grant County Commission

## AGREEMENT

It is hereby agreed and understood by and between Dakota Range I, LLC, a Delaware limited liability company, c/o Apex Clean Energy, Inc., 310 4th Street, NE, Suite 200, Charlottesville, VA 22902, hereinafter referred to as "Dakota Range", and Interstate Telecommunications Cooperative, Inc., P.O. Box 920, Clear Lake, South Dakota 57226, hereinafter referred to as "ITC", as follows:

WHEREAS, Dakota Range has submitted an Application to Grant County, South Dakota, for a franchise pursuant to SDCL Chapter 31-26 for the right to construct, maintain and operate a wind energy farm system for the purpose of distributing and/or transmitting electricity and electric energy over, upon, along and across certain public highways located within Grant County, South Dakota (the "Application"); and

WHEREAS, ITC has expressed concern in connection with such Application, because the construction of a wind energy farm and its transmission and distribution lines in certain areas may interfere with ITC's existing telephone and telecommunication lines and the signals carried by such lines; and

WHEREAS, Dakota Range has agreed that all construction by Dakota Range will be done in a manner so as to not interfere with the maintenance and operation of other utility and telecommunication lines existing in such public highway right-of-ways or elsewhere; now therefore,

IT IS HEREBY AGREED AND UNDERSTOOD by and between the respective parties that in the event the construction of the wind energy farm and its distribution and/or transmission lines of Dakota Range should "unreasonably interfere" with the operation of the ITC telephone and telecommunication lines upon the wind energy farm being energized or at any time thereafter which requires the need for repairs or replacement of lines,

then Dakota Range shall promptly cooperate in good faith to accomplish such repairs or replacement by promptly taking such steps as may be necessary to resolve or mitigate any such interference. "Unreasonable interference" is defined as ITC's existing telephone and telecommunication lines and the signals carried by such lines having degraded from "4.1.2 Acceptable" or better to "4.1.4 Not Recommended" or worse as such terms are defined and used in "IEEE Std 820™ -2005" (which shall be the applicable standard for assessing any interference described herein). Finally, all costs and expenses resulting from the unreasonable interference shall be timely satisfied in full by Dakota Range.

Dated this 10<sup>th</sup> day of May 2017.

**Dakota Range I, LLC,**  
a Delaware limited liability company

By: Apex GCL, LLC,  
a Delaware limited liability company, its sole member

By: Apex Clean Energy Holdings, LLC,  
a Delaware limited liability company, its sole member

  
Mark Goodwin, President

INTERSTATE TELECOMMUNICATIONS  
COOPERATIVE, INC.

  
Bryan Roth  
General Manager

**Codington County**  
**Planning Commission / Board of Adjustment**

1910 West Kemp Avenue  
Watertown, SD 57201-3048

Email: [codington.county@sdstate.edu](mailto:codington.county@sdstate.edu)  
Website: [codington.org](http://codington.org)

Phone: (605) 882-6300  
Fax: (605) 882-6302

March 21, 2018

RE: Memorandum

To whom it may concern

Dakota Range I, LLC and Dakota Range II, LLC (Dakota Range) were granted a Conditional Use permit by the Codington County Board of Adjustment on June 19, 2017 for a Wind Energy System. This office is also aware of at least one community meeting in South Shore which was held prior to the permit hearing by the county last June. Throughout the application process Dakota Range was responsive to this office, and provided information requested by the Zoning Office, even when that information was not explicitly required by our county's rules. Based upon this office's experience with this company, there is no reason to doubt that Dakota Range will continue to work with the county to meet the terms of the Zoning Ordinance and their respective Conditional Use Permits.

Sincerely,



Luke Muller

Codington County Zoning Officer





JAN 7 2016

Mr. B. Benjamin Evans  
EVANS Engineering Solutions  
216 Green Bay Rd., Ste. 105  
Thiensville, WI 53092-1625

Re: Dakota Range Project: Codington, Grant & Roberts Counties, SD

Dear Mr. Evans:

In response to your request dated November 12, 2015, the National Telecommunications and Information Administration provided to the federal agencies represented in the Interdepartment Radio Advisory Committee (IRAC) the plans for the Dakota Range Wind Project, located in Codington, Grant and Roberts Counties, South Dakota.

After a 45+ day period of review, one agency, the Department of Energy, had concerns with turbine placement in this area. Please see the brief attached Impact Statement.

While the other IRAC agencies did not identify any concerns regarding radio frequency blockage, this does not eliminate the need for the wind energy facilities to meet any other requirements specified by law related to these agencies. For example, this review by the IRAC does not eliminate any need that may exist to coordinate with the Federal Aviation Administration concerning flight obstruction.

Thank you for the opportunity to review this proposal.

Sincerely,

Peter A. Tenhula  
Deputy Associate Administrator  
Office of Spectrum Management

Attachment

The Dakota Range Project has the potential to interfere with Department of Energy Western Area Power Administration radio paths. Turbine placement will be critical, and we request that the project representative contact our Western Spectrum Manager for coordination purposes:

Scott E. Johnson  
Senior Telecom Engineer  
Spectrum Program Manager  
DOE/Western Area Power Administration  
720-962-7380 (Phone)  
720-962-4080 (Fax)  
[sjohnson@wapa.gov](mailto:sjohnson@wapa.gov)

Very respectfully,

Pamela E. Main  
Energy FAS Representative  
Spectrum Management Team  
Office of Technology and Innovation  
Office of the Chief Information Officer  
(301) 903-4261 Office  
(240) 449-6207 Mobile  
(301) 903-7045 Fax  
[pamela.main@hq.doe.gov](mailto:pamela.main@hq.doe.gov)

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

---

**IN THE MATTER OF THE  
APPLICATION BY DAKOTA RANGE  
I, LLC AND DAKOTA RANGE II, LLC  
FOR A PERMIT OF A WIND ENERGY  
FACILITY IN GRANT COUNTY AND  
CODINGTON COUNTY, SOUTH  
DAKOTA, FOR THE DAKOTA RANGE  
WIND PROJECT**

---

\* **APPLICANTS' RESPONSES TO**  
\* **STAFF'S THIRD SET OF DATA**  
\* **REQUESTS**  
\* **EL18-003**  
\*  
\*

Below, please find Applicants' Responses to Staff's Third Set of Data Requests.

- 3-1) Refer to Page 2-2 of the Application. Please provide copies of the Conditional Use Permits obtained from Grant and Codington County.**

Mollie Smith: Copies of the Conditional Use Permits obtained from Grant and Codington Counties were provided in Appendix K to the Facility Permit Application.

- 3-2) Refer to Page 7-3 of the Application. Please provide an update on the Advanced Determination of Prudence submitted by Xcel to the North Dakota Public Service Commission regarding its acquisition of the Dakota Range entities. Is the construction of this project contingent on the approval of the North Dakota Public Service Commission? Please explain.**

Christopher Shaw (Xcel Energy)/Mark Mauersberger: On February 5, 2018, Xcel Energy requested that the ND PSC postpone consideration of Xcel Energy's Dakota Range application for an ADP in order to allow for additional time to analyze the impacts of the Tax Cuts and Jobs Act on the Dakota Range Project and to provide time for Xcel Energy to work with its vendors on efforts to potentially mitigate those impacts. On February 14, 2018, the ND PSC granted Xcel Energy's request and continued the hearing previously scheduled for March 21, 2018. Xcel Energy submitted supplemental information to the ND PSC on March 23, 2018. A hearing has not yet been scheduled.

The ND PSC does not have to grant an ADP for Dakota Range to construct the Project.

- 3-3) Refer to Page 8-1 of the Application.**

- a) Please provide a detailed breakdown that supports the project cost estimate of \$380 million.**

Brenna Gunderson: An estimated breakdown is provided in the table below:

<b><u>Real Property</u></b>	
Site Improvements	8,000,000
Construction – New Bldg.	2,000,000
<b><u>Total Real Property</u></b>	<b><u>10,000,000</u></b>
<b><u>Personal Property</u></b>	
Manufacturing Equipment	250,000,000
Equip. & Materials installed and purchased by Contr.	70,000,000
Equip. & Materials installed and purchased by the Utility	0
Soft Costs	50,000,000
<b><u>Total Personal Property (incl. soft costs)</u></b>	<b><u>370,000,000</u></b>
<b><u>Total Real and Personal</u></b>	<b><u>380,000,000</u></b>

- b) Please provide the specific cost categories that may cause a 20% fluctuation in project costs.**

Brenna Gunderson: Project costs can fluctuate due to factors such as the final negotiated costs of equipment and services. The 20% noted was a high-level estimate, and not intended as an exact calculation.

- c) How does the Purchase and Sales Agreement with Xcel Energy address fluctuations in costs?**

James Mackey: Apex is responsible for the cost of all development work required to provide Xcel Energy with a fully-developed, constructible project at the time of transaction closing. Any fluctuation in post-development costs not related to the site plan, including but not limited to interconnection, equipment procurement, construction and commissioning, are borne by Xcel Energy.

- 3-4) Refer to Page 9-2 of the Application. The applicant states, “the Applicant requests that the permit allow turbines to be shifted within 500 feet of their current proposed location, so long as specified noise and shadow flicker thresholds are not exceeded, cultural resource impacts are avoided or minimized per the CRMMP, environmental setbacks are adhered to as agreed upon with USFWS and SDGFP, and wetland impacts are avoided to the extent practicable. If turbine shifts are greater than 500 feet, exceed the noted thresholds, or do not meet the other limitations specified, the Applicant would either use an alternate turbine location or obtain Commission approval of the proposed turbine location change.”**

- a) Please provide a detailed and thorough explanation as to why 500 feet was selected as the appropriate distance a turbine could be shifted without obtaining Commission approval.**

Brenna Gunderson: Turbine moves after permitting are avoided if possible, but having the flexibility during construction to shift a turbine allows the construction schedule to be maintained in the event there is an unforeseen issue that could be solved with a shift to a turbine. Some examples of why turbines are shifted after permitting include: geotechnical boring evaluations, unanticipated cultural resources, and newly installed towers that could impact radio frequencies. Apex believes a 500 foot move is reasonable, as the turbine will continue to meet all setback and sound requirements and will remain on the same parcel of land.

- b) Please provide evidence to support using 500 feet as the appropriate distance to necessitate a Commission filing.**

Brenna Gunderson: See answer to (a) above.

- c) Please describe what the Applicant envisions as the process to obtain Commission approval of a proposed turbine location change.**

Mollie Smith: With respect to the approval of a turbine location change exceeding 500 feet, Dakota Range proposes the following process:

- Dakota Range would file with the Commission a request for approval of the change that includes:
  - An affidavit describing the proposed change, the reason for the change, the reason the change does not comply with one or more turbine flexibility proposal limitations set forth in the Application, and the documentation referenced below;
  - A map showing both the approved location and the proposed change (in different colors);
  - Documentation demonstrating compliance with local zoning requirements, including setbacks from existing off-site residences, businesses, governmental buildings, and non-participating property lines, and the noise requirement at existing off-site residences; and
  - Documentation demonstrating compliance with voluntary commitments regarding cultural resources, wetlands, and sensitive species habitat; and
  - Documentation of compliance with or landowner waiver of voluntary setback commitments.

- Once received, the information would be reviewed by Commission Staff, and a recommendation regarding the request provided to the Commission.
- The Commission would then issue a decision regarding Dakota Range’s request at its next regularly scheduled Commission meeting.

**3-5) Refer to Page 9-3, Table 9-3 of the Application. Please provide Table 9-3 with the Rotor Diameter and Hub Height in feet rather than meters.**

**Table 9-3: Wind Turbine Characteristics**

Manufacturer	Model	Rotor Diameter	Hub Height	Generator Nameplate Capacity
Vestas	V136-4.2MW	446 feet	269 feet	4.2 MW

**3-6) Regarding the voluntary setback from Punished Woman’s Lake on Page 10-3:**

**a) Please explain the basis for the Applicant adopting this voluntary setback.**

Mark Mauersberger: In voluntarily agreeing to a 2-mile setback from the lakeshore of Punished Woman’s Lake, Apex applied a rationale that was consistent with the lake setbacks imposed by Deuel County, South Dakota, during its recent zoning ordinance amendment process.

Here is a brief description of the lakes for which setbacks are imposed in Deuel County’s zoning ordinance:

- Lake Cochrane is a 355-acre spring-fed lake located in Deuel County near the Minnesota border (<http://www.lakecochrane.org>) with nearby high-end homes and robust tourism (<https://gfp.sd.gov/parks/detail/lake-cochrane-recreation-area/>). Deuel County established a turbine setback of 3 miles from Lake Cochrane.
- Lake Alice is located in Deuel County. This lake is 1,116 acres in size. It is approximately 12 feet deep at its deepest point (<https://www.lake-link.com/south-dakota-lakes/deuel-county/lakealice/19780/?CFID=269729339&CFTOKEN=3c4b52ae102ff5e0-F2F93B49-C60C-D0D2-8F3D9C0B115512CA>) and has less real estate and tourism value than Lake Cochrane. Deuel County established a turbine setback of 2 miles from Lake Alice.
- Bullhead Lake is located in Deuel County. This lake is 341 acres in size and was referred to at the Deuel County meetings as a “lesser lake” (see <http://www.lake-link.com/south-dakota-lakes/deuel-county/bullhead-lake/19771/>). Deuel County established a turbine setback of 1 mile from Bullhead Lake.

**b) Please explain how the Applicant determined two miles to be the appropriate setback.**

Mark Mauersberger: The surface area of Punished Woman's Lake is 477 acres, and the average water depth is around 12 feet, which is comparable to Bullhead Lake (in size) and is similar to Lake Alice in depth (although Punished Woman's Lake is almost 2.5 times smaller than Lake Alice): <http://www.lake-link.com/south-dakota-lakes/codington-county/punished-womans-lake/19690/>. Therefore, Punished Woman's Lake falls between Lake Alice and a "lesser lake," and is not comparable to Lake Cochrane. In Apex's opinion, a 1-mile setback is probably the appropriate setback from Punished Woman's Lake; however, in the interest of being a good neighbor, Apex voluntarily imposed a 2-mile setback.

**c) Please explain why the Applicant did not adopt the three-mile setback proposed by the Punished Woman's Lake Association.**

Mark Mauersberger: There are two key reasons why Dakota Range did not adopt a 3-mile setback from Punished Woman's Lake. First, based on the rationale from Deuel County discussed above, a 2-mile setback is generous. Second, Punished Woman's Lake Association representatives strongly lobbied their own county's Planning and Zoning Board to consider a 3-mile setback from their lake during a recent (post-application filing) zoning ordinance amendment process. This very recent proposal did not receive a single vote of support. In fact, Codington County did not even support inclusion of the voluntary 2-mile setback that Apex agreed to, and, instead, included a 1-mile setback from the lake.

**3-7) Refer to Page 10-3, Table 10-1 of the Application. Do any of the County or State siting requirements listed violate any of the recommendations included in any manuals associated with the proposed Vestas V136-4.2 MW turbines? Please explain.**

Mark Mauersberger: No. At the public input hearing, there were references to a Vestas manual recommended safety zone of 1,650 feet. However, as indicated by the attached letter from Vestas, the statement has been taken out of context and Vestas does not have a specified safety zone around its turbines.

**3-8) Refer to Page 11-1 of the Application regarding cumulative impacts.**

**a) Please provide the location of the three nearest wind energy facilities, either proposed or under construction, relative to the Project.**

Jennifer Bell: In accordance with ARSD 20:10:22:13, cumulative effects of the proposed Project should be considered in combination with "any operating energy conversion facilities, *existing or under construction*" (emphasis added). The three nearest operating

wind energy facilities to the Dakota Range Project are Oak Tree Wind Farm, approximately 30 miles southwest in Clark County; Day County Wind Farm, approximately 35 miles west in Day County; and Buffalo Ridge II Wind Farm, approximately 35 miles southeast in Deuel and Brookings Counties.

**b) Please describe the distance a wind energy facility would need to be from the Project to be considered adjacent.**

Jennifer Bell: A portion of the project boundary of a wind energy facility would need to abut or overlap a portion of the Project Area boundary of Dakota Range to be considered adjacent.

**3-9) Refer to Page 14-12 of the Application and Staff data request 3-8. The Applicant states, “Acoustic bat surveys were completed for the Summit Wind Farm (proposed wind farm adjacent to Dakota Range) from May 15 through October 11, 2015, during which time 1,567 bat passes over 238 detector nights were recorded.” (emphasis added) Please explain why the Summit Wind Farm is considered adjacent to the Project when considering acoustic bat surveys, but the Applicant did not consider the Summit Wind Farm when it was analyzing cumulative effects on resources in accordance with ARSD 20:10:22:13.**

Jennifer Bell: The Summit Wind Farm is a proposed wind farm. Portions of the Summit Wind Farm project area boundary abut or overlap the Dakota Range Project Area boundary, and, therefore, the two projects are considered adjacent. Because the two proposed projects are adjacent, acoustic bat survey information for the Summit Wind Farm was considered in the bat effects analysis for Dakota Range.

The Summit Wind Farm was not considered when analyzing cumulative effects of the Project, because in accordance with ARSD 20:10:22:13, only “operating energy conversion facilities, *existing or under construction*” should be considered (emphasis added). The Summit Wind Farm is a proposed wind farm. It would be speculative to consider a proposed wind energy facility, because it is unknown whether or not such a facility would ultimately be constructed. If the Summit Wind Farm were in fact an operating facility, existing or under construction, then it would be appropriate to consider the Summit Wind Farm when analyzing cumulative effects of the Project.



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November 15, 2010

RE: Vestas Safety Manual - Correction and Clarification of Language

Certain older versions of the "General Precautions" chapter of Vestas' Safety Regulations manuals, including the manual entitled "Safety Regulations for Operators and Technicians – V90-3.0 MW/V100-2.75 MW" warn turbine operators and technicians to stay outside a certain radius from a wind turbine "unless necessary". This language, however, was meant to apply only in case of abnormal operation such as fire. The warning was never intended to apply to turbines operating normally. Accordingly, the specific warning was misplaced in the manual's "General Precautions" chapter.

Vestas has no documentation, studies or analysis proscribing a specified safety zone around its wind turbines in normal operation. As a result, Vestas has recently undertaken efforts to remove the warning from the "General Precautions" chapter in all of its manuals. However, Vestas does continue to specify a radius that should be evacuated in case of abnormal operating conditions such as fire. Vestas' Safety Regulations manuals should not be cited as support for any specific safety zone or setback for wind turbines in normal operation.

Wind turbines are sophisticated pieces of equipment and Vestas takes great care to ensure the safety of its equipment, its employees and their communities. As with any sophisticated electric generation equipment, abnormal operating conditions can occur. Nevertheless, Vestas wind turbines in normal operation are safe. Vestas employs thousands of service and maintenance technicians who work safely within close proximity to wind turbines every day.

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**STAFF'S FOURTH SET OF DATA  
REQUESTS TO APPLICANT**

**EL18-003**

Below, please find Staff's Fourth Set of Data Requests to Applicant. Please submit responses within 10 business days, or promptly contact Staff to discuss an alternative arrangement. In addition, please specify the responder when answering each interrogatory. Should any response have subparts answered by more than one individual, identify the respondent by subpart.

- 4-1) Are participating residents prohibited from filing a complaint before the South Dakota Public Utilities Commission or any other governmental entity regarding noise or any other concern due to language in their easement? Explain.

Mollie Smith: This request calls for a legal conclusion. That said, the leases do not specifically prohibit landowners from complaining to the Commission, but the leases do obligate participating landowners to cooperate with Dakota Range to obtain and maintain permits for the Project.

- 4-2) Please provide the name, address, and distance to the closest turbine of non-participating residences that are within the following distance from the closest turbine to their residence:
- a) 1,000 ft. to 1 mile;
  - b) 1 mile to 2 miles; and
  - c) 2 miles to 3 miles.

Please submit the response to Staff Data Request 4-2 confidentially.

Dakota Range is compiling data responsive to this request and will submit on April 26, 2018, per the extension granted by Ms. Amanda Reiss.

- 4-3) Refer to Mr. Mike MaRous' direct testimony, Page 1, Lines 26 – 27. When will the market impact studies for multiple wind projects in South Dakota be completed? Does

the Applicant intend to introduce these studies in this docket when the studies are complete? Please explain.

Michael MaRous and Mollie Smith: The April 13, 2018 Market Impact Analysis for the Crocker Wind Farm Study was submitted to the South Dakota Public Utilities Commission on April 13, 2018 in Docket No. 17-28. The other study work is underway and a completion date has not been set.

At this time, Dakota Range does not intend to submit market analyses for other projects in this docket; however, Mr. MaRous may offer additional information in support of his analysis for Dakota Range in rebuttal testimony, if appropriate.

4-4) Refer to Mr. Mike MaRous' direct testimony, Page 2, Lines 8 – 10. Mr. MaRous states, "When I use the phrase 'proximity to wind turbines,' I generally mean turbines within three to five times the hub height of a wind turbine."

a) Based on the Dakota Range project proposed turbines, please provide the range Mr. MaRous considers to be within proximity to the proposed wind turbines.

Michael MaRous: As an initial matter, I note that the quoted portion of my testimony has a typographical error: three to five times "hub height" should be three to five times "tip height," generally 1,500 to 2,500 feet. Based on the Project's proposed turbines, the range I consider to be within proximity to the proposed wind turbines is 1,476 feet – 2,460 feet.

b) Is Mr. MaRous asserting that residences and agricultural land that are at a distance of more than five times the hub height of a wind turbine away from a wind turbine do not need to be analyzed for any potential property value impact associated with the Project? Please explain.

Michael MaRous: Based on my years of appraisal experience, the values of residences and agricultural properties that are located more than five times the tip height away from a wind turbine are unlikely to be affected. That does not mean they should not be considered in a market analysis. I viewed all properties and residences in the Project area within Clay County and concluded that there was no market evidence that the value of distant properties and residences would be affected by the Project.

c) What is the basis for selecting three to five times the hub height of a wind turbine as the definition of proximity?

Michael MaRous: As clarified above, I meant to say “tip height,” not “hub height.” I chose to define “proximity” as three to five times the tip height of a wind turbine based on my experience as detailed in response to Part b.

- 4-5) Refer to Mr. Mike MaRous’ direct testimony, Page 3, Lines 19 – 20. How did visiting the Project area in Grant and Codington counties assist in conducting your market value analysis?

Michael MaRous: Visiting the Project area in Grant and Codington counties allowed me to get acquainted with the market area and demographics, as well as the physical characteristics of the Project footprint. This familiarity was helpful in conducting the market analysis.

My extensive experience has taught me that a thorough inspection of the subject and subject area is extremely helpful when preparing an accurate report. I have participated in the last several publications of *The Appraisal of Real Estate*, the foremost recognized publication concerning real estate appraisal. A thorough site and area inspection is always considered part of “best practice.” My visit to the Project area in Grant and Codington counties allowed me to observe the physical characteristics of the area (such as gravel roads, rolling topography, existence of numerous prairie potholes, wire fences in need of maintenance, older homes and out buildings, existing wind farms, small lakes, and limited non-agricultural uses). It also showed the suitability for agricultural pasture and hunting type uses. I viewed residential properties (on my way to and from the Project area) and I also viewed the planted shelterbelts around a large majority of the smaller “farmette” parcels. I could view and observe the proximity to amenities, services, and infrastructure of the area. The inspection also provided a confirmation of issues that I had found with reviewing the other technical expert reports, as well as published and historical information in the area, which aided me in preparing my market value analysis.

- 4-6) Refer to Mr. Mike MaRous’ direct testimony, Page 5, Lines 2 – 20.

a) On lines 6 – 10, Mr. MaRous mentioned one tax appeal based upon wind farm-related concerns. However, on Page 47 of 57 of Exhibit 1 to Mr. MaRous testimony, it is stated that there have been no tax appeals in any South Dakota county. Which statement is correct? Please clarify.

Michael MaRous: My testimony is correct, that there has been one tax appeal in South Dakota, which was unsuccessful. As noted in my Market Analysis, there was one

unsuccessful appeal in Aurora County, and that tax appeal was inadvertently omitted from the summary of outreach to South Dakota assessors.

b) On lines 11 – 12, Mr. MaRous stated there have been no reduction in assessed valuations due to proximity to wind turbines. Does the Applicant know how many reductions in assessed valuations there have been in the Counties surveyed during the requested survey time period, and the reasons for each reduction?

Michael MaRous: No. I do not have this information.

c) On lines 18 – 20, Mr. MaRous states, “Further, county assessors repeatedly stated that county revenues and revenues to individual farms outweighed any initial concerns that residents had about the wind farms joining their communities.”

i. Referring to “revenues to individual farms,” does “individual farms” refer to participating landowners in the Project? If no, please explain.

Michael MaRous: We understood the county assessors to be referring to participating landowners, but the assessors did not use that phrase in our surveys.

ii. Referring to “initial concerns that residents had about wind farms,” does “residents” refer to non-participating landowners to the Project? If no, please explain.

Michael MaRous: In this portion of my testimony I was referring to all landowners, participants and non-participants in the Project area.

iii. Please explain the County Assessors role and how they are qualified to issue an opinion on how the increased revenues associated with the Project outweighed any concerns.

Michael MaRous: Assessors set the market value of properties in their jurisdictions. An assessor’s determination of market value is used by the County to assess property taxes, and the assessor’s determination of market value would be what is being challenged in a property tax protest/appeal. Assessors analyze economic factors and sales transactions to estimate market value. They also receive input on factors influencing value, and know of complaints from parties protesting the assessor’s opinion of market value.

The minimum qualifications for county assessors are set by statute. A county assessor must obtain the Certified Appraiser Assessor designation from the South Dakota Department of Revenue. (SD Laws 10-3-1.1; SD Laws 10-3-1.2; SD Admin. Rules

64:02:01:14). To be eligible for this certification, they must have “at least one year of full-time experience in the assessing and appraising field, have completed and passed the required training prescribed in § 64:02:01:16, and ha[ve] passed the certification examination.” (SD Admin. Rules 64:02:01:05.) Appraisers routinely and reasonably rely upon information provided by assessors to prepare market analyses and appraisals.

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**BEFORE THE PUBLIC UTILITIES COMMISSION  
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**IN THE MATTER OF THE  
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I, LLC AND DAKOTA RANGE II, LLC  
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\* **APPLICANTS' RESPONSES TO STAFF**  
\* **DATA REQUEST No. 4-2**  
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\* **EL18-003**  
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Below, please find Applicants' Response to Staff Data Request No. 4-2.

- 4-1) Please provide the name, address, and distance to the closest turbine of non-participating residences that are within the following distance from the closest turbine to their residence:
- a) 1,000 ft. to 1 mile;
  - b) 1 mile to 2 miles; and
  - c) 2 miles to 3 miles.

Please submit the response to Staff Data Request 4-2 confidentially.

Mollie Smith: The requested information is attached. Dakota Range notes that for "c", Dakota Range does not have complete information regarding residences between two and three miles from a turbine because the dataset extends only one mile from the Project boundary. As requested by Staff, Dakota Range is submitting responses to Staff Data request No. 4-2 confidentially.

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**STAFF'S FIFTH SET OF DATA  
REQUESTS TO APPLICANT**

**EL18-003**

Below, please find Applicants' Responses to Staff's Fifth Set of Data Requests.

- 5-1) Refer to Mr. Mark Mauersberger's direct testimony, Page 2, Line 17. Mr. Mauersberger is sponsoring Appendix L, Property Value Effects Study, of the Application, while Mr. MaRous is supporting Section 21.1.2.3 of the Application. Is this correct? Please explain.

Mollie Smith: Mr. Mark Mauersberger assisted with preparation of the Application and is sponsoring Appendix L. Mr. Mike MaRous is supporting, rather than sponsoring, the Application's discussion of property value effects in Section 21.1.2.3 of the Application.

- 5-2) Refer to Mr. Mark Mauersberger's direct testimony, Page 10, Lines 13 – 15. Mr. Mauersberger states, "... , environmental setbacks are adhered to as agreed upon with USFWS and the South Dakota Game, Fish, and Parks, ...". Please provide a list of all environmental setbacks that the Applicant is implementing.

Jennie Geiger: Dakota Range has committed to the following environmental setbacks, as agreed upon with USFWS and SDGFP during the September 26, 2017 meeting:

- Bald eagle nest turbine setback of 1.6 miles.
- Prairie grouse lek turbine setback of no less than 0.3 mile.

In addition, the proposed layout avoids potentially suitable Dakota skipper and poweshiek skipperling habitat and USFWS easements.

- 5-3) Refer to Mr. Mark Mauersberger's direct testimony, Page 11, Lines 12 – 17. Does the County conditional use permit supersede the South Dakota Public Utilities Commission authority as provided in South Dakota codified law or administrative rule. Please explain.

Mollie Smith: This request calls for a legal conclusion, and the Commission's siting authority is outlined in SDCL Ch. 49-41B.. To the extent necessary, Dakota Range will address this issue in briefing.

- 5-4) Refer to Mr. Mark Mauersberger's direct testimony, Page 11, Lines 19 – 24. When will the Applicant determine whether future projects are possible based on available transmission capacity? Please explain.

Mark Mauersberger: Dakota Range does not know yet when a decision on future projects will be made. Available transmission capacity and its cost will be known when the results of interconnection studies become available. The Independent System Operator is responsible for completing those studies. Dakota Range and other developers are given a general schedule of when to expect completed studies, but the schedule is subject to change. Future projects are dependent upon available transmission capacity, but other proprietary business information is also considered in the decision. Dakota Range continues to assess the viability of future projects and will publicly submit documentation to the appropriate permitting authorities if a decision to move forward is reached.

- 5-5) Please provide Mr. Mike MaRous' appraiser work file for this docket.

Michael MaRous: My work file containing documents Bates labeled as Dakota Range 000001 — Dakota Range 000262 are attached. The work file includes an updated version of my South Dakota assessor's survey that adds surveys of the county assessors in Campbell and McPherson counties.

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**BEFORE THE PUBLIC UTILITIES COMMISSION  
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**STAFF'S SIXTH SET OF DATA  
REQUESTS TO APPLICANT**

**EL18-003**

Below, please find Staff's Sixth Set of Data Requests to Applicant. Please submit responses within 10 business days, or promptly contact Staff to discuss an alternative arrangement. In addition, please specify the responder when answering each interrogatory. Should any response have subparts answered by more than one individual, identify the respondent by subpart.

6-1) Refer to the direct testimony of Mr. Mike MaRous, Page 4, Lines 6 – 12. Mr. MaRous states, "I reviewed sales transactions in seven northeastern counties in South Dakota with operating wind farms to try to identify matched paired sales to use for comparison, meaning sales of similar rural residential properties where one property was near a wind farm and one property was not. However, of the sales reviewed, only one rural residential property sale was near a wind farm, and that property, located in Brookings County, South Dakota, was nearly four miles away from a turbine. As a result, the sale was not close enough to a wind turbine to use in a proximate/not proximate paired sales comparison."

a) How close to a wind turbine would a property sale need to be to be included in a paired sales analysis? Explain.

Mike MaRous: Ideally, a property sale included in a paired sales analysis would be located within 5 times the turbine tip height (approximately 2,500 feet) of a wind turbine.

b) Explain the review process Mr. MaRous conducted to ensure he reviewed all sales transactions near operating wind farms.

Mike MaRous: Using the wind farms associated with the assessor's survey, we went to real estate websites (such as Zillow, Trulia, Redfin, etc.) and the Northeast South Dakota Association of Realtors ("NESD") Multiple Listing Service ("MLS") to look

for all sales in the immediate area. We then contacted any relevant brokers to confirm our findings.

- 6-2) Refer to the direct testimony of Mr. Mike MaRous, Page 4, Lines 23 – 27.
- a) Describe the qualifications and experience of each of the six South Dakota County assessors surveyed by the Applicant.

Mike MaRous: The statutorily required qualifications for county assessors in South Dakota (also called “Directors of Equalization”) are contained in Title 10, Chapter 10-3 of the South Dakota Codified Laws, titled “County Directors of Equalization.”

- b) Are the duties and responsibilities of an assessor and an appraiser the same? If no, please explain.

Mike MaRous: An assessor is working for a county or public body and an appraiser is working for an individual client. The ultimate goal of both an assessor and an appraiser is to estimate market value as of a specific date.

- c) Are the education requirements for an assessor and an appraiser the same? If no, please explain.

Mike MaRous: They have similar course requirements, but appraisers’ course requirements are generally more rigorous and extensive.

- d) Please explain the difference between an assessed value and an appraised value.

Mike MaRous: “Appraised value” is market value and “assessed value” can be adjusted for level of assessment and equalization factors. Further, in South Dakota, crop and pasture land is assessed on productivity and residential properties are assessed on market value.

- e) Does an assessor review property on an individual basis or conduct mass appraisals? Please explain.

Mike MaRous: They can do both. The value of agricultural land in South Dakota is based on productivity, and it appears that residential assessed value has specific estimates of value that would not necessarily meet the requirements of Uniform Standards of Professional Appraisal Practices (“USPAP”) under appraisal standards.

- f) Does an assessor consider the view from an individuals' property when determining an assessed value for taxation purposes? Please explain.

Mike MaRous: View and any factors that affect value should be considered by the assessor when estimating market value and translating into assessed value.

- g) Please provide the objective measures that each of the six South Dakota county assessors consider when determining an assessed value.

Mike MaRous: It is my understanding that they are looking at productivity factors and crop values when valuing agricultural land. When valuing residential properties, they are looking at sales transactions, sales volume, market conditions, location, paved roads, land size, building sizes, amenities, and condition. They are also looking at desirability of location, economic viability, and future trends. Further, they will also consider the views of and from subject property.

- 6-3) Refer to Mr. MaRous's Market Analysis. Since Mr. MaRous could not identify any sales of property within the proximity of wind turbine, is the only analysis specific to South Dakota a survey of County Assessors? Please explain.

Mike MaRous: We included the Brookings County comparison as a South Dakota-specific analysis to reinforce the data we received from the assessors. There was also an analysis of recent residential and land sales of properties that were near the Project that were considered. There were, however, no sales involving property within proximity to turbines.

- 6-4) Refer to the direct testimony of Mr. Robert O'Neal, Page 4, Line 21, through Page 5, Line 18. Regarding Grant and Codington County's sound level requirement for wind energy facilities:

- a) Please explain what "constructive interference" means in each ordinance.

Robert O'Neal: Neither ordinance defines "constructive interference." From a general acoustics perspective, this term means the addition of two waveforms of similar phase in which a signal and any reflections are added together. In other words, the sound to be measured to satisfy the counties' sound ordinances is the sound from all operating wind turbines combined. That is how the sound level modeling study was performed.

- b) Is the "average sound" measurement defined in the ordinance? Please explain.

Robert O'Neal: "Average sound" is not defined in either ordinance.

- c) Has Mr. O'Neal confirmed with Grant and Codington County that the  $L_{eq}$  metric is appropriate? If so, please provide documentation.

Robert O'Neal: I have not conferred with either county on the metric. However, a preliminary sound analysis report was provided to each county with the Conditional Use Permit (CUP) applications, and each county granted a CUP to Dakota Range for the Project without taking issue with the sound analysis conducted. Further, the International Electrotechnical Commission (IEC) 61400-11 standard wind turbine manufacturers use to measure sound from their wind turbines is defined in terms of an Leq. Therefore, the sound modeling results were presented in terms of an Leq and compared to the sound level limits on an Leq to Leq basis.

- d) Please explain all efforts of the Applicant to work with Grant and Codington County to better define the sound ordinance.

Mark Mauersberger: It is unclear what is meant by this request. Dakota Range believes that it has demonstrated compliance with the each county's sound requirement, as evidenced by issuance of CUPs.

- e) Please explain how Grant and Codington County will audit the Dakota Range Wind Facility for compliance with its sound ordinance.

Mollie Smith: Neither the Grant County ordinance nor the Codington County ordinance includes any specific audit provisions. However, Dakota Range committed to providing an updated sound analysis for the final layout showing compliance with each county's applicable ordinance provision prior to construction.

- 6-5) Can the South Dakota Public Utilities Commission order a different sound level requirement than what is in Grant and Codington County's ordinance? If yes, please provide the factors the Applicant believes the Commission should consider in determining an appropriate sound level requirement. If no, please cite South Dakota codified laws or administrative rules the Applicant considered in making that determination.

Mollie Smith: The SD PUC's permitting authority for a wind energy facility is set forth in South Dakota Laws Ch. 49-41B. Dakota Range believes the issue of whether a



condition is appropriate is an issue for briefing because it is dependent on an analysis of the specific condition language and the fully developed record in the case.

- 6-6) Refer to the direct testimony of Mr. Mark Mauersberger, Page 10, Lines 7-19.
- a) Please explain how the request for turbine flexibility is compliant with ARSD 20:10:22:33.02 based on the Commission's interpretation of the rule in Docket EL17-028.

Mollie Smith: The rule cited is an Application content requirement (as noted by the PUC's Order Granting Motion to Deny and Dismiss Crocker Wind Farm's Application, dated November 1, 2017), and, therefore, is not determinative of the final conditions of the permit issued. Further, said order does not address turbine shifts.

- b) Please explain why shifts of turbines of up to 500 ft. should not be considered a new configuration of wind turbines.

Mollie Smith: See response to DR 6-6(a).

- 6-7) At the Public Input Hearing on March 21, 2018, Mr. Mauersberger stated the following:  
*"In addition to the aforementioned, Codington County representative actually reach out to their neighboring county's equalization office to discuss property values since Buffalo Ridge Wind Farm was built more than ten years ago. Brookings County told Codington County that they had just completed such an analysis on 243 home sites that were in and around the Buffalo Ridge Wind Farm.*

*Their conclusion? Over the past decade, 242 of the 243 homes around this nearby wind farm increased in value by an average of fifty eight percent. Now I understand that project opponents love to cite a flawed real estate study done in Canada. However, I would rely on South Dakota analysis done on an established wind farm in a nearby county as a better comparable."*

- a) Please explain why this analysis was not submitted as support for the Application if it was sourced at the Public Input Hearing and the general public was instructed to "rely" on the analysis by the Applicant.

Mark Mauersberger: See response to DR 2-19. The statement was not made until after the Application was filed, and I indicated I would rely on the Brookings County data over other flawed studies often referenced.

- b) Please provide the name, title, and qualifications of the Codington County representative mentioned above.

Mark Mauersberger: See response to DR 2-19.

- c) Please provide the name, title, and qualifications of the employee at the Brookings County equalization office that Codington County contacted.

Mark Mauersberger: See response to DR 2-19.

- d) For the 242 homes around the Buffalo Ridge Wind Farm, is the “increase in value” based on assessed value or real estate sales transactions? Explain.

Mark Mauersberger: See response to DR 2-19.

- e) Please define “in and around the Buffalo Ridge Wind Farm” for distances, similar to how Mr. MaRous defines proximity.

Mark Mauersberger: See response to DR 2-19.

- f) Did the analysis focus on residential or agricultural properties? Explain.

Mark Mauersberger: See response to DR 2-19.

- g) Is the Applicant asserting that the increase in value of these properties was primarily associated with the nearby wind farm? Explain.

Mark Mauersberger: See response to DR 2-19.

- h) Did Brookings County perform a paired sales analysis to determine if the increase was associated with property being near a wind farm? Explain.

Mark Mauersberger: See response to DR 2-19.

- i) How did the increase in value of these 242 properties compare to increase in value of properties that were not near a wind farm? Explain.

Mark Mauersberger: See response to DR 2-19.

- j) On Slide 24 of the Applicant’s presentation for the Public Input Hearing, the Applicant made claims that it follows an “evidence-based approach”, relying on “qualified/peer-reviewed studies.” Does the Applicant believe this study and the results conveyed to the general public met this rigorous standard? Explain.

Mark Mauersberger: Please see response to DR 2-19. Dakota Range employed an evidence-based approach to designing the Project and, where applicable, relied on qualified/peer-reviewed studies. Dakota Range’s scientific studies were based on multiple, qualified, professional reviews of the Project layout and immediately adjacent lands. Dakota Range’s Real Estate analysis was a statistical study, based on

assembling historical property value data (collected pre & post construction of a wind farm).

Dated this 30th day of April, 2018.

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**BEFORE THE PUBLIC UTILITIES COMMISSION  
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**IN THE MATTER OF THE  
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**APPLICANTS' RESPONSES TO  
STAFF'S SEVENTH SET OF DATA  
REQUESTS**

**EL18-003**

Below, please find Applicants' responses to Staff's Seventh Set of Data Requests to Applicant.

- 7-1) Refer to Figure 2 of the Application. Please provide the approximate number of miles Turbine 72 is from the city limits of Watertown.**

Jennifer Bell: Turbine 72 is located approximately 13 miles from the city limits of Watertown, at their nearest point.

- 7-2) Please provide the turbines, by number, that are within 300 meters from the following land use classifications:**

Jennifer Bell: The following numbers of turbines are located within these land use classifications or within 300 meters of these land use classifications:

- a) **Undisturbed native grasslands: 11**
- b) **Haylands: 5**
- c) **Pastureland and rangeland: 91.**

- 7-3) Please refer to the Constraints Map depicted on Figure 5:**

- a) **Please define "Buildable Area".**

Brenna Gunderson: For the purposes of Figure 5, the "buildable area" was developed by incorporating setback requirements and other factors related to the siting of wind turbines.

- b) **Please explain how certain turbines (ie – 16, 18, 19, 20) are not shown to be in a Buildable Area.**

Brenna Gunderson: Turbines 16, 18, 19, and 20 are shown in a non-Buildable Area as a result of an error in creating Figure 5 in which an outdated version of the Buildable Area was inadvertently used.

- c) **Please resubmit Figure 5 to also show the turbine flexibility requested, and submit Figure 5 with more detail (ie – broken out into 4 or 6 sub-regions of the project).**

Brenna Gunderson: See the attached revised Figure 5 maps.

**7-4) Refer to Appendix I to the Application.**

- a) **Please provide the electronic files that support Table B-1 and Table B-2 in Appendix I to the Application.**

Rob O’Neal: Tables B-1 and B-2 are being provided.

- b) **Please provide Table B-1 and Table B-2 with the following additional columns of information for each receptor ID: distance to closest turbine, closest turbine number, and street address associated with receptor ID.**

Rob O’Neal: The street addresses associated with each of the 189 receptors was not provided. The attached table (Dakota Range Receptor Distances to Turbines) includes the distance from each of the 189 receptors to the closest turbine and the number of that closest turbine.

- c) **Is “sensitive receptors” defined as property lines in Grant County, instead of how it is defined for Codington County on Page 1-1, to mirror the sound level requirement in Grant County’s ordinance? Please explain.**

Rob O’Neal: In Grant County, the point of evaluation was the “perimeter” of the structure, which was interpreted to mean at the edge of a structure, not the property line. In Codington County, the point of evaluation was the property line (although results are presented at each structure, too). Sound levels at any property line between a participating and non-participating parcel at 50 dBA or less in both counties (see Figure 5-2A and Figure 5-2B in Appendix I).

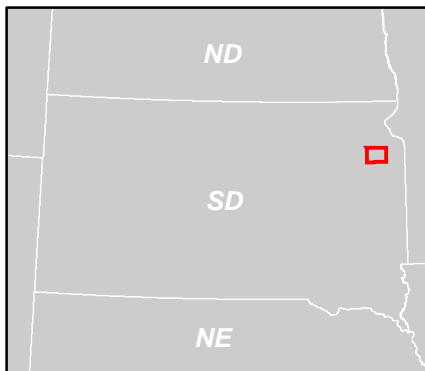
**7-5) Refer to Page 9-2 of the Application regarding final micrositing flexibility. The Applicant states, “As a result of final micrositing, minor shifts in the turbine locations may be necessary to avoid newly identified cultural resources (cultural resource studies in coordination with the SWO are ongoing), or due to geotechnical evaluations of the wind turbine locations, landowner input, or other factors. Please**

**provide a list of all wind generation projects completed by Apex Clean Energy Holding, LLC, or an associated subsidiary, where turbines were moved during the final micrositing process. For each project identified, provide how many turbines were moved, how many feet each turbine was shifted, and the reason for each shift. Also, provide a list of all wind generation projects completed by Apex Clean Energy Holding, LLC, or an associated subsidiary, where no turbines were shifted during the final micrositing process.**

Brenna Gunderson: This information is not readily available. The Applicant provided additional detail on turbine micrositing in its Application (see, for example, Section 9.1).

Dated this 3rd day of May, 2018.

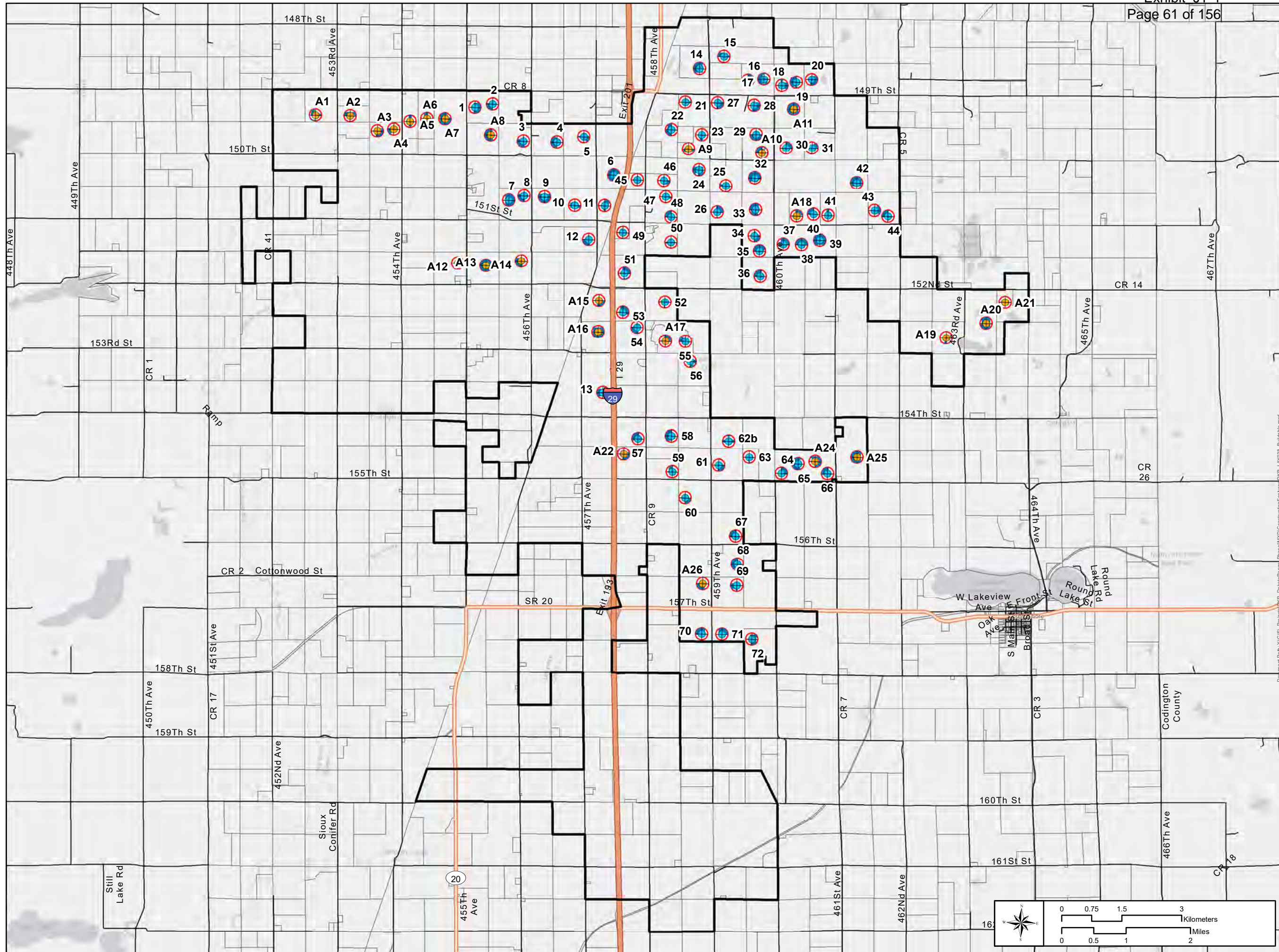
By /s/ Mollie M. Smith \_\_\_\_\_  
Mollie M. Smith  
Lisa A. Agrimonti  
FREDRIKSON & BYRON, P.A.  
Attorneys for Applicants  
200 South Sixth Street, Suite 4000  
Minneapolis, MN 55402  
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# Dakota Range

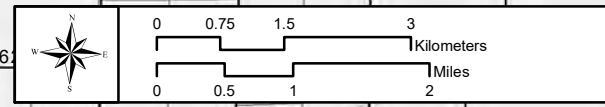
## Buildable Within 500ft From Turbine

- Project Boundary
- Parcel Boundary
- Primary Turbine
- Spare Turbine
- 500 ft. Radius
- Buildable Area (V136 at 82m)

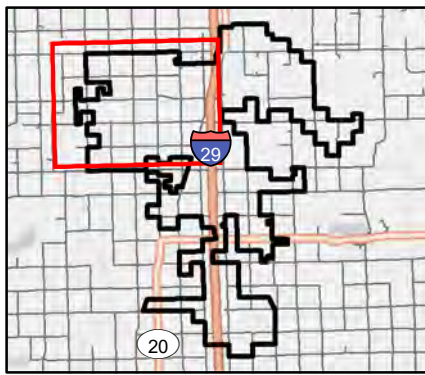


Date: 5/2/2018 Author: MR  
 Coordinate System: NAD 1983 StatePlane South Dakota North FIPS 4001 Feet  
 Projection: Lambert Conformal Conic  
 Datum: North American 1983  
 Units: Foot US

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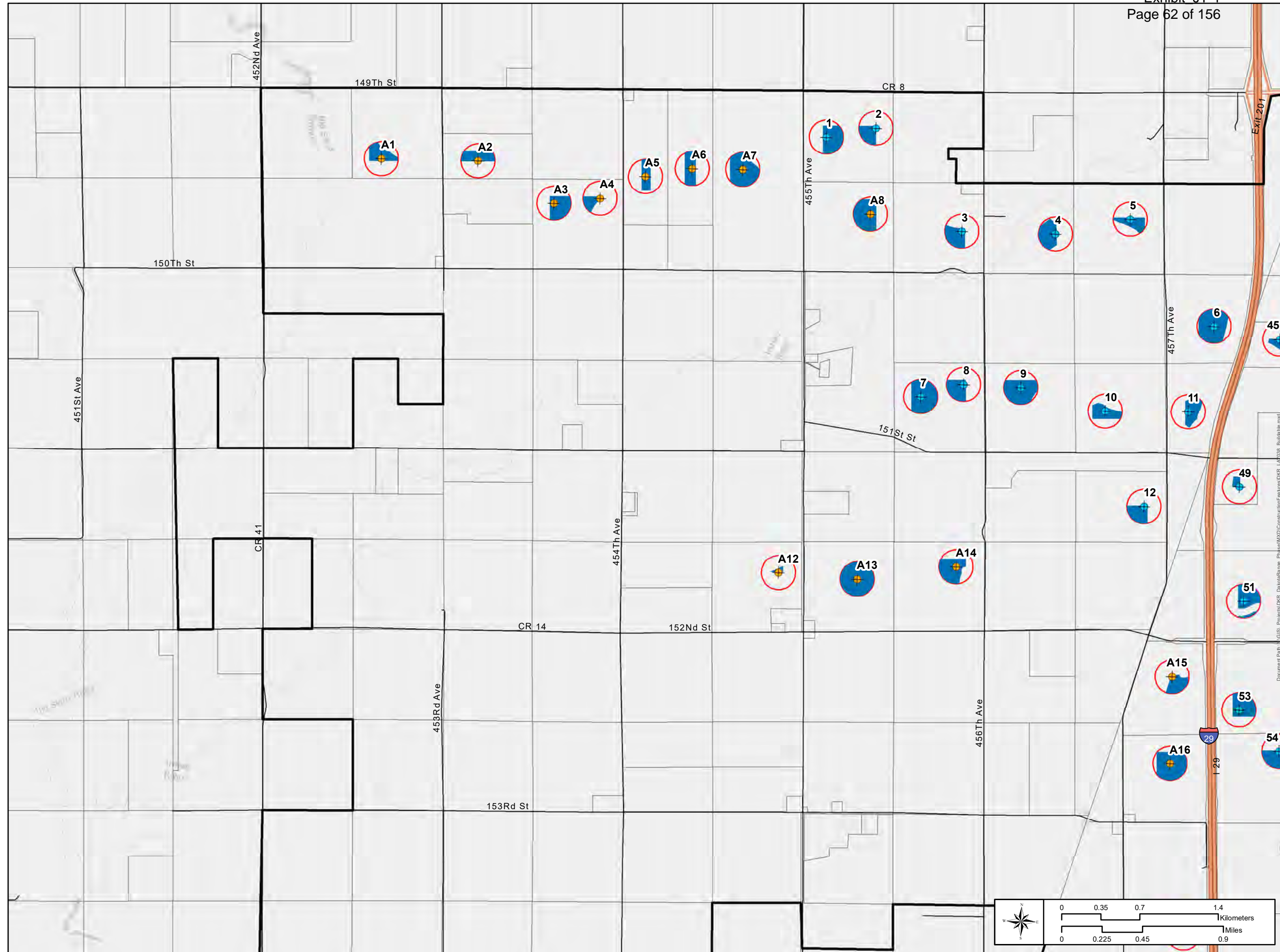
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# Dakota Range

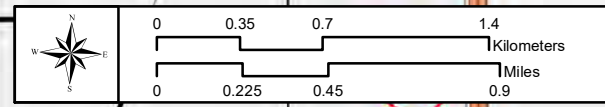
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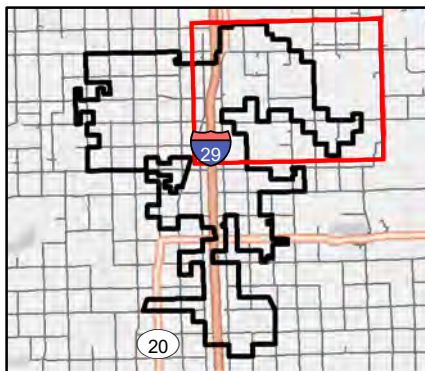
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 Units: Foot US

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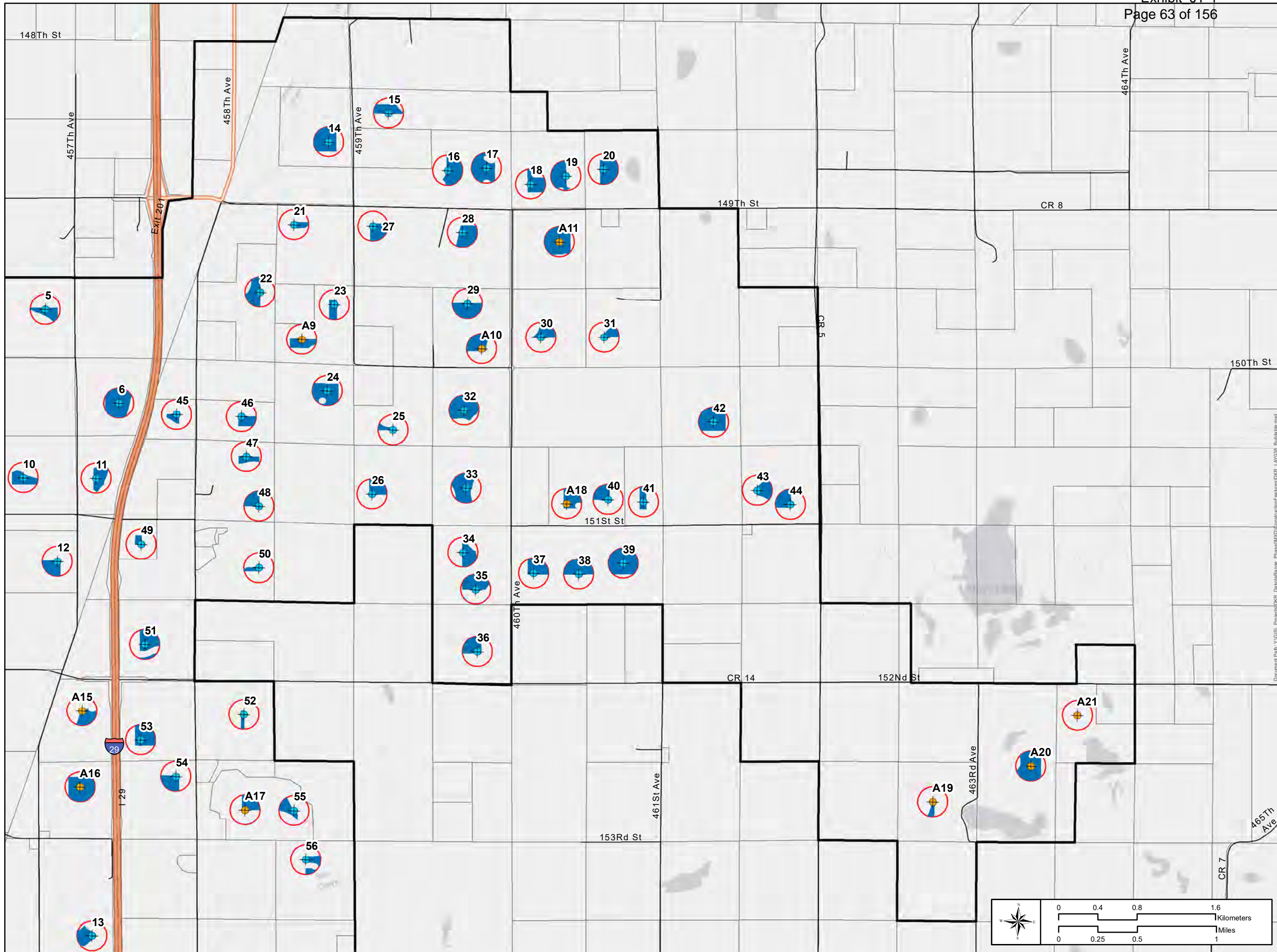




## Dakota Range

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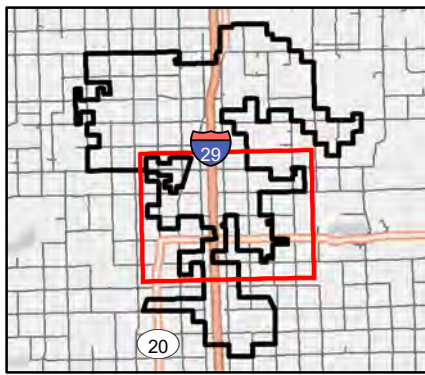


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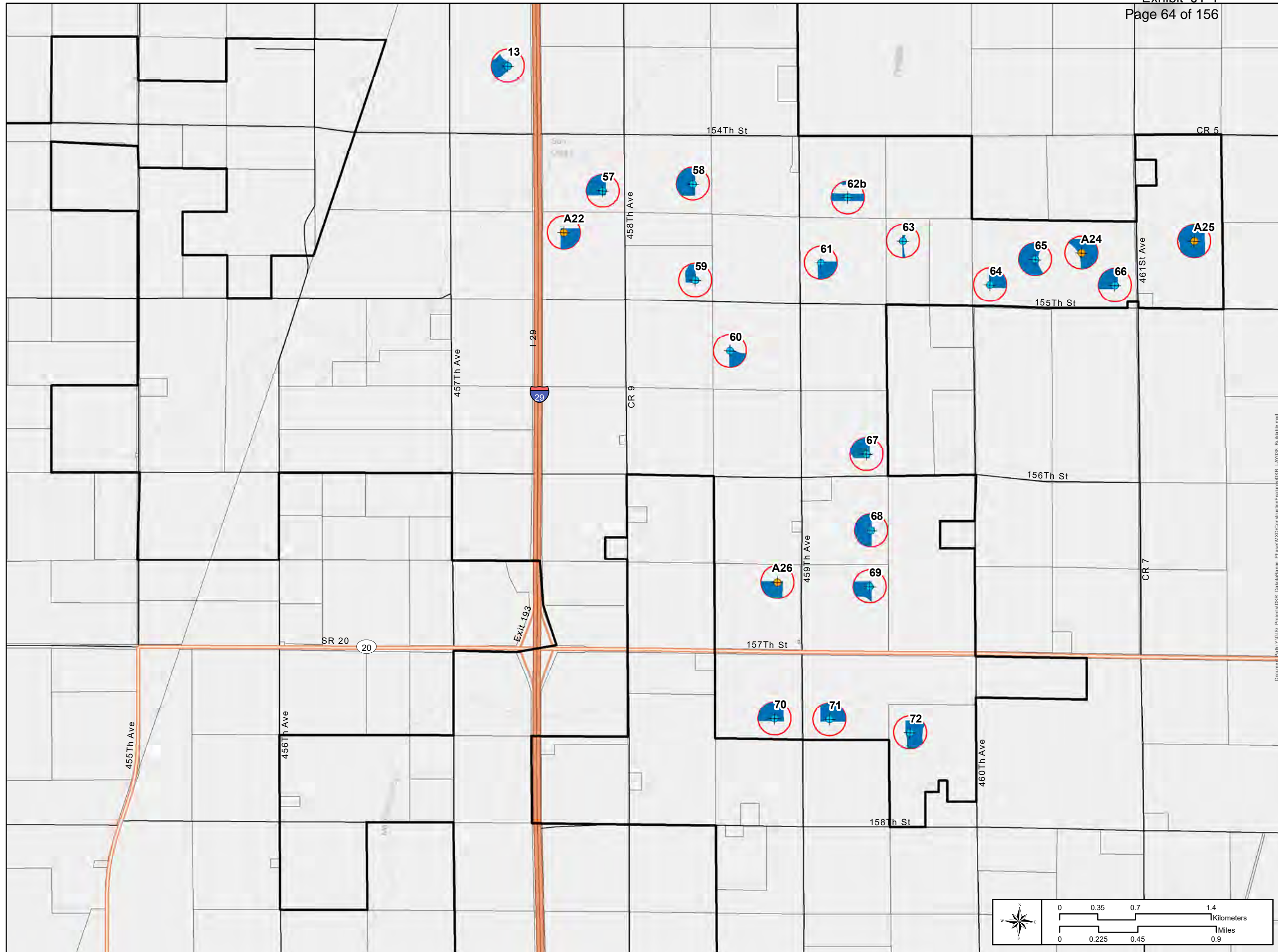
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# Dakota Range

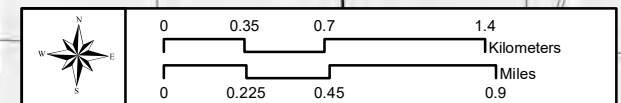
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Date: 5/2/2018 Author: MR  
 Coordinate System: NAD 1983 StatePlane South Dakota North FIPS 4001 Feet  
 Projection: Lambert Conformal Conic  
 Datum: North American 1983  
 Units: Foot US

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

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**IN THE MATTER OF THE  
APPLICATION BY DAKOTA RANGE  
I, LLC AND DAKOTA RANGE II, LLC  
FOR A PERMIT OF A WIND ENERGY  
FACILITY IN GRANT COUNTY AND  
CODINGTON COUNTY, SOUTH  
DAKOTA, FOR THE DAKOTA RANGE  
WIND PROJECT**

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**APPLICANT’S RESPONSES TO  
STAFF’S EIGHTH SET OF DATA  
REQUESTS**

**EL18-003**

Below, please find Dakota Range I, LLC, and Dakota Range II, LLC’s (“Applicant”) Responses to Staff’s Eighth Set of Data Requests.

- 8-1) Refer to the Rebuttal Testimony of Mr. Mark Mauersberger, Page 2, lines 16 – 19, and refer to Slide 24 of the presentation from the Public Input Meeting, second bullet point. Is the statement regarding “qualified/peer-reviewed studies” in the Presentation specific to “environmental studies” as stated in Mr. Mauersberger’s Rebuttal Testimony, or did the presentation include “property” in the statement associated with peer-reviewed studies? Please explain.**

Mark Mauersberger: The reference to “property” in bullet point two on Slide 24 is referencing how Apex uses qualified/peer-reviewed studies and scientific research to design our facilities to minimize impacts to wildlife, people, and property. This bullet point was not specifically referencing property value.

- 8-2) Refer to the Rebuttal Testimony of Mr. Mark Mauersberger, Page 3, Lines 7 – 9. Please provide the specific date that Mr. Muller provided the information, with supporting documentation.**

Mark Mauersberger: Mr. Muller provided a copy of the information on May 4, 2018.

- 8-3) Refer to the Rebuttal Testimony of Mr. Mark Mauersberger, Page 4, Line 27 through Page 5, Line 6. Please provide the proposed zoning ordinance amendment referred by the Codington County Planning and Zoning to the Board of County Commissioners.**

Mark Mauersberger: Attached as Attachment DR 8-3 is a copy of what we understand to be the proposed zoning ordinance amendment referred by Codington County Planning and Zoning to the Board of County Commissioners on April 16, 2018.

**8-4) Refer to the Rebuttal Testimony of Mr. Mark Mauersberger, Page 6, Lines 15 - 20.**

**a) Please explain what the Applicant meant with the response to Commission Staff Data Request 4-1, “The leases do obligate participating landowners to cooperate with Dakota Range to obtain and maintain permits for the Project.”**

Mark Mauersberger: The response was meant to indicate that leased landowners have agreed to cooperate with Dakota Range in obtaining and maintaining permits for the Project.

**b) Do the easements signed by participating landowners include a provision to waive all setback requirements? If yes, please explain why the Applicant includes that provision.**

Mark Mauersberger: Dakota Range’s leases include a provision waiving setback requirements. Such a provision is a standard lease provision in the wind development industry and avoids the necessity of later requesting setback waivers on an individual basis.

**8-5) Refer to the Rebuttal Testimony of Mr. Mark Mauersberger, Page 7, Lines 2 - 4. Please provide the distance from Ms. Kaaz’s property line and her residence from proposed turbines 68, 69, and A26.**

Mark Mauersberger: The attached map (Dakota Range: Teresa Kaaz Turbine Proximity) shows the distance of the four turbines in closest proximity to Ms. Kaaz’s property line and her residence.

**8-6) Are any non-participating residences surrounded by three proposed wind turbines of similar distances away from their residence as Ms. Kaaz (Turbines 67, 68, 69)? If yes, please provide the address of the residence, the proposed turbine numbers, and distance each turbine is away from the residence.**

Brenna Gunderson: A response to this request is being provided separately.

**8-7) Are any non-participating residences surrounded by four proposed wind turbines of similar distances away from their residence as Ms. Kaaz (Turbines 67, 68, 69, A26)? If yes, please provide the address of the residence(s), the proposed turbine numbers, and distance each turbine is away from the residence.**

Brenna Gunderson: A response to this request is being provided separately.

- 8-8) Are any participating residences surrounded by three proposed wind turbines of similar distances away from their residence as Ms. Kaaz (Turbines 67, 68, 69)? If yes, please provide the address of the residence(s), the proposed turbine numbers, and distance each turbine is away from the residence.**

Brenna Gunderson: A response to this request is being provided separately.

- 8-9) Are any participating residences surrounded by four proposed wind turbines of similar distances away from their residence as Ms. Kaaz (Turbines 67, 68, 69, A26)? If yes, please provide the address of the residence(s), the proposed turbine numbers, and distance each turbine is away from the residence.**

Brenna Gunderson: A response to this request is being provided separately.

- 8-10) Refer to the Rebuttal Testimony of Mr. Mark Mauersberger, Page 7, Lines 2 - 12. The Applicant provided the distance from the closest proposed wind turbine to Ms. Kaaz's residence and Ms. Mogen's address.**

- a) Please provide the estimated distance from the closest proposed wind turbine to the Mr. Falk's address identified in his Rebuttal Testimony of 47175 155th Street, Stockholm, SD 57264.**

Brenna Gunderson: Mr. Falk's address is approximately 13 miles away from Turbine A21, and his leased property within the Project Area is approximately 9,892 feet away from Turbine A12.

- b) Please provide the estimated distance from the closest proposed wind turbine to the Ms. Moyer's address identified in her Rebuttal Testimony of 2020 13th Avenue Circle, Watertown, South Dakota.**

Brenna Gunderson: Ms. Moyer's address is approximately 8.5 miles away from Turbine 70 and her leased property within the Project Area is approximately 4,766 feet away from Turbine A22.

- 8-11) Refer to the Rebuttal Testimony of Mr. Falk, Page 2, Lines 9 – 14. Please identify the name and job title of the Dakota Range representatives Mr. Falk has worked with to answer his questions? Which Dakota Range representative(s), including**

**name and job title, did Mr. Falk work with to answer his questions regarding his easement?**

Wade Falk/Brenna Gunderson: David Lau, Land Agent for Dakota Range.

**8-12) Refer to the Rebuttal Testimony of Mr. Falk, Page 2, Lines 16 – 18.**

**a) Provide a copy of the lease agreement mentioned by Mr. Falk.**

Mollie Smith: The lease agreement is, by its terms, confidential and contains the Applicants' proprietary information.

**b) Does the lease agreement mentioned by Mr. Falk differ in any material way from the standard agreement used by Dakota Range? If yes, explain.**

Mollie Smith: See response to 8-12(a).

**c) What specific provisions in the easement did Mr. Falk feel as though protect his property and interests? Please explain.**

Wade Falk: I reviewed the entire easement and believe it adequately addresses all issues, including removal of facilities should the Project be decommissioned.

**8-13) Did Mr. Falk hire an attorney to review Dakota Range's easement before signing? If so, which attorney did Mr. Falk retain?**

Mollie Smith: This request seeks information that is irrelevant and/or outside the scope of this proceeding. It also seeks information potentially protected by attorney-client privilege.

**8-14) Refer to the Rebuttal Testimony of Mr. Falk, Page 2, Lines 20 – 22. What were the specific concerns Mr. Falk had about the project, and how were they addressed?**

Wade Falk: My primary concern was what would happen with the facilities if the wind farm stopped operating and those concerns were addressed in the easement.

**8-15) Refer to the Rebuttal Testimony of Mr. Falk, Page 2, Lines 24 – 29. Mr. Falk states, "To my family, the Project means stability and an additional, stable source of income." How many turbines will Mr. Falk host on his property? Please identify each turbine number in the response.**

Mark Mauersberger: Mr. Falk's property is not currently hosting turbines. However, Dakota Range employs a community benefit compensation model. As a result, landowners are paid primarily by the amount of acres they have in the Project, rather than the number of turbines they host.

- 8-16) Refer to the Rebuttal Testimony of Ms. Moyer, Page 2, Lines 4 – 6. Please identify the name and job title of the Dakota Range representatives Ms. Moyer has worked with? Which Dakota Range representative(s), including name and job title, did Ms. Moyer work with to answer her questions regarding her easement?**

Alice Moyer: My primary contacts were Pat Adams and David Lau, both land agents for the Project. They answered my questions about the Project and the easement. I have also talked with Mark Mauersberger about the Project after I granted an easement.

- 8-17) Refer to the Rebuttal Testimony of Ms. Moyer, Page 2, Lines 8 – 10.**

- a) Provide a copy of the lease agreement mentioned by Ms. Moyer.**

Mollie Smith: The lease agreement is, by its terms, confidential and contains the Applicants' proprietary information.

- b) Does the lease agreement mentioned by Ms. Moyer differ in any material way from the standard agreement used by Dakota Range? If yes, explain.**

Mollie Smith: See response to 8-17(a).

- c) What specific provisions in the easement did Ms. Moyer feel as though protect her property and interests?**

Alice Moyer: I believe the easement agreement overall is a fair agreement. In particular, I believe the compensation provisions are fair and overall the easement ensures that my property would be restored if there were any construction activities on my property.

- 8-18) Did Ms. Moyer hire an attorney to review Dakota Range's easement before signing? If so, which attorney did Ms. Moyer retain?**

Mollie Smith: This request seeks information that is irrelevant and/or outside the scope of this proceeding. It also seeks information potentially protected by attorney-client privilege.

- 8-19) Refer to the Rebuttal Testimony of Ms. Moyer, Page 2, Lines 16 – 18. Ms. Moyer states, “For my family, the Project provides additional income and support and means progress toward a better future.” How many turbines will Ms. Moyer host on her property? Please identify each turbine number in the response.**

Mark Mauersberger: Ms. Moyer’s property is not currently hosting turbines. However, Dakota Range employs a community benefit compensation model. As a result, landowners are paid primarily by the amount of acres they have in the Project, rather than the number of turbines they host.

- 8-20) Refer to Docket EL17-055, Pre-filed Exhibits filed by Crocker Wind Farm, LLC, Exhibit A15-7. Please provide a similar constraints map for the Dakota Range Wind Project.**

Brenna Gunderson: The map is being finalized and will be provided as a hearing exhibit.

- 8-21) Referring to Dakota Range’s response to Commission Staff Data Request 2-9, please provide any follow-up communication Dakota Range had with WAPA and identify if the Project was able to address WAPA’s concerns.**

Mark Mauersberger: Dakota Range has reached out to WAPA by e-mail and phone, but to-date, has not received a response from WAPA.

- 8-22) Should the Commission require financial assurance to be provided for decommissioning prior to construction, please provide:**  
**a) The financial assurance options available;**

Brenna Gunderson: Please see Dakota Range’s proposed decommissioning condition.

- b) Dakota Range’s preferred option and justification for that option;**

Brenna Gunderson: Please see Dakota Range’s proposed decommissioning condition.

- c) The amount Dakota Range believes the financial assurance should be set at to cover decommissioning costs, with a supporting work paper to show how Dakota Range derived that amount; and**



Brenna Gunderson: Please see Dakota Range’s proposed decommissioning condition and Appendix I to the PUC Application.

**d) The estimated cost of each of the options provided in subpart a based on the amount derived in subpart c.**

Brenna Gunderson: The following table identifies the annual cost for carrying a letter of credit for the estimated decommissioning cost of the Project (\$40,000 per turbine x 72 turbines) for the first ten years of Project operations:

Op Year	Security	LC Fees
1	\$2,880,000	\$51,000
2	\$2,880,000	\$51,000
3	\$2,880,000	\$51,000
4	\$2,880,000	\$51,000
5	\$2,880,000	\$58,000
6	\$2,880,000	\$58,000
7	\$2,880,000	\$58,000
8	\$2,880,000	\$59,000
9	\$2,880,000	\$66,000
10	\$2,880,000	\$66,000

**8-23) Please provide all applicable sections of Dakota Range’s easement with participating landowners that include decommissioning, abandonment, and restoration obligations.**

Brenna Gunderson: Below are the applicable decommissioning/abandonment/restoration provisions:

**Effect of Termination.** Upon termination of this Agreement, whether as to the entire Property or only as to part, Lessee shall (i) upon written request by Landowner, execute and record a quitclaim deed to Landowner of all of Lessee’s right, title and interest in and to the Property, or to that part thereof as to which this Agreement has been terminated, and (ii) no later than eighteen (18) months thereafter, remove all above-ground Windpower Facilities from the Property or portion as to which this Agreement was terminated in compliance with all applicable governmental permitting and decommissioning requirements exclusive of any continuing right established pursuant to this Agreement to survive the term of this Agreement, and restore the soil surface to a condition reasonably similar to its original condition; provided, however, that unless

otherwise required by applicable law, roads will not be removed unless Landowner delivers written notice to Lessee within thirty (30) days following termination of this Agreement that Landowner wishes for such roads to be removed, which notice shall be in recordable form. If Lessee fails to remove such Windpower Facilities within eighteen (18) months of termination of this Agreement, Landowner may do so, in which case Lessee shall reimburse Landowner for reasonable and actual costs of removal incurred by Landowner, less any salvage value received by Landowner, within thirty (30) days after receipt of an invoice from Landowner.

**Indemnity.** Lessee will defend, indemnify and hold harmless Landowner against liability for physical damage to property and for physical injuries or death to Landowner, Landowner's property or the public, to the extent caused by Lessee's negligence or willful misconduct during the construction, operation or removal of Windpower Facilities on the Property, except to the extent such damages, injuries or death are caused or contributed to by the negligence or willful misconduct of Landowner or Landowner's tenants, invitees or permittees. The reference to property damage in the preceding sentence does not include any damages to crops (which are governed solely by the provisions of Section 8.7 below) or any losses of rent, business opportunities, profits and the like that may result from Landowner's loss of use of any portions of the Property occupied by, or otherwise attributable to the installation of, Windpower Facilities pursuant to this Agreement. Landowner authorizes Lessee, at Lessee's sole expense, to take reasonable safety and security measures to reduce the risk of damage to the Windpower Facilities or the risk that the Windpower Facilities will cause damage, injury or death to people, livestock, other animals and property, including without limitation, fencing around the perimeter of the Windpower Facilities as Lessee may deem necessary or appropriate to secure or enclose the same, without unduly burdening Landowner's use of the Property.

**8-24) How can Dakota Range guarantee the resources necessary for decommissioning and restoration will be available? Please demonstrate.**

Brenna Gunderson: Please see Dakota Range's proposed decommissioning condition. Dakota Range has entered into a Purchase and Sale Agreement with Xcel Energy to purchase Dakota Range, and Xcel Energy is an established, financially stable public utility. In the event an entity other than a public utility were to own Dakota Range, Dakota Range has proposed providing financial security for decommissioning prior to commencing operation of the Project, in accordance with its proposed decommissioning condition.

**8-25) Please explain why Dakota Range has not developed and provided a Bird and Bat Conservation Strategy.**

Dave Phillips: A draft Bird and Bat Conservation Strategy has been developed for the Project. It continues to be revised in coordination with Xcel Energy. Because it is in draft form, Dakota Range has not filed the document in this docket.

**8-26) Please provide a copy of the USFWS' comments that were attached to an email dated Monday, August 24, 2015 sent from Natalie Gates to Dave Phillips and found in Appendix B.**

Dave Phillips: See Attachment DR 8-26.

**8-27) Referring to Dakota Range's response to Commission Staff Data Request 5-2, please provide documentation from the USFWS and SD GF&P that they agreed with the setbacks identified in the response if available.**

Dave Phillips: USFWS and SD GF&P both agreed that the environmental setbacks presented during the September 25, 2017, meeting were appropriate to reduce risk to species of concern, as outlined in the meeting summary dated September 29, 2017. Both agencies acknowledged receipt of the meeting summary on October 2, 2017, at which time they provided no additional comments. The acknowledgements were via email on October 2, 2017, from Natalie Gates (USFWS) and Silka Kempema (SD GF&P), both of which are included in the application.

**8-28) Refer to the Rebuttal Testimony of Brenna Gunderson, Page 1, Line 30 through Page 2, Line 10. What is the Applicant's definition of the current proposed location of a turbine? Is the "current proposed location" defined as the edge of the proposed turbine foundation or center of the proposed turbine foundation? Please define current proposed location so all parties understand the location which 500 feet will be based upon.**

Brenna Gunderson: The "current proposed location" is based on the center of the turbine foundation.

**8-29) Refer to the Rebuttal Testimony of Brenna Gunderson, Page 2, Line 12 through Page 3, Line 4. Please provide a list of any wind generation projects completed by Apex Clean Energy Holding, LLC, or an associated subsidiary, where turbines were moved during the final micro-siting process. For each project identified, provide how many turbines were moved, how many feet each turbine was shifted, and the**

**reason for each shift. Also, provide a list of all wind generation projects completed by Apex Clean Energy Holding, LLC, or an associated subsidiary, where no turbines were shifted during the final micrositing process.**

Brenna Gunderson: See response to DR 7-5. I do not recall any projects on which I have worked where turbines were not shifted during final micrositing.

**8-30) Refer to the Rebuttal Testimony of Brenna Gunderson, Page 3, Lines 12 – 17. For each turbine that needs to be shifted, please provide:**

**a) The turbine number;**

Brenna Gunderson: THIS RESPONSE CONTAINS CONFIDENTIAL INFORMATION:

[REDACTED]

**b) The number of feet the turbine needs to be shifted; and**

Brenna Gunderson: THIS RESPONSE CONTAINS CONFIDENTIAL INFORMATION:

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

**c) The SWO's concern that is being addressed by the shift.**

Brenna Gunderson: Stone features and alignments, which are probable Native American cultural sites, were discovered during the field surveys recently completed by Apex, Quality Services, Inc., and the Sisseton Wahpeton Oyate (SWO) Tribal Historic Preservation Office (THPO). By shifting two turbines, these tribal sites would not be disturbed.

Regarding the other three SWO turbine shifts referenced in my Rebuttal Testimony, one of the three turbines was eliminated from the configuration in order to avoid a tribal resource. The other two turbine sites were initially identified as potentially requiring shifts; however, subsequent to my submittal of Rebuttal Testimony, field surveys for tribal resources were completed by the SWO THPO and were determined to be clear of tribal resources.

Two additional non-SWO-related shifts have also been identified, which are discussed in response to 8-30(b).

- 8-31) Did Mr. MaRous provide written and oral testimony in Docket EL17-055, In the Matter of the Application by Crocker Wind Farm, LLC for a Permit of a Wind Energy Facility and a 345 kV Transmission Line in Clark County, South Dakota, for Crocker Wind Farm? If yes, does Attachment “Attachment DR 8-31 – EL17-055 May 11 Transcript.pdf” provide a transcript of Mr. MaRous’ oral testimony on May 11, 2018? If no, please explain.**

Mike MaRous: Yes.

- 8-32) Referring to the Rebuttal Testimony of Mr. Phillips, Page 2, Lines 6-14, please explain how the Commission can fully understand the project’s impacts on landmarks and cultural resources of historic, religious, archaeological, scenic, natural, or cultural significance without being provided the information and recommendations resulting from the work with SWO?**

Dave Phillips: The Project provided a Level III Archeological Inventory Report and an Architectural Survey Report to the PUC and SHPO, which indicated the location of resources warranting protection, all of which are being addressed by Project design. Additionally, the SWO and the Project’s cultural resource contractor (QSI) have completed field surveys to specifically evaluate resources of concern to the tribes. The locations of all sites where avoidance has been requested by the SWO have been provided to the Project, and project facilities are currently being microsited in accordance with the SWO’s input to ensure no impact to these resources. The SWO has indicated that no sites warrant the 75’ setback as described in the CRMMP, but that all identified/agreed upon sites do indeed warrant avoidance of direct disturbance, which is being carefully managed via siting, marking during construction, and ongoing coordination with the SWO.

As specified in previous testimony and consistent with PUC Guideline 8(c), the Project is respecting the confidentiality of these sites and is working closely with the SWO to protect these resources by avoiding disruption. It is the Project’s understanding that both the site forms and report will be provided to the State Archeology Office (SAO) and SHPO once complete.

- 8-33) Refer to the Rebuttal Testimony of Mr. MaRous, Page 6. Mr. MaRous states, “However, our further research found that \$169,500 is the accurate figure.” Please submit documentation of Mr. MaRous’ further research that shows \$169,500.

Mike MaRous: See Attachment DR8-33.

- 8-34) Refer to the Rebuttal Testimony of Mr. MaRous, Page 6. Mr. MaRous states, “Again, while Mr. Lawrence accurately reports what is in the public records, my research indicates that the Rathum Loop property has a crawl space.” Please provide documentation of your research that shows Rathum Loop property has only a crawl space.

Mike MaRous: Please see response to DR 8-33, which is incorporated herein.

- 8-35) Refer to the Rebuttal Testimony of Mr. MaRous, Page 10. Mr. MaRous states, “In my property sales research, I used the Multiple Listing Service (“MLS”); residential online services, including Trulia and Zillow; brokerage research; and public county records. In general, I found South Dakota data to be limited.

Mr. Lawrence’s testimony directed me to Beacon, another source of property sales information for Brookings County. Beacon is a subscription service of which I was not previously aware.” *(emphasis added)*

- a) Does Mr. MaRous claim that the Multiple Listing Service did not list the sale of BK1?
- b) Does Mr. MaRous claim that the Multiple Listing Service did not list the sale of BK2?
- c) Does Mr. MaRous claim that the Multiple Listing Service did not list the sale of BK2.5?
- d) Does Mr. MaRous claim that the Multiple Listing Service did not list the sale of BK3?
- e) Does Mr. MaRous claim that the Multiple Listing Service did not list the sale of BK4?
- f) Does Mr. MaRous claim that the Multiple Listing Service did not list the sale of BK5?

Mike MaRous: I worked with a local broker who had access to MLS and who at my direction investigated sales from 2015 to 2017. He found no relevant MLS data for the years we surveyed.

Mr. Lawrence identified six property sales in proximity to wind turbines in Brookings, South Dakota. The most recent was in 2016. At the Crocker hearing, EL17-055, I was presented on cross-examination with several documents by PUC Staff counsel Kristen Edwards that appeared to be the MLS listings for the six sales Mr. Lawrence identified. I did not have an opportunity to review the documents in any detail at the hearing. I requested through Dakota Range's attorney Lisa Agrimonti that the documents be obtained from PUC staff counsel. Ms. Agrimonti advised that the request had been made and that Ms. Edwards stated that the documents were not retained and could not be produced.

**8-36) Does Dakota Range know how many property values will be impacted (influenced) by the Dakota Range Wind Project? How many homes are in the proximity to the Dakota Range Wind Farm?**

Mike MaRous: There are 73 occupied residences within the Project Area. My opinion is the values of these rural residential properties will not be adversely affected by the Project.

**8-37) How many South Dakota courthouses did Mr. MaRous personally visit to perform research for the Market Impact Analysis?**

Mike MaRous: I visited several courthouses while traveling through the various counties but did not personally meet with any staff. I did have phone conferences with eight South Dakota county assessors.

**8-38) Did Mr. MaRous research sales in the Register of Deeds office in Aurora County, Brookings County, Charles Mix County, Day County, Hyde County, or Jerauld County for his Market Impact Analysis? If yes, please identify which counties.**

Mike MaRous: I did not go to the Register of Deeds offices as part of my research.

**8-39) Did Mr. MaRous research sales in the County Equalization Office in Aurora County, Brookings County, Charles Mix County, Day County, Hyde County, or Jerauld County for his Market Impact Analysis? If yes, please identify which counties.**

Mike MaRous: I did not go to the County Equalization offices as part of my research.

**8-40) Has Mr. MaRous identified any property sales proximate to wind turbines other than those that were provided by Mr. Lawrence in Aurora County, Brookings**

**County, Charles Mix County, Day County, Hyde County, or Jerauld County? If yes, please provide.**

Mike MaRous: I have not identified any additional proximate sales in South Dakota.

**8-41) For each of the sales listed on MaRous Rebuttal Testimony Exhibit 5 (BK1, BK2, BK3, BK4, BK5, and BK7):**

**a) Did Mr. MaRous personally call the buyer and seller?**

Mike MaRous: No. In my experience, sellers and buyers often do not retain long-term memories of sales transactions and can provide inaccurate data. The sales were not recent, e.g. BK-7 is 8 years old and BK-2 and BK-3 occurred 7 years ago. Given the ages of these sales, I concluded that interviewing and or confirming with market participants would not be beneficial to my analysis.

**b) Did Mr. MaRous physically visit the property?**

Mike MaRous: No. However, I reviewed all properties using aerial imaging on Google Earth, measured distances of turbines to residences and observed the physical characteristics of each site.

**c) Did Mr. MaRous research the easements on each property?**

Mike MaRous: No.

**d) Did Mr. MaRous research the deed and the certificate of real estate value for each property?**

Mike MaRous: No. Beacon researches the deed and certificate of real estate value, and I relied on Beacon's information.

**8-42) Please identify the distance from Mr. Falk's address listed in his Rebuttal Testimony to the closest turbine hosted on his property.**

Brenna Gunderson: See response to DR 8-10.

**8-43) Please identify the distance from Ms. Moyer's address listed in her Rebuttal Testimony to the closest turbine hosted on her property.**



Brenna Gunderson: See response to DR 8-10.

Dated this 7<sup>th</sup> day of June 2018.

By /s/ Mollie M. Smith  
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## Ordinance #68

AN ORDINANCE ENTITLED, AN ORDINANCE AMENDING ARTICLE II DEFINITIONS AND CHAPTER 5.22 (WIND ENERGY SYSTEMS) OF ARTICLE V GENERAL REQUIREMENTS OF ORDINANCE 65 AN ORDINANCE AMENDING ORDINANCE #15 AN ORDINANCE ESTABLISHING COMPREHENSIVE ZONING REGULATIONS FOR CODINGTON COUNTY, SOUTH DAKOTA, AND PROVIDING FOR THE ADMINISTRATION, ENFORCEMENT, AND AMENDMENT THEREOF, PURSUANT TO SDCL 11-2, 1967, AND AMENDMENTS THEREOF, AND FOR THE REPEAL OF ALL RESOLUTIONS AND/OR ORDINANCES IN CONFLICT HEREWITH.

BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF CODINGTON COUNTY, SOUTH DAKOTA: that Article II Definitions, adopted by Ordinance #65, March 27, 2017, as amended, of the Zoning Ordinance of Codington County be amended by adding the following terms highlighted in bold and underline font:

**Participating (in reference to Chapter 5.22). Any landowner or person who receives direct or indirect compensation for allowing a wind energy system to utilize or have an access/easement to utilize their property.**

**Occupied Residence (in reference to Chapter 5.22). A dwelling, mobile home, or manufactured home which has been occupied for the two (2) years immediately preceding an application for a wind energy system.**

BE IT FURTHER ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF CODINGTON COUNTY, SOUTH DAKOTA: that Chapter 5.22 WIND ENERGY SYSTEM (WES) REQUIREMENTS of Article V General Requirements, adopted by Ordinance #65, March 27, 2017, as amended, of the Zoning Ordinance of Codington County be amended by adding the highlighted items in bold and underline font; and deleting the highlighted items in “strikethrough” font.

Highlighted items in bold and underline font to be added.  
Highlighted items in strikethrough font to be removed.

### CHAPTER 5.22 WIND ENERGY SYSTEM (WES) REQUIREMENTS.

#### **Section 5.22.01 Applicability.**

1. The requirements of these regulations shall apply to all WES facilities except private facilities with a single tower height of less than seventy-five (75) feet and used primarily for on-site consumption of power.

#### **Section 5.22.02 Federal And State Requirements.**

1. All WESs shall meet or exceed standards and regulations of the Federal Aviation and South Dakota State Statutes and any other agency of federal or state government with the authority to regulate WESs.

**Section 5.22.03 General Provisions.**

1. Mitigation Measures

- a. Site Clearance. The permittees shall disturb or clear the site only to the extent necessary to assure suitable access for construction, safe operation and maintenance of the WES.
- b. Topsoil Protection. The permittees shall implement measures to protect and segregate topsoil from subsoil in cultivated lands unless otherwise negotiated with the affected landowner.
- c. Compaction. The permittees shall implement measures to minimize compaction of all lands during all phases of the project's life and shall confine compaction to as small an area as practicable.
- d. Livestock Protection. The permittees shall take precautions to protect livestock during all phases of the project life.
- e. Fences. The permittees shall promptly replace or repair all fences and gates removed or damaged during all phases of the project's life unless otherwise negotiated with the affected landowner.
- f. Roads
  - i. Public Roads. Prior to commencement of construction, the permittees shall identify all state, county or township "haul roads" that will be used for the WES project and shall notify the state, county or township governing body having jurisdiction over the roads to determine if the haul roads identified are acceptable. The governmental body shall be given adequate time to inspect the haul roads prior to use of these haul roads. Where practical, existing roadways shall be used for all activities associated with the WES. Where practical, all-weather roads shall be used to deliver cement, turbines, towers, assemble nacelles and all other heavy components to and from the turbine sites.
  - ii. The permittees shall, prior to the use of approved haul roads, make satisfactory arrangements with the appropriate state, county or township governmental body having jurisdiction over approved haul roads for construction of the WES for the maintenance and repair of the haul roads that will be subject to extra wear and tear due to transportation of equipment and WES components. **The permittees shall notify the County of such arrangements upon request of the County. A haul road agreement in accordance with county standards shall be executed between the applicant and appropriate road authority.**
  - iii. Turbine Access Roads. Construction of turbine access roads shall be minimized. Access roads shall be low profile roads so that farming equipment can cross them and shall be covered with Class 5 gravel or similar material. When access roads are constructed across streams and drainage ways, the access roads shall be designed in a manner so runoff from the upper portions of the watershed can readily flow to the lower portion of the watershed.

- iv. Private Roads. The permittees shall promptly repair private roads or lanes damaged when moving equipment or when obtaining access to the site, unless otherwise negotiated with the affected landowner.
  - v. Control of Dust. The permittees shall utilize all reasonable measures and practices of construction to control dust.
  - g. Soil Erosion and Sediment control Plan. The permittees shall develop a Soil Erosion and Sediment Control Plan ~~prior to construction and submit the plan to the County~~. The Soil Erosion and Sediment Control Plan shall address the erosion control measures for each project phase, and shall at a minimum identify plans for grading, construction and drainage of roads and turbine pads; necessary soil information; detailed design features to maintain downstream water quality; a comprehensive revegetation plan to maintain and ensure adequate erosion control and slope stability and to restore the site after temporary project activities; and measures to minimize the area of surface disturbance. Other practices shall include containing excavated material, protecting exposed soil, stabilizing restored material and removal of silt fences or barriers when the area is stabilized. The plan shall identify methods for disposal or storage of excavated material.
2. Setbacks. Wind turbines shall meet the following minimum spacing requirements.

**i. Distance from participating and non-participating residences, businesses, churches, and schools shall be in accordance with Table 5.22.03.2.**

**Table 5.22.03.2  
WES Setbacks**

		<b>Setback Distance*</b>	
		<b>Vertical Height of Tower 75' to 500'</b>	<b>Vertical Height of Tower Over 500'</b>
<b>Participating occupied residence, business, church, or school</b>		<b>550'</b>	<b>550' plus 2.5' feet for each additional vertical foot more than 500' in height</b>
<b>Municipal Boundaries at the time of Conditional Use Permit Application</b>		<b>5,280'</b>	<b>5,280'</b>
<b>Non-Participating occupied residence, business, church, or school</b>	<b>Town District</b>	<b>5,280'</b>	<b>5,280'</b>
	<b>All other Districts</b>	<b>1,500'</b>	<b>1,500' plus 2.5' feet for each additional vertical foot more than 500' in height</b>
<b>Distance from the Right-of-Way of Public Road</b>		<b>110% of the height of the wind turbine**</b>	
<b>Distance from Property Line</b>		<b>110% of the height of the wind turbine***</b>	

\* **Setback distance to be measured from the wall line of the neighboring principal building to the base of the WES tower. The vertical height of the wind turbine is measured from the ground surface to the tip of the blade when in a fully vertical position.**

\*\* **The horizontal setback shall be measured from the base of the tower to the public right-of-way.**

\*\*\* **The horizontal setback shall be measured from the base of the tower to the adjoining property line unless wind easement has been obtained from adjoining property owner.**

- ii. **Exception: The Board of Adjustment may allow setback/separation distances to be less than the established distances identified above if the road authority, participating or non-participating landowners, or municipality (by resolution of the governing body) agree to a lesser setback/separation distance. If approved, such agreement is to be recorded and filed with the Codington County Zoning Officer. Said agreement shall be binding upon the heirs, successors, and assigns of the title holder and shall pass with the land.**

- a. ~~Distance from existing off site residences, businesses, churches, and buildings owned and/or maintained by a governmental entity shall be at least one thousand (1,000) feet. Distance from on-site or lessor's residence shall be at least five hundred (500) feet.~~
  - b. ~~Distance from centerline of public roads shall be at least one hundred ten percent (110%) the height of the wind turbines, measured from the ground surface to the tip of the blade when in a fully vertical position.~~
  - c. ~~Distance from any property line shall be at least one hundred ten percent (110%) the height of the wind turbine, measured from the ground surface to the tip of the blade when in a fully vertical position unless wind easement has been obtained from adjoining property owner.~~
3. Electromagnetic Interference. The permittees shall not operate the WES so as to cause microwave, television, radio, or navigation interference contrary to Federal Communications Commission (FCC) regulations or other law. In the event such interference is caused by the WES or its operation, the permittees shall take the measures necessary to correct the problem.
  4. Lighting. Towers shall be marked as required by the Federal Aviation Administration (FAA). There shall be no lights on the towers other than what is required by the FAA. This restriction shall not apply to infrared heating devices used to protect the monitoring equipment. **Distance from centerline of public roads shall be at least one hundred ten percent (110%) the height of the wind turbines, measured from the ground surface to the tip of the blade when in a fully vertical position.** **The preferred manner of lighting is by means of an Aircraft Detection Lighting System (ADLS). Subject to FAA approval, applicants will install an ADLS within one (1) year of approval by FAA for the specified project. In the event FAA does not approve an ADLS system, the applicant will comply with all lighting and markings otherwise required by FAA.**
  5. Turbine Spacing. The turbines shall be spaced no closer than three (3) rotor diameters (RD) (measurement of blades tip to tip) within a **straight line string**. If required during final micro siting of the turbines to account for topographic conditions, up to ten (10) percent of the towers may be sited closer than the above spacing but the permittees shall minimize the need to site the turbines closer.
  6. Footprint Minimization. The permittees shall design and construct the WES so as to minimize the amount of land that is impacted by the WES. Associated facilities in the vicinity of turbines such as electrical/electronic boxes, transformers and monitoring systems shall **to the greatest extent feasible** be mounted on the foundations used for turbine towers or inside the towers unless otherwise negotiated with the affected landowner.
  7. Collector Lines. **Collector lines are the conductors of electric energy from the WES to the feeder lines.** When located on private property, the permittees shall place electrical lines, known as collectors, and communication cables underground between the WES and the feeder lines. The exception to this requirement is when the total distance of the collectors from the substation requires an overhead installation due to line loss of current from an underground installation. Collectors and cables shall also be placed within or immediately adjacent to the land necessary for turbine access roads unless otherwise negotiated with the affected landowner. This paragraph does not apply to feeder lines.

8. Feeder Lines. **Feeder lines are the conductors of electric energy from the collector lines to the main electric terminal, and may be located either above or below ground.** ~~The permittees shall place~~ Overhead electric lines, known as feeders, **may be placed on private property or** on public rights-of-way ~~if a public right-of-way exists~~. Changes in routes **in public rights-of-way** may be made as long as ~~feeders remain on public rights of way~~ and approval has been obtained from the governmental unit responsible for the affected right-of-way. ~~If no public right-of-way exists, the permittees may place feeders on private property.~~ When placing feeders on private property, the permittees shall place the feeder in accordance with the easement negotiated with the affected landowner. The permittees shall submit the site plan and engineering drawings for the feeder lines before commencing construction.
9. Decommissioning/Restoration/Abandonment
  - a. Decommissioning Plan. Within 120 days of completion of construction, the permittees shall submit to the County a decommissioning plan describing the manner in which the permittees anticipate decommissioning the project in accordance with the requirements of paragraph (b) below. The plan shall include a description of the manner in which the permittees will ensure that it has the financial capability to carry out these restoration requirements when they go into effect. The permittees shall ensure that it carries out its obligation to provide for the resources necessary to fulfill these requirements. The County may at any time request the permittees to file a report with the County describing how the permittees are fulfilling this obligation.
  - b. Site Restoration. ~~Upon~~ **The decommissioning of the WES shall begin within eight (8) months of the** expiration of this permit, or ~~upon~~ **earlier termination of operation of the WES, the** ~~and be completed within eighteen (18) months of the expiration of this permit or earlier termination of operation of the WES.~~ **The** permittees shall have the obligation to dismantle and remove from the site all towers, turbine generators, transformers, overhead ~~collector and feeder lines~~ **underground cables**, foundations, buildings and ancillary equipment to a depth of four (4) feet. To the extent possible the permittees shall restore and reclaim the site to its pre-project topography and topsoil quality. All access roads shall be removed unless written approval is given by the affected landowner requesting that one or more roads, or portions thereof, be retained. Any agreement for removal to a lesser depth or for no removal shall be recorded with the County and shall show the locations of all such foundations. All such agreements between the permittees and the affected landowner shall be submitted to the County prior to completion of restoration activities. The site shall be restored in accordance with the requirements of this condition within eighteen (18) months after expiration.
  - c. Abandoned Turbines. The permittees shall advise the County of any turbines that are abandoned prior to termination of operation of the WES. The County may require the permittees to decommission any abandoned turbine.
  - d. Cost Responsibility. The owner or operator of a WES is responsible for decommissioning that facility and for all costs associated with decommissioning that facility and associated facilities.**
  - e. Financial Assurance. Five (5) years from the date of issuance of a conditional use permit, the Board may require a performance bond, surety bond, letter of credit,**

**corporate guarantee or other form of financial assurance that is acceptable to the Board to cover the anticipated costs of decommissioning the WES facility.**

**f. Failure to Decommission. If the WES facility owner or operator does not complete decommissioning, the Board may take such action as may be necessary to complete decommissioning, including requiring forfeiture of the above referenced financial assurance. The entry into a participating landowner agreement shall constitute agreement and consent of the parties to the agreement, their respective heirs, successors, and assigns, that the Board may take such action as may be necessary to decommission a WES facility.**

10. Height from Ground Surface. The minimum height of blade tips, measured from ground surface when a blade is in fully vertical position, shall be twenty-five (25) feet.

11. Towers.

a. Color and Finish. The finish of the exterior surface shall be non-reflective and non-glass.

b. All towers shall be ~~singular~~ tubular design.

12. Noise.

**a. Noise level generated by wind energy system shall not exceed 50 dBA, average A-weighted Sound pressure including constructive interference level effects at the property line of existing off-site non participating residences, businesses, and buildings owned and/or maintained by a governmental entity.**

**b. Noise level measurements shall be made with a sound level meter using the A-weighting scale, in accordance with standards promulgated by the American National Standards Institute. An L90 measurement shall be used and have a measurement period no less than ten minutes unless otherwise specified by the Board of Adjustment.**

**13. Flicker Analysis. A Flicker Analysis shall include the duration and location of flicker potential for all schools, churches, businesses and occupied dwellings within a one (1) mile radius of each turbine within a project. The applicant shall provide a site map identifying the locations of shadow flicker that may be caused by the project and the expected durations of the flicker at these locations from sun-rise to sun-set over the course of a year. The analysis shall account for topography but not for obstacles such as accessory structures and trees. Flicker at any receptor shall not exceed thirty (30) hours per year within the analysis area.**

**a. Exception: The Board of Adjustment may allow for a greater amount of flicker than identified above if the participating or non-participating landowners agree to said amount of flicker. If approved, such agreement is to be recorded and filed with the Codington County Zoning Officer. Said agreement shall be binding upon the heirs, successors, and assigns of the title holder and shall pass with the land.**

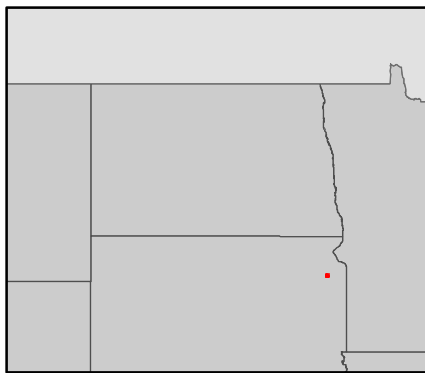
**13-14. Permit Expiration. The permit shall become void if either no substantial construction as described in the application has commenced been completed within three (3) years of**







issuance; or if a State Permit from the South Dakota Public Utility Commission has not been issued within two (2) years of issuance.

~~14.15. Required~~ Information **Required to Obtain a** for Permit.

- a. Boundaries of the site proposed for WES and associated facilities on United States Geological Survey Map or other map as appropriate.
- b. Map of easements for WES; **and affidavit attesting that necessary easement agreements with landowners have been obtained.**
- c. Map ~~of~~ **including any** occupied residential structures, businesses, churches, and buildings owned and/or maintained by a governmental entity **within one (1) mile of the project area.**
- d. **Preliminary map of sites for WES, access roads and collector and feeder lines. Final map** Map of sites for WES, access roads and utility lines **is required prior to issuance of any building permits associated with the conditional use permit.**
- e. Location of other WES in general area.
- f. Project schedule.
- g. Mitigation measures, **if applicable (i.e. haul roads, communication, aviation, environmental, etc.)**
- h. **Final h** Haul road agreements **to be submitted sixty (60) days prior to construction.**
  - ~~i. Haul road agreements will state that collector and feeder lines will not be trenched across public roads or public road right-of-ways.~~
  - i. Proof of right-of-way and private easements or licenses for access to transmission lines and/or utility interconnection shall be submitted sixty (60) days prior to construction.**
- j. **Evidence of consultation with state and federal wildlife agencies regarding project-specific environmental concerns (e.g. native habitat, rare species, and migratory routes).**



### Dakota Range: Teresa Kaaz Turbine Proximity

-  Project Boundary
-  County Boundary
-  Parcel Boundary
-  Proposed Turbine (LAY 038)



Date: 5/30/2018 Author: MR CONFIDENTIAL  
 Coordinate System: NAD 1983 StatePlane South Dakota North FIPS 4001 Feet  
 Projection: Lambert Conformal Conic  
 Datum: North American 1983  
 Units: Foot US



## DAKOTA RANGE WIND PROJECT - MEETING SUMMARY

Meeting Attendees: Natalie Gates, UFWWS  
Silka Kempema, SDGFP  
Dave Phillips, Apex  
Chad Little, Apex  
Clayton Derby, WEST

Notes Prepared by: Apex

Date: April 30, 2015

On August 12, 2015, Apex Clean Energy (Apex) met with the U.S. Fish and Wildlife Service (USFWS) and South Dakota Game Fish and Parks (SDGFP) to discuss the proposed Dakota Range Wind Project (Project) in Codington and Grant Counties, South Dakota. The purpose of the meeting was to introduce the agencies to Apex, discuss the project and Tier 1 and 2 reviews, agree on Tier 3 studies to be completed to assess risk, and discuss potential impact avoidance and minimization measures for the project. The meeting was held at the SDGFP Office in Pierre, South Dakota. The following is a summary of the topics discussed.

Apex presented an overview of the company, project status, risk assessment completed to date and Apex's proposed studies using the attached Power Point (PPT) presentation. It was agreed that the material presented in the PPT was accurate and adequately addressed the Tier 1 and Tier 2 review processes as recommended in the USFWS Wind Energy Guidelines.

**Eagles:** Apex and USFWS agreed that the project site presented low risk to eagles, but that studies are appropriate to assess winter use and eagle nests within 10 miles of the project. It was agreed that 20-minute point counts, using 800 m plots covering approximately 30% of the project, studied each month during December, January and February were appropriate to assess winter use. And, if nests were found in close proximity to the project during nest surveys, that similar studies of eagle use near nests during spring/early summer would be appropriate to determine how nesting eagles and their young might use the project area.

**General Avian:** Winter raptors (e.g., short eared owl, rough-legged hawk, etc.) and passerines (e.g., snow buntings) were identified as of potential concern, and it was agreed that the winter eagle use surveys would effectively evaluate the potential use by these species by recording all birds observed during point counts. Although collision risk is likely to be low year-round for all birds, the loss of grassland habitat associated with installation of turbines and roads was identified as a primary concern of USFWS and SDGFP. Avoidance of higher quality grassland habitats and potential mitigation of habitat impacts through acquisition of conservation easements or other methods of generating conservation lands was recommended for Apex to consider.

**Bats:** USFWS and SDGFP agreed that general acoustic monitoring was limited in utility given Apex's intent to avoid treed and wetland habitats with turbine siting and to feather turbines up to manufacturer's cut in speed. But, both agencies agreed that it was important to assess

**Comment [GN1]:** Okay, so I'm stuck again on the 20 min versus hour or longer point count time. I looked at our Eagle guidance for more specifics. Below is a cut/paste from that document which pretty much indicates 20 min isn't enough. Would be good to lay out WHY you think 20 min is enough. I'm wavering on going against the guidance below.

"The optimal duration of point count survey for eagles is a focus of current research. For now, for point count surveys of eagles at proposed wind energy projects, the Service recommends counts of 1, 2, or more hours duration instead of 20- to 40-minute counts typically used (Strickland *et al.* 2011). Longer counts also facilitate integration of other survey types (e.g., development of utilization distribution profiles). Many raptor biologists have suggested that the likelihood of detecting an eagle during a 20- to 40-minute point count survey is extremely low in all but locales of greatest eagle activity and datasets generated by pre-construction point count surveys of this duration typically are replete with counts of zero eagles, resulting in unwieldy confidence intervals and much uncertainty. Moreover, time spent traveling to and accessing points for 20-minute surveys may exceed time spent conducting the observations. For example, 250 1-hour surveys conducted annually at a project of average size (e.g., 15 sampling points, 1 to 3 km apart) and travel conditions require roughly the same total field time as needed for 500 20-minute surveys, yet yield 5 (1)

**Comment [GN2]:** Proposing only 1 visit/month? That would be considered minimal.

**Comment [GN3]:** One visit/month? Survey frequency for small birds is typically greater during migration/breeding...is there some info that shows once/month is adequate to determine use?

**Comment [GN4]:** Best to avoid all grassland, prioritizing high quality natives first.

**Comment [GN5]:** 70 acres/turbine based on 300 m avoidance distance. See: Shaffer, J. A. and D. A. Buhl. 2015. Effects of wind-energy facilities on breeding grassland bird distributions. Conservation Biology, Volume 00, No. 0, 1-13.

potential summer presence of northern long-eared bat using USFWS protocols, and inform siting and operational protocols if presence was confirmed.

**Listed Species:** Potential exists for the Dakota skipper to occur in suitable habitats within the project area, and although highly unlikely, the Poweshiek skipperling could also occur; therefore surveys to habitat potential is warranted in areas planned for disturbance. USFWS and SDGFP recommend avoiding identified suitable habitat, or that presence-absence surveys be completed to determine if avoidance is required to avoid permitting under Section 10 of the Endangered Species Act. Apex requests information on the appropriate survey protocols for the species.

With the exception of northern long-eared bat and these butterflies, no other species-specific protocols were recommended for federal or state-listed species due to the low risk nature of the project site.

**Operational Monitoring:**

It was discussed that an operational monitoring program to assess low risk conclusions is appropriate for this project site. One, possibly two, years of monitoring during the fall bat migration period, and possibly during the winter avian risk period may be appropriate; however, results of the planned bird and bat studies will be discussed after completed and are expected to inform the level of operational monitoring warranted for the site.

**II. Action Items:**

During the discussions, several action items surfaced:

- Apex will meet with Connie Mueller from USFWS @ Waubay NWR, SD, to identify and define key grassland habitats within the proposed project area.
- Apex will assess the quality of grassland habitat present within the project site and work to design the project in response to these findings.
- USFWS will provide information on the appropriate survey protocols to assess habitat suitability and presence/absence of the listed butterflies.
- Apex will complete the studies discussed and planned for the project to assess bird and bat risk.
- Apex will meet with USFWS and SDGFP to discuss survey results and agree on next steps in late summer/fall 2016.

**Comment [GN6]:** I think there are a few variations on survey methods that would be acceptable. Best to contact experienced surveyor (e.g. Dennis Skadsen in SD).

**Comment [GN7]:** Because we've got a lot of information on other farms in SD – including one nearby. Discuss the rationale. You're not planning to do any grassland breeding bird surveys, correct? As I recall, the thinking was that such surveys would not contribute much to what we already might anticipate at this site, and that focus could rather be on offsetting habitat impacts.

**Comment [GN8]:** Give a little more detail here of what is planned.

**Comment [GN9]:** Here's a clip from a butterfly survey applicant that would likely work: **Methodology and Equipment:**

Presence/Absence Surveys

These surveys are conducted by randomly walking through suitable habitat and identifying butterflies to species by observing with the naked eye or binoculars, or by temporarily capturing the butterfly with a hand net to identify. Occasionally, individuals will be held for a few minutes in a clear plastic vial to identify. Once captured butterflies are identified, they are released back into the wild. Number, sex, and condition of the target species, behavior including nectar sources and copulating pairs, and a brief description of grasses and forbs at the collection site are recorded in a field notebook or electronic device along with a lat/long of the collection site. Photographs are often taken to record and confirm identification also. Numbers of observations per hour are the standard for measuring species richness for presence/absence surveys. Surveys are conducted between the hours of 9 am and 6 pm. Ideal conditions for surveying butterflies are bright sunny days with temperatures above 75° F, high humidity, and light winds 0 to 7 mph. Weather conditions during surveys are measured using a Kestrel 3000 Pocket Weather Station.

Pollard Transects

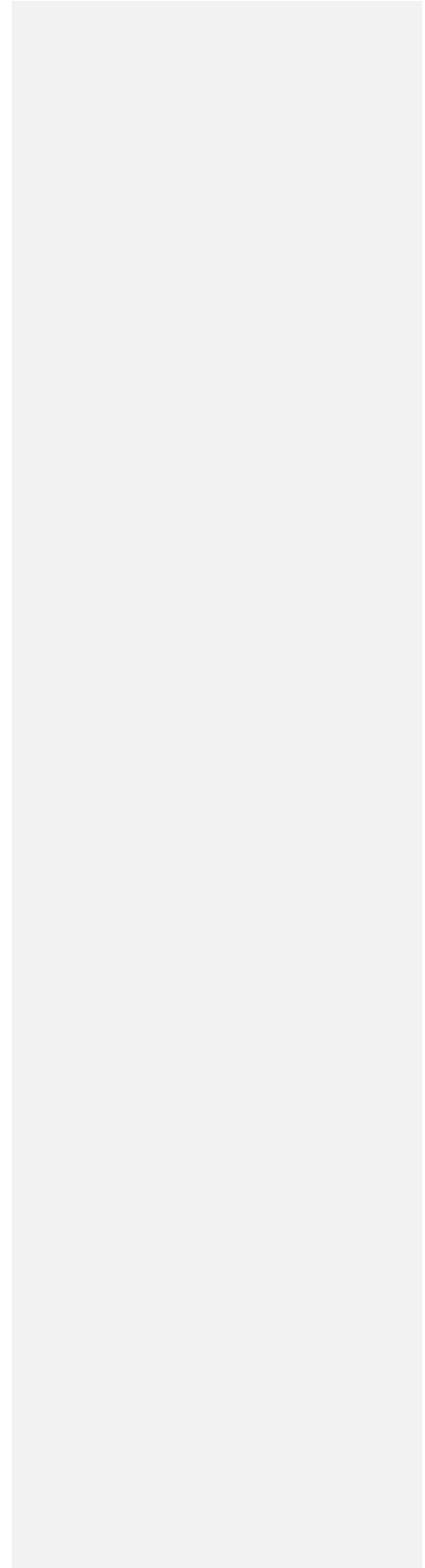
These surveys are conducted by walking along a pre-determined transect of varying lengths through suitable habitat and identifying butterflies to species by observing with the naked eye or binoculars, or by temporarily capturing the butterfly with a hand net to identify. All butterflies observed within a 15 meter square directly in front of the surveyor are counted. [2]

August 12, 2015 Meeting Summary

Business Confidential and Proprietary

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## Attachment 1: Power Point Presentation



Page 1: [1] Comment [GN1]

Gates, Natalie

8/24/2015 11:21:00 AM

Okay, so I'm stuck again on the 20 min versus hour or longer point count time. I looked at our Eagle guidance for more specifics. Below is a cut/paste from that document which pretty much indicates 20 min isn't enough. Would be good to lay out WHY you think 20 min is enough. I'm wavering on going against the guidance below.

" The optimal duration of point count survey for eagles is a focus of current research. For now, for point count surveys of eagles at proposed wind energy projects, the Service recommends counts of 1, 2, or more hours duration instead of 20- to 40-minute counts typically used (Strickland *et al.* 2011). Longer counts also facilitate integration of other survey types (*e.g.*, development of utilization distribution profiles). Many raptor biologists have suggested that the likelihood of detecting an eagle during a 20- to 40-minute point count survey is extremely low in all but locales of greatest eagle activity and datasets generated by pre-construction point count surveys of this duration typically are replete with counts of zero eagles, resulting in unwieldy confidence intervals and much uncertainty.

Moreover, time spent traveling to and accessing points for 20-minute surveys may exceed time spent conducting the observations. For example, 250 1-hour surveys conducted annually at a project of average size (*e.g.*, 15 sampling points, 1 to 3 km apart) and travel conditions require roughly the same total field time as needed for 500 20-minute surveys, yet yield 50% more observation hours (250 versus 167), with correspondingly greater probability of detecting eagles. Another advantage of longer counts is that they reduce biases created if some eagles avoid conspicuous observers as they approach their points and begin surveys, although some observers may become fatigued and overlook eagles during longer counts. A potential trade off of fewer visits, of course, is diminished accounting of temporal variation (*e.g.*, variable weather conditions or an abrupt migration event). While counting at fewer points for longer periods might also reduce the ability to sample more area, we advocate maintain the minimum spatial coverage of at least 30% of the project footprint. Until there is more evidence that shorter count intervals are adequate to estimate eagle exposure, we believe that a sampling strategy including counts of longer duration, albeit fewer total counts, may in the end improve sampling efficiency and data quality.

Page 2: [2] Comment [GN9]

Gates, Natalie

8/24/2015 11:49:00 AM

Here's a clip from a butterfly survey applicant that would likely work: ***Methodology and Equipment:***

#### Presence/Absence Surveys

These surveys are conducted by randomly walking through suitable habitat and identifying butterflies to species by observing with the naked eye or binoculars, or by temporarily capturing the butterfly with a hand net to identify. Occasionally, individuals will be held for a few minutes in a clear plastic vial to identify. Once captured butterflies are identified, they are released back into the wild. Number, sex, and condition of the target species, behavior including nectar sources and copulating pairs, and a brief description of grasses and forbs at the collection site are recorded in a field notebook or electronic device along with a lat/long of the collection site. Photographs are often taken to record and confirm identification also. Numbers of observations per hour are the standard for measuring species richness for presence/absence surveys. Surveys are conducted between the hours of 9 am and 6 pm. Ideal conditions for surveying butterflies are bright sunny days with temperatures above 75° F, high humidity, and light winds 0 to 7 mph. Weather conditions during surveys are measured using a Kestrel 3000 Pocket Weather Station.

#### Pollard Transects

These surveys are conducted by walking along a pre-determined transect of varying lengths

through suitable habitat and identifying butterflies to species by observing with the naked eye or binoculars, or by temporarily capturing the butterfly with a hand net to identify. All butterflies observed within a 15 meter square directly in front of the surveyor are recorded as the surveyor slowly moves forward along a transect. Occasionally, individuals will be held for a few minutes in a clear plastic vial to identify. Once captured butterflies are identified, they are released back into the wild. Number, sex, and condition of the target species, behavior including nectar sources and copulating pairs, and a brief description of grasses and forbs at the collection site are recorded in a field notebook or electronic device along with a lat/long of the collection site. Photographs are often taken to record and confirm identification also. Surveys are conducted between the hours of 9 am and 6 pm. Ideal conditions for surveying butterflies are bright sunny days with temperatures above 75° F, high humidity, and light winds 0 to 7 mph. Weather conditions during surveys are measured using a Kestrel 3000 Pocket Weather Station. Surveys that continue to monitor the presence of the Dakota skipper and Poweshiek skipperling will provide yearly status on population data to present and future propagation programs and researchers.

1 (Applicant Exhibits A1 through A21 are marked.)

2 (Intervenor Exhibits I-1 through I-63 are marked.)

3 (Staff Exhibits S1 through S6 are marked.)

4 =====

5 I N D E X (Continued)

6	APPLICANT EXHIBITS	M	O	R
7	A1 - Crocker Application	3	14	14
8	A2 - Crocker Response to Commissioner Nelson's Request	3	14	14
9	A3 - Email from Miller to Hesse	3	14	14
10	A4A - Engelking Direct	3	14	14
11	A4A-1 - Ex. 1 Resume	3	14	14
12	A4B - Engelking Updated Direct	3	14	14
13	A5 - Fladeboe Direct	3	14	14
14	A5-1 - Ex. 1 Resume	3	14	14
15	A6 - Copouls Direct	3	14	14
16	A6-1 - Ex. 1 Resume	3	14	14
17	A7 - Duncan Direct	3	14	14
18	A7-1 - Ex. 1 Resume	3	14	14
19	A8 - Duncan Rebuttal	3	14	14
20	A8-2 - Proposed Noise Condition	3	14	14
21	A9 - Morris Direct	3	14	14
22	A9-1 - Ex. 1 Resume	3	14	14
23	A10 - Morris Rebuttal	3	14	14
24	A10-1 - Letter from FAA to Stevens	3	14	14
25	A10-2 - Study References	3	679	680
26	A11 - Anderson Direct	3	14	14
27	A11-1 - Ex. 1 Resume	3	14	14
28	A12 - Anderson Rebuttal	3	14	14
29	A12-1 - Ex. 1 Potentially Undisturbed Lands (Region)	3	14	14
30	A12-2 - Ex. 2 Potentially Undisturbed Lands (Project)	3	14	14
31	A13 - Pickle Rebuttal	3	14	14
32	A13-1 - Resume	3	14	14
33	A13-2 - Ex. 2 Raptor Nest Survey Results	3	14	14
34	A13-3 - Ex. 3 Lek Survey Results	3	14	14
35	A13-4 - Ex. 4 Northern Long-Eared Bat Presence/Absence Acoustic Surveys	3	14	14

1 THE PUBLIC UTILITIES COMMISSION

2 OF THE STATE OF SOUTH DAKOTA

3 =====

4 IN THE MATTER OF THE APPLICATION BY CROCKER WIND FARM, LLC, FOR A PERMIT OF A WIND ENERGY FACILITY AND A 345 KV TRANSMISSION LINE IN CLARK COUNTY, SOUTH DAKOTA, FOR CROCKER WIND FARM

5 EL17-055

6 =====

7 Transcript of Hearing

8 Volume III, Pages 558-690

9 May 11, 2018

10 =====

11 BEFORE THE PUBLIC UTILITIES COMMISSION,

12 KRISTIE FIEGEN, CHAIRWOMAN

13 GARY HANSON, VICE CHAIRMAN

14 CHRIS NELSON, COMMISSIONER

15 =====

16 COMMISSION STAFF

17 Karen Cremer

18 Adam de Hueck

19 Greg Rislov

20 Jon Thurber

21 Darren Kearney

22 Katlyn Gustafson

23 =====

24 APPEARANCES

25 Mollie Smith, Lisa Agrimonti, and Brett Koenecke, appearing on behalf of Crocker Wind Farm, LLC.

Reece Almond, appearing on behalf of the Intervenor.

Kristen Edwards and Amanda Reiss, appearing on behalf of Public Utilities Commission Staff.

Reported By Cheri McComsey Wittler, RPR, CRR Precision Reporting, 213 S. Main, Onida, South Dakota

1 The following transcript of proceedings was

2 held in the above-entitled matter at the Joe Foss

3 Building, Matthew Training Center, 523 East Capitol

4 Avenue, Pierre, South Dakota, on the 11th day of

5 May, 2018, commencing at 8:30 a.m.

6 =====

7 I N D E X

8	APPLICANT WITNESS	DIRECT	CROSS	RD	RC
9	Elizabeth Engelking	16	18,29	43	45,45
10	Barry Fladeboe	46	47,79	112	117
11	Rob Copouls	121	123,130	--	143
12	Eddie Duncan	145	148	--	167,167
13	Michael Morris	169,466	170,467	177	--
14	Brie Anderson	178	183,219	247	244,245
15	Joyce Pickle	248	264,294	326,346	336,339
16	Adam Holven	351	355,357	--	--
17	Melissa Schmit	361	374,385	428,443	433,439
18	Mike MaRous	472,578	580,583	612	618,619

15	INTERVENOR WITNESS	DIRECT	CROSS	RD	RC
16	Wendy Christman	452	455	--	--
17	Jody Obermeier	460	--	--	--
18	Gale Paulson	483	489	--	--
19	Sheldon Stevens	498	505	507	--

19	STAFF WITNESS	DIRECT	CROSS	RD	RC
20	David Hessler	445	446,448	--	--
21	Darren Kearney	509	660,662	677	--
22	Paige Olson	511	511,521	526	530
23	Tom Kirschenmann	530	531,535	566	567,576
24	David Lawrence	624	628,633	--	--

1 I N D E X (Continued)

2	APPLICANT EXHIBITS	M	O	R
3	A13-5 - Ex. 5 Dakota Skipper and Poweshiek Skipperling Habitat Assessment Report	3	14	14
4	A13-6 - Ex. 6 Bat Acoustic Survey Report	3	14	14
5	A13-7 - Ex. 7 2017 Eagle Nest Survey	3	14	14
6	A13-8 - Ex. 8 Avian Use Studies	3	14	14
7	A13-9 - Ex. 9 Grassland Use Studies	3	14	14
8	A13-10 - Ex. 10 2017 Dakota Skipper and Poweshiek Skipperling Survey Report	3	14	14
9	A13-11 - Ex. 11 Bird and Bat Conservation Strategy	3	14	14
10	A14 - Holven Rebuttal & Ex. 1-2	3	14	14
11	A14-1 - Ex. 1 Resume	3	14	14
12	A14-2 - Ex. 2 Cultural Resources Survey Methods and Prelim. Field Results	3	14	14
13	A15 - Schmit Rebuttal	3	14	14
14	A15-1 - Ex. 1 Curriculum Vitae	3	14	14
15	A15-2 - Ex. 2 Microwave Study Report	3	14	14
16	A15-3 - Ex. 3 Communication Tower Study	3	14	14
17	A15-4 - Ex. 4 Land Mobile Emergency Services Report	3	14	14
18	A15-5 - Ex. 5 AM and FM Radio Report	3	14	14
19	A15-6 - Ex. 6 Off-Air TV Analysis	3	14	14
20	A15-7 - Ex. 7 Constraints Map	3	14	14
21	A15-8 - Turbine Flexibility Proposal	3	14	14
22	A15-9 - Email chain Johnson, WAPA, and Schmit, Geronimo Energy	3	14	14
23	A16 - MaRous Rebuttal	3	14	14
24	A16-1 - Ex. 1 Market Impact Analysis	3	14	14
25	A16-2 - Ex. 2 The Impact of Wind Power Projects on Residential Property Values in the U.S.	3	14	14
26	A16-3 - Ex. 3 A Spatial Hedonic Analysis of the Effects of Wind Energy Facilities on Surrounding Property Values in the U.S.	3	14	14



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2	APPLICANT EXHIBITS		
3	A16-4 - Impact of Industrial Wind Turbines on Residential Property Assessment in Ontario: 2012 Study	3	14 14
5	A16-5 - Ex. 5 Impact of Industrial Wind Turbines on Residential Property Assessment in Ontario: 2016 Study	3	14 14
7	A16-6 - Ex. 6 Effects of Wind Turbines on Property Values in Rhode Island	3	14 14
8	A16-7 - The Effects of Wind Turbines on Property Values in Ontario	3	14 14
10	A16-8 - Ex. 8 Relationship between Wind Turbines and Residential Property Values in MA	3	14 14
12	A17 - Obermeier Rebuttal	3	461 461
12	A18 - Christman Rebuttal	3	454 455
13	A19 - Intervenors' Responses to Crocker's First Set of Data Requests	3	14 14
14	A20 - Intervenors' Responses to Crocker's Second Set of Data Requests	3	14 14
15	A21 - Staff's Responses to Crocker's First Set of Data Requests	3	14 14
17	A22 - MaRous Sur-surrebuttal	578	578 578
18	A22-1 - Brookings Co. Single Family Residential Sales	578	578 578
19	A22-2 - Supplemental Paired Sales Analysis-Residential Sales	578	578 578
20	INTERVENOR EXHIBITS	M	O R
21	I1 - Crocker Draft EA	3	14 14
22	I2 - USFWS Land-Based Wind Energy Guidelines	3	14 14
23	I3 - Siting Guidelines for Wind Power Projects in SD	3	14 14
24	I4 - (Withdrawn - not marked.)	--	-- --
24	I5 - (Withdrawn - not marked.)	-	-- --
25	I6 - Photo of 3 eagles on Stevens' slough	3	14 14

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I N D E X (Continued)			
	M	O	R
2	INTERVENOR EXHIBITS	M	O R
3	I7 - Email thread with SDGFP regarding active eagle nest	3	14 14
4	I8 - Photo of migrating geese	3	14 14
5	I9 - Photo of geese coming to feed near Reid Lake Refuge	3	14 14
6	I10 - Withdrawn	3	-- --
6	I11 - Withdrawn	3	-- --
7	I12 - Crocker Wind Farm land use map	3	14 14
7	I13 - Crocker Wind Farm Land Cover/Land Use Map	3	14 14
8	I14 - Appendix C - Ex. 3 Crocker Wind Farm with State and Federal Conservation Lands & Easements	3	14 14
9	I15 - Grassland Easement Contract	3	14 14
10	I16 - Photo of geese on Reid Lake	3	14 14
11	I17 - Ex. 1 - Potentially Undisturbed Land (Anderson Rebuttal)	3	14 14
11	I18 - Withdrawn	3	-- --
12	I19 - SD White-Tailed Deer and Mule Deer Management Plan	3	14 14
13	I20 - Photo showing migration at Reid-Round Lake Complex	3	14 14
14	I21 - Motion to Reconsider	3	14 14
15	I22 - 12/1/10 Correspondence from USFWS to Geronimo	3	14 14
16	I23 - 3/14/16 Correspondence from SDGFP to Geronimo	3	14 14
17	I24 - 5/18/16 Correspondence from USFWS to Geronimo	3	14 14
18	I25 - 11/29/16 Correspondence from USFWS to Crocker	3	14 14
19	I26 - 11/29/16 Correspondence from Schmit to Johnson	3	14 14
20	I27 - Ring-Necked Pheasant Management Plan for SD 2016-2020	3	14 14
21	I28 - Quantifying Undisturbed Lands in Eastern SD: 2013	3	14 14
22	I29 - Photo of eagle nest and eagle	3	14 14
22	I30 - Photo of eagle 3/24/16	3	14 14
23	I31 - Photo of eagle 3/24/16	3	14 14
23	I32 - Photo of eagle nest	3	14 14
24	I33 - 11/7/16 Correspondence from SD State Historical Society to Crocker	3	14 14
25			

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	M	O	R
2	INTERVENOR EXHIBITS	M	O R
3	I34 - Assortment of arrowheads found in and near the project area	3	14 14
4	I35 - Photo of communication tower	3	14 14
4	I36 - Photo of local topography	3	14 14
5	I37 - Photo of local topography	3	14 14
5	I38 - Reid/Round Lake Complex SDGFP	3	14 14
6	I39 - 8/31/16 email correspondence from Gates to Schmit	3	14 14
7	I40 - 10/26/15 email correspondence from Gates to Smith	3	14 14
8	I41 - NTSB Accident Data	3	14 14
8	I42 - 12/6/17 email from Gates to Schmit	3	14 14
9	I43 - 11/9/16 Crocker Memorandum	3	14 14
10	I44 - 12/13/16 Crocker Memorandum	3	14 14
10	I45 - 5/19/16 Crocker Memorandum	3	14 14
11	I46 - Map Exhibit 3 Crocker Conservation Easements	3	14 14
12	I47 - 1/25/16 email thread between Mueller and Smith	3	14 14
13	I48 - 6/2/16 email from Gates to Schmit	3	14 14
14	I49 - 5/25/17 email from Gates to Pickle	3	14 14
15	I50 - Figure 1 from Crocker - 2016 Raptor Nest Survey	3	14 14
16	I51 - Figures 2a, 2b, 2c, and 2d Project Layout Map Series	3	14 14
17	I52 - Figures 5, 51, 5b, 5c, and 5d Project Setbacks	3	14 14
18	I53 - Paulson Prefiled Testimony	3	14 14
18	I54 - Stevens Prefiled Testimony	3	14 14
19	I55 - Crocker's Responses to Staff's First Set of Data Requests	3	14 14
20	I56 - Crocker's Responses to Staff's Second Set of Data Requests	3	14 14
21	I57 - Crocker's Responses to Staff's Third Set of Data Requests	3	14 14
22	I58 - Crocker's Responses to Staff's Fourth Set of Data Requests	3	14 14
23	I59 - Crocker's Responses to Staff's Fifth Set of Data Requests	3	14 14
24	I60 - Crocker's Responses to Intervenors' First Set of Data Requests	3	14 14
25			

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I N D E X (Continued)			
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2	INTERVENOR EXHIBITS	M	O R
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4	I62 - Crocker's Responses to Intervenors' Third Set of Data Requests	3	14 14
5	I63 - Crocker's July 2017 Application	3	14 14
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8	STAFF EXHIBITS	M	O R
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10	S2 - Kirschenmann Prefiled Testimony and Exhibits	3	14 14
11	S3 - Olson Prefiled Testimony and Exhibits	3	14 14
12	S4 - Lawrence Prefiled Testimony and Exhibits	3	14 14
13	S5 - Hessler Prefiled Testimony and Exhibits	3	14 14
13	S6 - Lawrence Surrebuttal & Exhibits	3	14 14
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1 MR. DE HUECK: Good morning, everyone. My name  
2 is Adam de Hueck. I'm the Hearing Examiner for this  
3 morning's hearing in EL17-055. We're on day three, and I  
4 will call the hearing back to order.

5 When we went into recess last night we were in  
6 the middle of staff's direct case. They had their  
7 witness Tom Kirschenmann on the stand, and we had just  
8 concluded Commission questions.

9 So at this point if you would like to take the  
10 stand again and, staff, go ahead with your redirect  
11 whenever ready. And I'd remind you you're still under  
12 oath.

13 THE WITNESS: Yes.

14 REDIRECT EXAMINATION

15 BY MS. REISS:

16 Q. Thank you. Good morning, Mr. Kirschenmann.

17 A. Good morning.

18 Q. So yesterday there were a few questions from the  
19 Commissioners. Do you remember a question Commissioner  
20 Fiegen had for you regarding a lease for a walk-in area  
21 with a turbine located on the property?

22 A. Yes.

23 Q. Do you have any additional information regarding  
24 that question?

25 A. Yes, I do. Commissioner Fiegen, the question you

1 pheasant hunting.

2 I've been pheasant hunting since I was a very young  
3 child. And I have an older brother. So first I want to  
4 ask hypothetically if my brother and I were to go hunting  
5 together, I think the daily limit is three; right?

6 A. Daily limit, three per person.

7 Q. And if I were to go hunting with him, can he shoot  
8 all six?

9 A. Technically, yes.

10 Q. Okay. Seriously, though, why don't you turn to  
11 Exhibit I-27 for me.

12 A. Got it, sir.

13 Q. And what is this document?

14 A. This is the Ring-necked Pheasant Management Plan for  
15 South Dakota. It is one of our management plans that we  
16 as the natural resource agency for the State put together  
17 for various species.

18 This one focuses on pheasant and the different  
19 management components of pheasant management.

20 Q. And you were part of the management plan team that  
21 put together this publication; correct?

22 A. I was, yes. Primarily as the section leader of  
23 that. And the work of this is primarily consisted of our  
24 biological staff and our biologist.

25 Q. And I think on the very first page there, ii, it

1 had posed was what kind of agreement do we have on this  
2 particular walk-in area. So I went back this morning and  
3 visited with staff that oversee that program.

4 The agreement that we have with the individual  
5 landowner right now is a year-to-year contract. And at  
6 this point in time we are in our annual process of  
7 renewing walk-in areas, and I do not have that  
8 information. That has not been submitted from our field  
9 staff yet for this coming year. But over the history  
10 that has been a year-to-year contract with that  
11 landowner.

12 CHAIRWOMAN FIEGEN: Thank you.

13 MS. REISS: Staff has nothing further at this  
14 time.

15 MR. DE HUECK: Any recross?

16 MS. SMITH: No.

17 MR. DE HUECK: Mr. Almond?

18 MR. ALMOND: Briefly.

19 RECROSS-EXAMINATION

20 BY MR. ALMOND:

21 Q. Good morning, Mr. Kirschenmann.

22 A. Good morning.

23 Q. Commissioner Fiegen spoke with you a little bit  
24 about pheasant hunting yesterday, and I'd be remiss if I  
25 didn't take this opportunity to talk with you about

1 notes -- not page 1, but the page number ii.

2 A. Uh-huh.

3 Q. Is that where you're at?

4 A. Yes.

5 Q. Oh. The middle paragraph there it says, "This  
6 document is of little value by itself. The value is in  
7 its implementation."

8 What is meant by that? Do you know?

9 A. Really we look at it, you know, oftentimes when a  
10 management plan, a strategic plan, whatever you want to  
11 call a specific document, is put together, if it's put  
12 together, put on the shelf, and never "implemented," the  
13 strategies, the goals, the things worked on that's in the  
14 document, it's of no use.

15 The real key to it is what you outline in there and  
16 what you want to work on and propose to get done going  
17 out and implementing those strategies.

18 Q. And pheasants and -- are a significant part of  
19 South Dakota; correct?

20 A. Yes.

21 Q. I mean, they're recreational. They offer tourist  
22 opportunities for out-of-state people to come into  
23 South Dakota and spend money. I know I'm from Sioux  
24 Falls, and I don't hunt around Sioux Falls, as you might  
25 imagine, so rural communities really depend on pheasant

1 hunting.

2 Would you agree with that?

3 A. Yes.

4 Q. And what has the pheasant population been doing for

5 the last 10 years?

6 A. Over the last 10 years you could say that there has

7 been an overall decline in the pheasant numbers in our

8 state. It will vary from year to year based on weather

9 conditions, habitat conditions. But a general answer

10 would be a decline over the last 10 years.

11 Q. And if you can turn to page 79, please. Figure 9,

12 is that kind of showing the decline in a graph form?

13 A. Yes.

14 Q. And I read through this. Certainly I'm not an

15 expert, but my conclusion or one conclusion I drew was a

16 concern for the decline in pheasant population is because

17 of a decline in nesting habitats. Is that accurate?

18 A. Nesting habitat is critical for pheasant populations

19 to sustain or grow. Grassland habitat is the number one

20 habitat component for reproduction, nesting purposes, and

21 so that's why we often focus on nesting habitat when it

22 comes to pheasant populations.

23 Q. And you said grassland habitat is the most

24 significant or important?

25 A. For reproduction, yes.

1 the nest itself.

2 Q. And another -- if you flip the page there. And this

3 is the Best Management Practices section; correct?

4 A. Yes.

5 Q. In the very first bullet point it says, "Use native

6 species or noninvasive introduced species for upland

7 habitat establishment."

8 What is that talking about there?

9 A. The general concept there when we talk about using

10 native species of grasses for plantings for upland

11 habitat, in this case for pheasant, that could be a

12 variety of cool season/warm season native grass species.

13 Just typically from the standpoint a nonnative --

14 and I'll use an example of brome grass can become very

15 dominant in that landscape and can take it over, and it's

16 probably less productive then from the standpoint of

17 nesting and raising their broods.

18 And so we typically encourage where possible to use

19 native species in the plantings, and this encompasses a

20 wide spectrum of both cool and warm season grasses.

21 Q. Thank you, Mr. Kirschenmann.

22 Aside from the fact that my brother can shoot all

23 six pheasants, I don't have -- I appreciate your time

24 this morning.

25 A. You're welcome.

1 Q. If you can turn to page 16 of that, the Nesting And

2 Brooding Habitat Best management Practices on the very

3 bottom of the page, do you see that?

4 A. Yes.

5 Q. And it notes that, "Nesting hen pheasants select for

6 and are most successful in large blocks of unfragmented

7 nesting habitat." And then above that it encourages a

8 minimum size of 40 acres with 80 to 160 acres as being

9 ideal.

10 Can you just explain why that's the case?

11 A. Primary reason in including that comes from the

12 larger blocks of habitat that are available, as suggested

13 here, when they're nesting will help minimize the effects

14 of predation of those nests, i.e., skunks, raccoons, fox

15 finding the nest, destroying the eggs, hence, lowering

16 the reproduction.

17 The bigger the grassland habitat, the more it helps

18 to minimize the impacts of predation. And so that's why

19 we talk about having those types of blocks of grassland

20 habitat available for nesting.

21 Q. So the more fragmentation that occurs, the more

22 advantage the skunks, the raccoons, and the wily coyotes

23 have to find the pheasants?

24 A. The smaller patches of grassland habitat make it

25 easier and more efficient for the predator to scour for

1 MR. DE HUECK: Any final Commission questions?

2 Go ahead, Commissioner Nelson.

3 COMMISSIONER NELSON: If I can follow up on the

4 thought of and the commentary about grasslands being the

5 best for nesting for pheasants.

6 I've seen some commentary that pheasants really

7 have no preference between grassland or winter wheat

8 planted areas, that really it's kind of a 50/50 so far as

9 what they prefer.

10 Is that not correct?

11 THE WITNESS: That would be a correct statement

12 from the standpoint that pheasants do use winter wheat

13 for nesting habitat.

14 The primary reason that they will use winter

15 wheat in particular is because it is a plant species that

16 grows early in the season. You have that canopy cover

17 for the birds to feel comfortable in establishing their

18 nest and nesting in.

19 So in parts of the state -- and, in fact, we

20 encourage the use of winter wheat simply from the

21 standpoint that we know it could potentially be fit in an

22 agricultural operation, and it will provide nesting

23 habitat for pheasants and nesting habitat for certain

24 duck species as well. Again, the primary reason, it's

25 early growing, comes up quickly, and you have that

1 overhead canopy cover for those nesting birds.  
 2 COMMISSIONER NELSON: Thank you.  
 3 CHAIRWOMAN FIEGEN: Thank you, Tom, for coming  
 4 back. And I think many, many South Dakotans are  
 5 passionate about what you do. It certainly is passionate  
 6 to me. It's certainly passionate to lots of people.  
 7 So are you aware that the Commission can put  
 8 conditions on a permit that they agree to grant?  
 9 THE WITNESS: My understanding is, yes, you as  
 10 the Commission body making that decision can apply  
 11 conditions to a permit.  
 12 CHAIRWOMAN FIEGEN: If the Commission would put  
 13 a condition on that said that Game, Fish & Parks needed  
 14 to sign off on an agreement, who would -- who would that  
 15 be? Who would be signing off on that in your department?  
 16 THE WITNESS: May I ask what type of an  
 17 agreement are you referencing?  
 18 CHAIRWOMAN FIEGEN: Well, it appears to me Game,  
 19 Fish & Parks has worked with Crocker on making  
 20 recommendations for the permit and where the wind towers  
 21 are placed, suggests -- you have given several  
 22 recommendations.  
 23 So it would be the entire permit and where the  
 24 wind towers are sited. And although, of course, it's not  
 25 a requirement, it could possibly be a condition.

1 THE WITNESS: So I think in the big picture  
 2 ultimately that would come down to the Secretary of our  
 3 Department would have to be the final signatory on  
 4 something like that in the consultation through him.  
 5 What I would offer to you is that as the natural  
 6 resource agency for the State of South Dakota we do stand  
 7 by to work with in this case Crocker and looking to the  
 8 future, other wind farms. We will stand by and certainly  
 9 help and assist where we can. We're committed to  
 10 standing by and working with those developers to continue  
 11 to provide those recommendations.  
 12 Ultimately, again, as we've talked about  
 13 earlier, the regulatory authority falls on you as the  
 14 Commission, not us, but we certainly stand by to provide  
 15 assistance where we can and work with those developers.  
 16 CHAIRWOMAN FIEGEN: Thank you.  
 17 MR. DE HUECK: Any final redirect?  
 18 MS. SMITH: I just have a couple of questions.  
 19 Do you want me to go now?  
 20 MR. DE HUECK: Was there redirect?  
 21 Okay. Go ahead.  
 22 MS. SMITH: Okay. I wasn't trying to go out of  
 23 order.  
 24  
 25

RECROSS-EXAMINATION

1 BY MS. SMITH:  
 2 Q. So, Mr. Kirschenmann, you were just talking with the  
 3 Commissioner about sign-off. Is it typical for your  
 4 department to sign off on development projects?  
 5 A. Not signing off, no.  
 6 Q. And as far as we have talked a bit yesterday about  
 7 there being some inconclusive information and ongoing  
 8 work to understand some of the policies that may want to  
 9 be put into place in the future; is that correct?  
 10 A. Yes.  
 11 Q. And so at this time while these are recommendations,  
 12 these are not absolute requirements that the department  
 13 would impose?  
 14 A. That is correct.  
 15 MS. SMITH: I have no further questions.  
 16 MR. DE HUECK: Anyone have anything else for  
 17 Mr. Kirschenmann?  
 18 MS. REISS: Just one, if I may.  
 19 RECROSS-EXAMINATION  
 20 BY MS. REISS:  
 21 Q. Mr. Kirschenmann, I believe that throughout this  
 22 process GF&P has been in consultation or engaged in  
 23 discussions with Crocker; correct?  
 24 A. Yes.  
 25

1 Q. And throughout that process you provided  
 2 recommendations.  
 3 A. As an agency, yes.  
 4 Q. Have all those concerns been addressed by Crocker at  
 5 this point?  
 6 A. There have been areas that have been addressed, yes.  
 7 Q. Is Game, Fish & Parks satisfied with the areas that  
 8 have been addressed, or are there remaining concerns?  
 9 A. We still talk about, in particular, of the grassland  
 10 component of the project area, and those recommendations  
 11 still stand in place to -- where the greatest extent  
 12 possible, to avoid grassland habitat.  
 13 MS. REISS: We have nothing further. Thank you.  
 14 MR. DE HUECK: Thank you for your testimony this  
 15 morning. You may step down.  
 16 (The witness is excused.)  
 17 MR. DE HUECK: And, staff, you may call your  
 18 next witness.  
 19 MS. REISS: I believe there was a final witness  
 20 for Crocker's direct case that we would prefer to have go  
 21 before our final witnesses speak.  
 22 MS. SMITH: Just to clarify, are you talking  
 23 about Mr. MaRous?  
 24 MS. REISS: Yes, I am.  
 25 MS. SMITH: Sure.

1 MS. AGRIMONTI: Mr. MaRous.  
 2 MS. EDWARDS: At this point I would just like to  
 3 renew my objection from yesterday.  
 4 MR. DE HUECK: So noted.  
 5 MS. AGRIMONTI: Mr. de Hueck, I think we left  
 6 off yesterday finishing up with Mr. MaRous, and what was  
 7 pending was the admission of A22, A22-1, and A22-2. I  
 8 would re-move those documents at this time.  
 9 MR. DE HUECK: You would do --  
 10 MS. AGRIMONTI: I'm sorry. Re-move for their  
 11 admission.  
 12 MS. EDWARDS: I would re-object at this time.  
 13 MR. DE HUECK: And they are admitted. Thank  
 14 you.  
 15 MS. AGRIMONTI: Thank you.  
 16 DIRECT EXAMINATION (Continued)  
 17 BY MS. AGRIMONTI:  
 18 Q. Mr. MaRous, just a few more questions before you  
 19 will stand for cross-examination.  
 20 You talked about your paired sales analysis in your  
 21 initial Rebuttal Testimony and then in your Surrebuttal  
 22 Testimony. Are you aware of whether Mr. Lawrence  
 23 provided or prepared a similar analysis using paired  
 24 sales?  
 25 A. I have not seen one prepared by Mr. Lawrence.

1 scope of his direct.  
 2 MR. DE HUECK: Sustained.  
 3 Q. Mr. MaRous, just final after reviewing the testimony  
 4 that Mr. Lawrence provided, both his initial Rebuttal and  
 5 his Surrebuttal, is there anything in there that changes  
 6 your opinions with respect to the impact of this wind  
 7 farm on property values?  
 8 A. No.  
 9 Q. And what is that ultimate opinion?  
 10 A. That the proposed development will not have a  
 11 negative impact on property values in Clark County.  
 12 MS. AGRIMONTI: Thank you.  
 13 Mr. MaRous is available for cross-examination.  
 14 MR. DE HUECK: Mr. Almond.  
 15 CROSS-EXAMINATION  
 16 BY MR. ALMOND:  
 17 Q. Good morning, Mr. MaRous. Is it MaRous or MaRous?  
 18 A. MaRous.  
 19 Q. MaRous?  
 20 A. Correct.  
 21 Q. Where are you from?  
 22 A. Park Ridge, Illinois.  
 23 Q. Where approximately is that at? Is that close to  
 24 Chicago?  
 25 A. Yes. Suburban Chicago.

1 Q. More generally, do you have an opinion about how  
 2 wind farms affect property values in the communities that  
 3 surround them?  
 4 A. Essentially, particularly in low density rural areas  
 5 they provide a tremendous economic benefit. And the  
 6 Keystone evaluation goes to economics, whether they be  
 7 good or bad.  
 8 And in this situation, as an example, a  
 9 \$500-million-plus project that will generate between --  
 10 real estate taxes to the county and the community and  
 11 payments to landowners annually of plus or minus 3 and a  
 12 half million dollars plus 12 to 20 jobs, relatively high  
 13 paying, is a huge economic benefit to a county with 3,600  
 14 people.  
 15 Where that filters down to is generally better  
 16 roads. I think we heard yesterday that there's only one  
 17 road that's passable all the time in the winter. It goes  
 18 to the infrastructure of the schools, which means more  
 19 money to upgrade schools, to provide the ability to  
 20 compete for better teachers, to provide technology such  
 21 as iPads or tablets or whatever they're going to be in  
 22 10 years.  
 23 And then it goes to the ability to have money in the  
 24 community to upgrade the farm equipment, to --  
 25 MS. EDWARDS: I'm going to object as outside the

1 Q. And I don't have your resume in front of me so I  
 2 apologize, but what company do you work for?  
 3 A. MaRous & Company. Illinois corporation. I own  
 4 100 percent of the shares.  
 5 Q. And what's the main business of your company?  
 6 A. Real estate valuation and consulting.  
 7 Q. And in consulting is a lot of -- what portion of  
 8 your work is devoted to providing what I would consider  
 9 expert testimony?  
 10 A. Actually testifying in hearing like this or trials  
 11 or depositions, that physical time, you know, maybe 15 or  
 12 20 percent.  
 13 Q. And the remaining time, what is that devoted to?  
 14 A. Basically consulting with clients, involvement in  
 15 the preparation of appraisal reports, and basically  
 16 running a small business.  
 17 Q. And I noticed the business shares your name. Are  
 18 you the founder and president or the guy in charge?  
 19 A. The chief cook and bottle washer, yes.  
 20 Q. Do you have a lot of employees?  
 21 A. That's relative. I have approximately 10.  
 22 Q. Are they all appraisers like yourself?  
 23 A. No.  
 24 Q. How many other appraisers do you have on staff?  
 25 A. I believe, five. I have an attorney, and then I

1 have support staff and an editor, just to clarify.  
 2 Q. Aside from this project have you ever worked with  
 3 Geronimo on any other consulting work?  
 4 A. No.  
 5 Q. Were you contacted by Geronimo to assist in this  
 6 project?  
 7 A. Yes.  
 8 Q. When did they contact you?  
 9 A. I believe either late February or early March of  
 10 this year.  
 11 Q. Approximately how many ongoing files do you have  
 12 right now?  
 13 MS. AGRIMONTI: Objection. Relevance.  
 14 MR. DE HUECK: Sustained.  
 15 Q. And I assume you're being paid by Geronimo to  
 16 provide your testimony today?  
 17 A. Based on my professional time and experience, yes.  
 18 Q. And are you being paid by the hour?  
 19 A. I am.  
 20 Q. Approximately how many hours do you have into this  
 21 project from when they first contacted you to today?  
 22 A. I really don't know. It's potentially 30 to 50. I  
 23 mean, obviously this last few days has added up for all  
 24 of us.  
 25 Q. As you sit here today, approximately 30 to 50?

1 A. Yes. But I have other staff members also working on  
 2 the project too.  
 3 Q. I believe there was a Mr. Thayer was first kind of  
 4 identified and submitted Direct Testimony, but he hasn't  
 5 testified today.  
 6 Did you work in coordination with Mr. Thayer?  
 7 A. It's two questions. I'll answer, yes, I believe he  
 8 was involved before me. I reviewed his work product, but  
 9 I really have had no personal contact with him.  
 10 Q. When you say "work product" you mean his Direct  
 11 Testimony?  
 12 A. Yes. And I have -- I have seen and worked with him  
 13 previously.  
 14 Q. So were you retained by Geronimo for this project  
 15 before Mr. Thayer submitted his written testimony?  
 16 A. I don't know the dates, counsel. I don't. I don't  
 17 know the timing.  
 18 MR. ALMOND: No further questions.  
 19 MR. DE HUECK: Staff, your cross.  
 20 MS. EDWARDS: Thank you.  
 21 CROSS-EXAMINATION  
 22 BY MS. EDWARDS:  
 23 Q. Good morning and welcome to South Dakota.  
 24 A. Thank you.  
 25 Q. Looking at Exhibit A16-1, this appears to be

1 something that was prepared by you or your company;  
 2 correct?  
 3 A. Yes.  
 4 Q. And in the last paragraph there it states that,  
 5 "MaRous & Company has appraised a variety of properties  
 6 in the large market area of the proposed project in  
 7 South Dakota."  
 8 Can you describe some of these projects in the  
 9 project area near Clark?  
 10 A. Near Clark specifically, this is the only project in  
 11 Clark. I have done work in Deuel and also proximate for  
 12 another project called Dakota Range.  
 13 Q. This says you did appraise a variety of properties  
 14 in the project area; correct?  
 15 A. And it goes on in North Dakota and Iowa and  
 16 Minnesota. The remainder of that sentence.  
 17 Q. There were no projects in the project area right by  
 18 Clark?  
 19 A. That's correct.  
 20 Q. Okay. Did you work with any local South Dakota  
 21 appraisers to educate yourself on the market dynamics of  
 22 South Dakota for this assignment?  
 23 A. I worked with a broker in eastern Dakota who I  
 24 referenced in my report. I had contacted one appraiser  
 25 and then was not able to find anybody that was active in

1 Clark.  
 2 Q. You said "eastern Dakota." South Dakota?  
 3 A. Correct.  
 4 Q. Okay. And in response to a question by Mr. Almond,  
 5 I believe you said you were engaged in early March or  
 6 February of this year; correct?  
 7 A. Correct.  
 8 Q. Okay. And looking at this same Exhibit A16-1, and  
 9 turning to page 5, on the last bullet point in the first  
 10 set of bullet points I believe it states that you did  
 11 work October 4 and 5, 2017; correct?  
 12 A. Correct. Not on this project but in the -- general  
 13 work in the wind farm or energy in Dakota.  
 14 Q. Do you have a permit to practice as an appraiser in  
 15 South Dakota?  
 16 A. I have the highest form of licensure in the State of  
 17 South Dakota, general certified.  
 18 Q. When did you obtain your permit to practice here?  
 19 A. The original permit was in October of 2017. I had a  
 20 temporary license for this project. I believe I got it  
 21 in March. And then in the past week I have received the  
 22 full general certified.  
 23 I have a copy of that with me if you'd like to  
 24 review it.  
 25 Q. Of your temporary permit?

1 A. No. Of my full permit. My full license, the  
 2 general certified license.  
 3 Q. Do you have a copy of the one from last October?  
 4 A. Not -- I didn't bring it with me, no.  
 5 Q. In the scope of your work Joseph MaRous is listed as  
 6 performing site visits with you in February; correct?  
 7 A. Yes.  
 8 Q. What was his involvement with this project?  
 9 A. Just research into various projects, the general  
 10 demographics, and economics of the area, specifics on the  
 11 subject proposed development.  
 12 Q. And is he a licensed appraiser in South Dakota?  
 13 A. He is not.  
 14 Q. Referring to page 61 of that same exhibit, it states  
 15 that he performed appraisals on wind projects in  
 16 South Dakota; correct?  
 17 A. He assisted in projects in South Dakota.  
 18 Q. So he did so without a license; correct?  
 19 A. Under --  
 20 MS. AGRIMONTI: Objection. Relevance. To the  
 21 extent that Mr. Joey MaRous may have worked on other  
 22 projects and there's a question about his licensing, that  
 23 would not be relevant to this project.  
 24 MS. EDWARDS: Can I respond?  
 25 MR. DE HUECK: Go ahead.

1 my report I believe I provided information on that.  
 2 And I believe six, at least, have projects with over  
 3 25 turbines, which was kind of the way we looked at it  
 4 when I did the study.  
 5 So the Clark existing project with 11 turbines would  
 6 not have made the cut.  
 7 Q. You just said six counties; correct?  
 8 A. Six -- I think I did. Six or seven.  
 9 Q. Okay.  
 10 A. And if you include Oak Tree in Clark, that would be  
 11 another one. But, again, mine was 25 units and above.  
 12 Q. Okay. Why did you limit yourself to the six or  
 13 seven counties? Why the 25 and above?  
 14 A. Because the subject proposal is 140 units. It's  
 15 400 megawatts. It's a significant project. And it's  
 16 kind of the trend of the new wind development to have  
 17 generally over 50 units.  
 18 I thought that was most comparable and relative to  
 19 impactful and provided better information when contacting  
 20 the various assessors in these counties to gauge the  
 21 impact or the number of potential contacts or appeals  
 22 based on an allegation of negative impact based on  
 23 existing turbines.  
 24 Q. But in your original Rebuttal Testimony you had only  
 25 found one property; correct?

1 MS. EDWARDS: He based his research off this so  
 2 if he based his research off faulty or illegally obtained  
 3 information, it's relative to this proceeding.  
 4 MS. AGRIMONTI: I don't agree with the  
 5 characterization of it as being illegal. And collecting  
 6 data is not the same as providing an appraisal or  
 7 appraisal testimony.  
 8 MR. DE HUECK: Agreed. We're going to continue,  
 9 let it in, and keep going.  
 10 So overruled.  
 11 Q. So going back to that October 4 through 5, 2017, the  
 12 report date on Exhibit 1, Market Impact Analysis, is  
 13 April 12, 2018; correct?  
 14 A. Correct.  
 15 Q. So is it fair to say it took you about six months to  
 16 develop this study?  
 17 A. No. I wasn't hired or engaged until either February  
 18 or March. The inspection in the fall of '17 was relative  
 19 to other work in the area that had to understanding the  
 20 area and site conditions and the wind industry in  
 21 South Dakota. It wasn't specific to the subject  
 22 project.  
 23 Q. Do you know how many counties in South Dakota have  
 24 operating wind projects?  
 25 A. I do. I would have to look through my notes, and in

1 A. That's not a turbine. That's a residential  
 2 property. That's correct.  
 3 Q. Right. So at that point did you consider expanding  
 4 your search to include those smaller wind farms?  
 5 A. Again, I was looking at something more comparable in  
 6 size to the proposed development and the future trend of  
 7 development rather than the very small wind farms.  
 8 Again, there's one in Clark. It's 11 units. It  
 9 really isn't comparable to what's proposed here.  
 10 Q. Referring to the same exhibit, page 12, about the  
 11 middle of the second paragraph it states, "The only sale  
 12 found in South Dakota that is located in the general  
 13 market area of a wind farm based on data research from  
 14 the entire state was a residence approximately 4 miles  
 15 from the Buffalo Ridge wind farm in nearby Brookings  
 16 County." Correct?  
 17 A. That's what it says.  
 18 Q. So by reading this is one to believe that you  
 19 searched the entire state?  
 20 A. I did.  
 21 Q. Not just six counties?  
 22 A. The entire state where there were wind farms over  
 23 25 units.  
 24 Q. Did you put that somewhere in your testimony?  
 25 A. It's in the report. I would assume there's a

1 consistent statement in my testimony.  
 2 **Q.** You assume. Okay.  
 3 Can you provide in more detail how the field  
 4 research was done to perform this study?  
 5 **A.** Sure. I took into consideration previous visits and  
 6 research in South Dakota over the last few months. I  
 7 contacted a local broker that was active in land to  
 8 engage to get information.  
 9 I attempted to find active appraisers in the Clark  
 10 County area. Did research on MLS services. And, again,  
 11 because of the limitation of 3,600 residents in the  
 12 county, there just wasn't a lot of activity. And then  
 13 went on public record to try and track additional sale  
 14 information. Went out and physically toured the site.  
 15 When I say "the site," the area. Not only the plus  
 16 or minus 30,000-acre footprint, but also toured the area  
 17 in proximity and took into consideration, again, some  
 18 more tours in eastern South Dakota.  
 19 Then went on and looked into ag land. There's a  
 20 couple different studies where there's tracking of  
 21 basically trends and prices of price per acre of ag land.  
 22 Contacted each of the assessors in the counties that had  
 23 the wind farms over 25 units, and then went on additional  
 24 general available data searches for transactions.  
 25 I was not aware of Beacon at the time. Thanks to

1 sales Mr. Lawrence identified were listed on the MLS  
 2 service?  
 3 **A.** I'm not really here to surprise with my testimony.  
 4 If that can be supported and -- by Mr. Lawrence and then  
 5 I would have to review it, it's very possible.  
 6 **Q.** So if it is true, those were missed when you did  
 7 your research; correct?  
 8 **A.** My initial research. But, again, when I went back  
 9 with Beacon I was able to get additional documentation  
 10 based on the transactions provided in the Mr. Lawrence  
 11 Surrebuttal report.  
 12 **Q.** All right. Moving on, did you research the sales  
 13 with the county Register of Deeds?  
 14 **A.** Through the Beacon research, yes.  
 15 **Q.** Okay. So the last couple of days?  
 16 **A.** No. The last -- in the last week.  
 17 **Q.** Okay. Did you review the Certificate of Real Estate  
 18 Value to determine if these sales were at an arms-length?  
 19 **A.** Based on my research, it appeared that they were.  
 20 There I believe is 2A -- I'm sorry. 2.0 and 2.5.  
 21 There were some issues going on there between  
 22 basically the same seller, but it appeared that they were  
 23 arms-length. And I believe one or two are listings so,  
 24 obviously, that wouldn't qualify.  
 25 **Q.** Specifically with reference to the Buffalo Ridge

1 Mr. Lawrence, I became aware of it. And to, you know, be  
 2 fair and realize there was information that I didn't  
 3 have, I immediately subscribed to Mr. Lawrence, and  
 4 that's a supplement to my report.  
 5 **Q.** You said you reviewed public data. Would that  
 6 include the MLS listings?  
 7 **A.** Yes.  
 8 **MS. EDWARDS:** Permission to approach the  
 9 witness?  
 10 **MR. DE HUECK:** Yeah.  
 11 **MS. AGRIMONTI:** Do you have a copy of that,  
 12 Ms. Edwards?  
 13 **MS. EDWARDS:** I do not. It's just being used  
 14 for impeachment purposes.  
 15 **MR. DE HUECK:** Can you just walk up to counsel,  
 16 show it to them, and then go back to the witness.  
 17 (Counsel examines the document.)  
 18 **Q.** Do you agree this is MLS data?  
 19 **A.** You just put it down. Can I look at it a little  
 20 bit?  
 21 **Q.** Look at it.  
 22 (Witness examines document.)  
 23 **A.** This appears to be MLS data that was printed out on  
 24 April 17, 2018.  
 25 **Q.** Thank you. Would it surprise you that six of the

1 sale, did you make an attempt to contact the buyer or  
 2 seller to discuss the transaction?  
 3 **A.** That's an interesting question. So the answer is  
 4 yes and was not able to do that. I did attempt to  
 5 contact the appraiser that Mr. Lawrence cited who said he  
 6 would love to talk to us, but he had a conflict of  
 7 interest and couldn't speak with us in regard to it.  
 8 **Q.** Did you physically observe the properties included  
 9 in both of those sales analysis?  
 10 **A.** In the first set, yes. The second set I observed  
 11 on-line with aerial photography with Google and also Bing  
 12 to look at the area.  
 13 **Q.** In Exhibit A16-1 in the Market Analysis you state  
 14 the 473rd Avenue sale near White, South Dakota was  
 15 observed from the exterior; correct?  
 16 **A.** Correct.  
 17 **Q.** Did you physically observe that?  
 18 **A.** Yes.  
 19 **Q.** Did you note high-traffic area in the vicinity?  
 20 **A.** I responded to the comment by Mr. Lawrence that I  
 21 was aware it was approximately 500 feet from I-29, but it  
 22 was blocked by a view shield of trees and actually  
 23 significant outbuildings that lie between the house and  
 24 the Interstate.  
 25 **Q.** On page 13 of this exhibit, that's a picture of that



1 property; correct?

2 A. Yes.

3 Q. Why is the Interstate cropped out of that picture?

4 A. That's a good question. It was the way the aerial

5 came out. In looking at it, if I would have done it

6 again, I would have put the Interstate there.

7 Q. What is your experience with the Brookings real

8 estate market?

9 A. In both the other inspections plus this one, I

10 drove through Buffalo Ridge, basically observed the

11 footprint. I went into Brookings. I did research.

12 Obviously, the subject is in Clark, not Brookings.

13 Brookings is, you know, a relatively large town with some

14 diversity and some -- a variety of different industries

15 and support in retail, hotels, et cetera.

16 Q. So you paired that 473rd Avenue sale with a 2011

17 sale from the Brookings area; right?

18 A. Correct.

19 Q. Are you aware that there's a university in

20 Brookings?

21 A. Yes.

22 Q. Would that have an effect on a property's ability to

23 sell?

24 A. In my opinion, universities and hospitals and other

25 major economic engines that are modern and viable, such

1 filter into the community, significant real estate tax

2 payments, and 12 to 15 high paying jobs. The trickle

3 down effect will be a significant economic benefit.

4 So, yes, I do. But that wasn't my job here.

5 Q. Okay. But getting to the property value, are you

6 suggesting that a landowner, a nonparticipating landowner

7 adjacent to the property, would be able to sell their

8 property at a higher price because of the wind farm?

9 A. Again, yes. Because it's going to have significant

10 economic vitality to the higher area. All the sudden you

11 have better schools. You have better roads. You have

12 better support facilities.

13 People are creating economic opportunities, creating

14 more vitality in the town of Clark, and that trends to

15 higher demand for the entire area. And, again, it's just

16 not the single property that are getting the economic

17 return, but it increases the whole area.

18 Q. What about the other counties not covered by

19 Mr. Lawrence that you stated you researched in your

20 Rebuttal Testimony?

21 Have you verified that your previous claims that

22 there were no sales there were accurate?

23 A. So this is to some extent a living and breathing

24 document, and if I find additional information that's

25 relevant, I look at it.

1 as a wind farm, are positive to a local economy.

2 Q. So you would compare a wind farm to a university as

3 far as its effect on a property's ability to sell?

4 A. It's another example of a major economic commitment

5 and viability. And generally a wind farm actually

6 generates a lot more real estate taxes than a university

7 but they're different characteristics but it's just

8 another example.

9 It's like a manufacturing facility. It's a

10 combination of an amenity and an employment source.

11 Q. In your experience, would you consider the community

12 of White, South Dakota comparable to Brookings,

13 South Dakota?

14 A. It's more rural but immediately outside of

15 Brookings. It is rural.

16 Q. Referring to the same exhibit, page 24, the last

17 sentence of the first paragraph says, "The broker stated

18 that the turbine being installed proximate to the

19 property is a possible reason for the quick sale at a

20 higher price."

21 Are you suggesting that the Crocker Wind project

22 will increase the values of nonparticipating residential

23 properties in the vicinity?

24 A. In my opinion, it will. It will add incredible

25 economic vitality, significant land payments that will

1 So based on the information that Mr. Lawrence

2 provided, I'm going to relook at what I've done. And as

3 part of this research -- in fact, there was an article

4 out two or three days ago dealing with wind farms. It

5 goes into the file. And I will relook at this data and

6 probably add additional information to the Deuel project,

7 which is not done, and add additional information into

8 the project in Dakota Range.

9 So my job is to be accurate, and if there's

10 something that's out that adds additional information,

11 I'm going to consider it, good or bad.

12 MS. EDWARDS: I look forward to that additional

13 information, and I have no further questions.

14 MR. DE HUECK: We're going to come to Commission

15 questions. I'm going to start with Commissioner Hanson.

16 But before we do that, I want to clear up the record.

17 Earlier Ms. Smith lodged an objection, and then

18 I got a little confused. I think I made the wrong verbal

19 ruling. I meant to sustain her objection and then

20 continue with his line of testimony. Just for the

21 record.

22 MS. SMITH: Thank you for the clarification. I

23 will just clarify it was Ms. Agrimonti, for the record,

24 just so I don't screw up the record either.

25 Thank you.

1 COMMISSIONER HANSON: Good morning, Mr. MaRous.  
 2 THE WITNESS: MaRous. Good morning,  
 3 Commissioner.  
 4 COMMISSIONER HANSON: There's a lot of exhibits  
 5 here, a lot of information, and I appreciate that. It's  
 6 all very intriguing to me.  
 7 All of these surveys and the conclusions that  
 8 you came to, it seems counterintuitive with all of the  
 9 people who have opposed and said they're going to move  
 10 out of the area and on and on. It seems counterintuitive  
 11 that prices would be stable or perhaps actually -- well,  
 12 not impacted negative.  
 13 Does it surprise you as an appraiser with all of  
 14 your experience?  
 15 THE WITNESS: Many things surprise me,  
 16 Commissioner.  
 17 So and maybe some of it's personal bias when we  
 18 do these studies. But it goes back to my comment on  
 19 economic engines, and it goes to matter -- maybe a matter  
 20 of taste compared to value impact.  
 21 And, as an example, in Iowa as I was doing the  
 22 studies there one of the questions had to do with the hog  
 23 containment facilities. And I would have thought there  
 24 would have been significant negative impact within a mile  
 25 for the road traffic, the noise, the smells. And

1 basically the simple answer kept coming back it's the  
 2 smell of money, and it's increased the desirability of  
 3 the area. And that was kind of shock -- that surprised  
 4 me.  
 5 So and I look a lot at value impacts, whether it  
 6 be quarries, whether it be landfills, whether it be  
 7 church expansions. And you look at traffic, you look at  
 8 light, you look at noise, and you look at economic  
 9 benefit.  
 10 And, you know, I've done work for the Cubs in  
 11 the expansion of Wrigley, and in the last 10 years the  
 12 values have tripled. But the noise, the lights, to me I  
 13 wouldn't want to live there because of all of that, but  
 14 it's increased values because it's an economic engine.  
 15 So sometimes there's a character change, but  
 16 when these wind farms get stabilized and developed and --  
 17 throughout all the area and I say in similar rural  
 18 areas -- and most of them have a much higher population.  
 19 A lot of them, the infrastructure is struggling. Their  
 20 best and their brightest are not coming back to their  
 21 communities.  
 22 And you have a very aging population and aging  
 23 infrastructure and these economic benefits are  
 24 significant and people are not coming in. Are people  
 25 still complaining verbally? Yes. There's been, I think,

1 two or three tax appeals among these five states that  
 2 we've surveyed all these assessors, and nobody's gotten a  
 3 tax reduction so far.  
 4 Now are some projects better than others? Of  
 5 course they are. And, you know, it's an evolving  
 6 industry. But it seems once they're done, they're  
 7 stabilized, and the improvement comes to the community,  
 8 there's trickle down effect economically. The values are  
 9 going up, and the assessors basically say the values are  
 10 going up. If you want to file an appeal, fine.  
 11 So when you say counterintuitive, I agree with  
 12 your suggestion. That's why we went out to see. Because  
 13 they're the people on the ground seeing -- and I think it  
 14 goes to Mr. Lawrence's point, look for local knowledge.  
 15 And those assessors are local knowledge.  
 16 COMMISSIONER HANSON: Speaking of local  
 17 assessors, in my experience and I'm curious if you would  
 18 agree, and you somewhat touched on this it might have  
 19 been yesterday when you said -- spoke of the assessors  
 20 just not really doing an appraisal.  
 21 Oftentimes they drive to the front, take a  
 22 picture of the residence and file that in the office, and  
 23 occasionally they just simply look at a -- an area, for  
 24 instance, in a town or whatever and just apply a  
 25 percentage, 5 percent increase to this particular area.

1 So I was curious when you used -- that the  
 2 assessors' interviews as part of it. And I don't fault  
 3 you for that certainly. That's one area to obtain  
 4 information. But you can't really base values upon that,  
 5 can you?  
 6 THE WITNESS: No. But they're the ones that are  
 7 hearing the complaints, and the complaints are based on  
 8 value or based on value impact. Just as when we had the  
 9 great recession or the recession of 2008 through '12.  
 10 That, you know, various assessors got complaints, you  
 11 know, alleging that their assessed values are too high  
 12 and they should get a reduction.  
 13 Same issue with turbines. If they got a  
 14 problem, that's who they present it to. Then the  
 15 assessor has to defend their assessment.  
 16 Do they have the same training and expertise as  
 17 Mr. Lawrence and I? Of course not. But they're there on  
 18 the ground. So it's really more of a fact issue.  
 19 And some of the assessors are very thorough and  
 20 know their properties very well. And the subject  
 21 footprint of 30,000 acres, it appears that there's only  
 22 28 to 30 actually occupied residences. And so probably  
 23 there's a good chance at one time or another the Clark  
 24 County Assessor may know most of those houses pretty well  
 25 because they may have been there socially or for some

1 other reason.

2 COMMISSIONER HANSON: So you -- with the  
3 assessors you discussed the equalization process with  
4 them and adjustments that may have been made by the  
5 equalization committee.

6 Did you garner any information from that type of  
7 discussion?

8 THE WITNESS: Generally inconsistent. It was  
9 more focused on any reviews or analysis that they did of  
10 the project in their area, the wind turbine. Did they  
11 live near or in a footprint? What type of reactions from  
12 a negativity basis? And how were they handling it on a  
13 county-wide basis?

14 COMMISSIONER HANSON: You apparently performed  
15 your market values on a sales comparison basis, which  
16 obviously is more appropriate than a cost analysis.  
17 However, the income approach to appraisal I would have  
18 thought you would have used for agricultural properties  
19 or businesses in the area.

20 Did you find any of those? And did you use the  
21 income approach on any properties?

22 THE WITNESS: So the simple answer is this is  
23 something we've been studying, and there's actually a  
24 recent article just out on it. But the simple fact,  
25 again, when you go to market participants -- and let's

1 use as an example that the revenue is \$10,000 for a  
2 turbine. And let's just say it's not in Clark; it's  
3 somewhere else, and it's a 100-acre farm.

4 You know, a cap rate -- which I'm not going to  
5 get into all of that, but that's going to -- at 5 percent  
6 could indicate an additional value of \$200,000, which  
7 could indicate an additional value for the entire  
8 100 acres of \$2,000 an acre, even though the footprint of  
9 the turbine might be three-quarters of an acre.

10 So it's the way these transactions are happening  
11 anywhere. With modern turbines. You can't say it with  
12 some of the existing 10 year old small ones because  
13 they're tied to the capacity, the size, et cetera. But  
14 that's the way it's happening.

15 So that was taken into consideration. And as,  
16 again -- I think it's BK-11. There's 11 and 13 that  
17 Mr. Lawrence used, reflected increases in value on the  
18 sites where the turbines were sitting because of the  
19 income approach.

20 Now the income approach to the houses, I didn't  
21 think it was germane. That's not the way these are  
22 bought and sold. And the businesses, there's one  
23 business in the town of Crocker, which I don't think an  
24 income approach is relevant. And then there's businesses  
25 in Clark, which is quite a ways away. The town of Clark,

1 I didn't think it was relevant either.

2 COMMISSIONER HANSON: One of the reasons I asked  
3 the question is seeing that you universally used the  
4 sales method, comparison method, of the three appraisal  
5 methods, you also referred to several other states  
6 because you could only find one, and it wasn't a good  
7 comparable in South Dakota. At least you testified to  
8 that in your testimony. Your written testimony shows  
9 that.

10 In those other states did they use the other  
11 appraisal methods?

12 THE WITNESS: No. But I considered the income  
13 approach as it related to the participants or kind of  
14 proposal with the participants, yes. But I didn't do it  
15 really any different than I did it in this report.

16 The cost approach, unless you have a new  
17 subdivision, you know, measuring accrued depreciation is  
18 very subjective, and for this type of study, I mean, it's  
19 considered but it's really not used.

20 COMMISSIONER HANSON: And according to your  
21 testimony, as I just referred to a second ago, the sale  
22 that you found in South Dakota in which we've -- has been  
23 discussed previously was four miles away. It was not  
24 close enough, in your opinion, to a wind turbine to use  
25 the proximate/not proximate paired sales comparison.

1 And, of course, you concluded that there's no market  
2 evidence to support a negative impact on residential  
3 property values.

4 Would it be fair to say there's no market  
5 evidence to support a positive impact on residential  
6 property values as well? There's just simply no  
7 evidence?

8 THE WITNESS: I would agree with that at this  
9 point. But I go back to the statement that I'm not going  
10 to repeat. If you look at the economic drivers of a  
11 project like this, it's very economically beneficial.  
12 And when you have those type of economic drivers as a  
13 university or college that's viable, that's successful,  
14 it's positive.

15 COMMISSIONER HANSON: Appreciate that and the --  
16 the Lawrence Berkley National Laboratory study is an  
17 impressive one. I haven't known of that prior to your  
18 evidence being presented here.

19 Are they in -- are they likely to be doing  
20 another one anytime soon?

21 THE WITNESS: I think -- I believe they're in  
22 the process of doing another one right now. It's a hot  
23 topic, I think we would all agree.

24 COMMISSIONER HANSON: On page 14 of  
25 Mr. Lawrence's testimony he talks about a South Dakota

1 study should include analyzing all operating wind energy  
 2 projects from around the state and include a wide  
 3 representation of the property characteristics, including  
 4 ag, residential, mixed land uses.  
 5 You took exception to that. And I'm curious  
 6 because Mr. Lawrence on the same page, on page 14 at the  
 7 bottom, opposes your position of using different market  
 8 areas in the United States. I'll be asking him the same  
 9 question.  
 10 I'm curious. On one hand he believes that we  
 11 should use the entire state of South Dakota regardless of  
 12 the proximity to larger communities. And you oppose that  
 13 because -- I won't put words in your mouth, but it seems  
 14 like you oppose it from your writings that it is because  
 15 they're not really comparable by being in other locations  
 16 and larger communities.  
 17 And yet Mr. Lawrence opposes for pretty much the  
 18 same reason, that they're not -- that should not use the  
 19 other states because they're not really comparable and  
 20 wants to use -- so it seems like the two of you are using  
 21 similar arguments to oppose each other's. I'll give you  
 22 each a chance to explain that.  
 23 THE WITNESS: Tough question. I think I can  
 24 handle it.  
 25 So this becomes a matter of opinion. I respect

1 on looking at the three other projects, including the  
 2 Deuel area, looking at Beethoven.  
 3 And the other issue you have to be careful of is  
 4 some of these projects, you know, were early on and  
 5 probably didn't have some of, you know, the more  
 6 thoughtful zoning issues as have been negotiated to make  
 7 them projects that maybe were as good as this one's going  
 8 to be.  
 9 Then again you're comparing apples to oranges.  
 10 So if you start going to other areas, you better make  
 11 sure you're comparing a state-of-the-art project with  
 12 something that's not state of the art.  
 13 So where do you stop? If I'm appraising a house  
 14 here in Pierre, do I, you know, look at every state  
 15 capitol in the U.S. to look for comps of a two-story  
 16 colonial? No. You have to draw the line somewhere.  
 17 COMMISSIONER HANSON: Thank you for your  
 18 testimony.  
 19 THE WITNESS: Thank you.  
 20 COMMISSIONER HANSON: Appreciate it.  
 21 CHAIRWOMAN FIEGEN: Thank you for being here. I  
 22 wish it was a sunnier day. But it's not. We have some  
 23 rain.  
 24 THE WITNESS: It was beautiful yesterday.  
 25 CHAIRWOMAN FIEGEN: Exactly.

1 Mr. Lawrence's opinion, but where do you draw the line?  
 2 You know, one of the wind farms is actually partly in  
 3 North Dakota, and another is in South Dakota. One of his  
 4 comps is partly in Minnesota and partly in South Dakota.  
 5 Do we compare Clark to Sioux Falls or Rapid  
 6 City? I mean, you've got disparate areas in the same  
 7 state, different characteristics in the same state. And  
 8 to compare every one, they're different areas. So I went  
 9 down to look at Beethoven to see if that had any  
 10 relevance.  
 11 Well, there's virtually no proximate residential  
 12 properties. There's some small towns proximate. But you  
 13 can see the Beethoven lights at night. You can see the  
 14 small town lights at night. But tried to see if there  
 15 was any data there. I didn't find any because basically  
 16 there's no houses.  
 17 And we can't make up data, but the information  
 18 from these areas that have been doing this a little bit  
 19 longer, particularly Iowa and Minnesota and Illinois,  
 20 they're all in rural areas, all have similar  
 21 demographics, all have similar infrastructure and aging  
 22 issues, and I felt that was the best information. And to  
 23 have the time --  
 24 And I think Mr. Lawrence alluded to six months.  
 25 It could take that long. But I didn't see anything based

1 When you looked at Clark County -- you talked  
 2 about Clark County. This project is way on the north  
 3 end; correct?  
 4 THE WITNESS: Yes. It's northern Clark and  
 5 basically almost touches Day.  
 6 CHAIRWOMAN FIEGEN: Yeah. How far is the south  
 7 boundary of Clark County approximately to the wind  
 8 project?  
 9 THE WITNESS: Oh, it could be 10 miles. I mean,  
 10 just a general response.  
 11 CHAIRWOMAN FIEGEN: So your response in  
 12 everything I have read is that there are no issues with  
 13 residential value declining if you're next to a wind  
 14 farm; correct?  
 15 THE WITNESS: No. There's -- to be fair,  
 16 there's always issues. And if I can give an example, for  
 17 every property, assuming there's buyers, some people are  
 18 going to have certain taste choices. Some want a split  
 19 level. Some want a colonial. And if they want a  
 20 colonial, they're not going to do a split level.  
 21 And, you know, I for one don't like mansard  
 22 roofs, and I like a Tudor. So I think certain people  
 23 will probably, you know, have objection to having this  
 24 type of development in their county, so they may not want  
 25 to buy there.

1 On the other end, you have people who look at  
2 the economic vitality, and they're going to want to buy  
3 there. You only need one buyer. You only need two  
4 buyers to create a little driving of economics. So I'm  
5 saying will some people not like them? It's a matter of  
6 taste. Sure. So are there issues? Sure.

7 And, you know, during the construction period  
8 will there be issues? Sure. But that happens with  
9 any -- you know, when this building was built. With any  
10 major construction project, on any road project, there's  
11 issues. But that's short term with any real estate  
12 development.

13 So there are people that are going to object, as  
14 I think we all know in this room, but the matter is  
15 what's the market going to do and will there be more  
16 people that want to live there and buy there? That's  
17 going to drive up value and demand.

18 CHAIRWOMAN FIEGEN: Okay. So the impact to  
19 property values we will not see that in residential  
20 properties near and around the wind farm?

21 THE WITNESS: In my opinion, that's correct.

22 CHAIRWOMAN FIEGEN: So if there were conditions  
23 put on the permit talking about property value, you would  
24 be very comfortable with that type of condition?

25 THE WITNESS: Well, that's like asking me what

1 conditions my wife puts on me. So it's a matter of  
2 definition and realistic administration.

3 And I can talk to that if you want, but to say,  
4 you know, absolutely yes, my answer would be absolutely  
5 no. I haven't seen it done. It's brought up a lot or  
6 it's been done effectively and I can go to the concerns  
7 and issues and I'm sure Mr. Lawrence and I would have  
8 some agreement on that, would be my speculation.

9 CHAIRWOMAN FIEGEN: So you haven't seen any  
10 permits on wind farms that have had conditions put on  
11 regarding property value?

12 THE WITNESS: I've seen them introduced. I'm  
13 not sure that I've seen them implemented. I think they  
14 get negotiated out because the administration issue is  
15 basically a nightmare, and it's very tough to set up.

16 And I can go through again the problems if you want.

17 CHAIRWOMAN FIEGEN: So there possibly could be  
18 some conditions put on some permits; you just don't know  
19 for sure about property values and permits on wind farms?

20 It sounds like you've seen possibly a condition.  
21 They may have been negotiated out, but you're not sure if  
22 there is a condition on property value on any wind  
23 permits.

24 THE WITNESS: My answer is part of that is  
25 correct. But usually it gets brought up and then

1 dismissed, and then it doesn't go anywhere.

2 CHAIRWOMAN FIEGEN: Okay. Thank you.

3 COMMISSIONER NELSON: Thank you for being here.

4 In your Sur-surrebuttal Testimony you have Exhibit A22-2,  
5 which is the paired sales analysis of residential  
6 properties that are proximate to a wind turbine and those  
7 that are not.

8 And you did analysis of six different pairs;  
9 correct?

10 THE WITNESS: Correct.

11 COMMISSIONER NELSON: In that analysis did you  
12 detect any lessening of the value of those residences  
13 that were proximate to a wind turbine?

14 THE WITNESS: No.

15 COMMISSIONER NELSON: Thank you.

16 MR. DE HUECK: Do you have a redirect?

17 MS. AGRIMONTI: Thank you.

18 REDIRECT EXAMINATION

19 BY MS. AGRIMONTI:

20 Q. Mr. MaRous, you talked about economic drivers or  
21 engines in a community. What are the economic engines in  
22 Clark County?

23 A. Basically ag land, pastureland, and hunting, you  
24 know, recreational type events. And to a small extent  
25 some of the small businesses in Clark which, you know,

1 there's a couple restaurants, a gas station. I wouldn't  
2 call those economic drivers. They're mainly support.  
3 And probably the hunt club, which has the 11 turbines  
4 which is -- see if I can find it in my notes.

5 That is the Oak Tree hunt club. So they have, you  
6 know, weddings and other support facilities, company  
7 outings. I think some come from Sioux Falls.

8 So, you know, in the big picture very limited  
9 economic drivers, if none. They don't have any colleges.  
10 You know, they don't have any sports teams. They don't  
11 have any major industry that's an economic driver.

12 Q. All right. Thank you.

13 And the 11 wind turbines that you described as being  
14 associated with the hunt club, are those on the hunt club  
15 property?

16 A. They've sold it, but one -- I mean, they're right  
17 there at the hunt club property, and one basically is  
18 right up against the hunt club main facility. If you  
19 frame it and take a picture with the bride and groom and  
20 the wedding party and you're shooting south, besides the  
21 buildings and the pastoral setting, the turbine is right  
22 in the back of it.

23 Q. Chair Fiegen asked you a few questions about a  
24 property value guarantee. I'd like to follow up on that  
25 next.

1 You discussed the problems with the property value  
 2 guarantee and in implementing; is that right?  
 3 A. Correct.  
 4 Q. And is one of the problems figuring out what value  
 5 you're guaranteeing?  
 6 A. Absolutely. And are you guaranteeing the assessor's  
 7 value? And it's a point in time. Value is a point in  
 8 time. What time, what value, and who sets the value.  
 9 Q. And you were trying to determine that -- there were  
 10 a variety of proposals put forward, you know, multiple  
 11 appraisals or assessed values over time. There's been  
 12 no -- there hasn't been a way that has been accepted as a  
 13 way to determine what the value is that you're  
 14 potentially guaranteeing; is that right?  
 15 A. No. Because of the problems of really monitoring  
 16 that and monitoring economic conditions, monitoring the  
 17 condition of the house, and then having consistent  
 18 appraisals. Because if you have it appraised, is that  
 19 appraiser going to be in business in 10 years? We're an  
 20 aging community too.  
 21 Q. And when you value a property there are lots of  
 22 factors that go into what a price can be -- a lot of  
 23 factors that go into what a property will be sold for;  
 24 right?  
 25 A. Correct.

1 Q. And so a property that's worth a certain amount in  
 2 the marketplace may be valued because it's near a lake or  
 3 far from a lake. It may be large. It may be small. You  
 4 can't really determine or isolate any particular factor  
 5 without doing the paired sales analysis that you provided  
 6 for the Commission here; is that right?  
 7 A. And a full inspection, correct.  
 8 Q. And those are just a couple of the problems that  
 9 would be associated with the property value guarantee.  
 10 There would be others that you could go into; right?  
 11 A. I can, yes.  
 12 Q. All right. And generally could you describe just  
 13 what comes to the top of your head as other issues with a  
 14 property value guarantee?  
 15 A. So, first of all, we talk about date and time. So  
 16 we put today's date. Look at the economic conditions.  
 17 Who sets the values? Is it the assessor who I think  
 18 we've heard from the Commissioner and Mr. Lawrence maybe  
 19 they're not the best one to estimate market value. So  
 20 then you have to hire an appraiser. Or do you hire a  
 21 broker? And then who's that consultant?  
 22 And then back to time, how long does this go for?  
 23 And if it goes for five years, is that consultant still  
 24 going to be in business in five years, and can you find  
 25 somebody that everybody agrees on that's in the

1 community, an expert in the community?  
 2 Then you get into an issue of monitoring condition  
 3 of the property. And a great example here because  
 4 initially when we looked at the footprint there were 68  
 5 to 70 houses in the footprint. And then when it got  
 6 scaled back it looks like maybe only 28 or 30 of them are  
 7 actually habitable.  
 8 So you get into this condition issue, and if  
 9 somebody let's say over a five-year period, doesn't  
 10 maintain their house, doesn't modernize it, out in, you  
 11 know, the area of Clark or Crocker, it's going to  
 12 deteriorate. So how do you determine those maintenance  
 13 levels and modernization levels? And, you know, what's  
 14 the requirement for replacing the HVAC, the appliances,  
 15 et cetera.  
 16 And then what happens -- if we run it from 2008 to  
 17 2012? Well, a lot of these residential values dropped  
 18 significantly. That's no fault of you or me or the wind  
 19 farm. That's just market conditions.  
 20 So to isolate all of those becomes very difficult.  
 21 And, as an example, at what point does it trigger -- if a  
 22 property has a base value of 100,000 and somebody wants  
 23 to get 300,000 five years from now, do you have an  
 24 inflation factor and how do you agree on an inflation  
 25 factor?

1 Because the base value is 100 grand, does that set  
 2 it? Not based on somebody's wish? Because I think we  
 3 all know of people, probably me included, that have  
 4 overpriced something when they're trying to sell it.  
 5 So these are just a few of the issues that become  
 6 complex. And it becomes very expensive with lawyers and  
 7 appraisers. I mean, it's a great -- and for the  
 8 appraisers, you know, it's a market opportunity, but I  
 9 don't think we really add value. We just confuse the  
 10 issue if you're not able to have some consistency.  
 11 Q. Mr. MaRous, based on your 40 years of appraisal  
 12 experience, your work in other states with other wind  
 13 farms, your analysis specific to the Crocker Wind Farm,  
 14 do you see any justification for a property value  
 15 guarantee here?  
 16 A. Not at all.  
 17 MS. AGRIMONTI: I have nothing further.  
 18 MR. DE HUECK: Before we go over to Mr. Almond,  
 19 we're going to take a short break. 10 minutes.  
 20 (A short recess is taken.)  
 21 MR. DE HUECK: Welcome back, everyone. We'll  
 22 resume. Mr. MaRous is on the stand, and he'll be  
 23 tendered for redirect; right?  
 24 MS. AGRIMONTI: We just did that. I've  
 25 concluded my redirect.

1 MR. DE HUECK: Let's head over for cross.  
2 Mr. Almond.  
3 MR. ALMOND: Thank you.

4 REXCROSS-EXAMINATION

5 BY MR. ALMOND:

6 Q. Mr. MaRous, really only one question from me.  
7 You testified that you were hired by Geronimo in  
8 either February or March of 2018. And according to your  
9 written testimony, both your Rebuttal and your  
10 Surrebuttal Testimony, I'm assuming you appropriately  
11 used the pronoun "I" in your testimony today.

12 Since then you've familiarized yourself with the  
13 project, you've reviewed Dr. Thayer's work product, which  
14 is his written testimony, which included 19 attachments,  
15 you've performed a market analysis, researching property  
16 and sales in seven different counties. You've reviewed  
17 Dr. Lawrence's testimony.

18 You've prepared Rebuttal Testimony, which included  
19 eight attachments. A report was attached thereto  
20 specific to this project. You've further reviewed  
21 Dr. Lawrence's Surrebuttal Testimony. You've analyzed  
22 that Surrebuttal Testimony and prepared a Sur-surrebuttal  
23 report to that, which included additional paired sales  
24 analysis, I believe. Prepared that Sur-surrebuttal  
25 Testimony.

1 You applied, and received, for a permanent license  
2 to offer appraisal opinions here in South Dakota. You  
3 visited the project area in April of 2018. Apparently  
4 you went down and looked at Beethoven as well. You've  
5 traveled here to Pierre. Sat through the hearing  
6 yesterday. You've done all of that in 30 to 50 hours.

7 So my one question I guess is what kind of coffee do  
8 you drink?

9 CHAIRWOMAN FIEGEN: That was a long question.

10 A. There's a high energy level, counsel, which works  
11 when you're involved with interesting projects and  
12 clients and interesting locations.

13 MR. ALMOND: Thank you.

14 MR. DE HUECK: Staff.

15 REXCROSS-EXAMINATION

16 BY MS. EDWARDS:

17 Q. There was discussion about a potential condition  
18 that could be placed on the permit. And you talked about  
19 the difficulty in enforcing that condition?

20 A. Correct.

21 Q. Are you confident enough in your opinion that there  
22 wouldn't be an effect to take the gamble that the  
23 condition wouldn't be difficult to enforce?

24 MS. AGRIMONTI: I'm going to object just to the  
25 form of the question. If you rephrased -- I think

1 "gamble" just seems a little imprecise.

2 Q. Are you confident enough in your opinion that there  
3 would be no negative effect on property value to risk  
4 that the condition might be difficult to enforce?

5 A. Risk, in my opinion, it would be very difficult, if  
6 not impossible, to properly enforce besides the  
7 implementation. You know, I'm not here to measure risk.  
8 Mine was really to analyze and provide professional  
9 opinions on value.

10 I address my concerns with the property value  
11 guarantee. If there was a way to make it simple, clear,  
12 and concise, I would be more supportive, but I've  
13 struggled with numerous clients on a variety of issues.

14 And I also was a public official where we got into  
15 these issues. And from a practical end it just creates  
16 conflict and difference of opinion and that's my concern  
17 and that's my opposition. I can understand people having  
18 concern about their property values. It's, you know --  
19 for most people it's their key asset in life. So I have  
20 that concern too, but to take a risk --

21 I'm measuring risk. I'm just trying to explain my  
22 opinions about it.

23 MS. EDWARDS: Thank you. Nothing further.

24 MR. DE HUECK: Commissioners?

25 COMMISSIONER HANSON: Just one curiosity. The

1 temporary license that was discussed, is that just the  
2 typical reciprocal license that real estate folks obtain  
3 when they want to do some work in another state?

4 THE WITNESS: I think I need to explain it.  
5 Generally that's the answer. But you have to provide  
6 good standing from your own state, being applying for the  
7 same level. So if I had the residential appraisal  
8 license, that's the only type temporary I could get in  
9 South Dakota.

10 But the temporary was received for just that one  
11 particular assignment, and then I made the decision just  
12 to apply for the top level of licensure in the state.

13 COMMISSIONER HANSON: And one other.

14 In your home state and -- perhaps you may be  
15 aware of the rules in South Dakota, of the laws in  
16 South Dakota pertaining to licensure. Is there any  
17 prohibition for a person to provide information and work  
18 for an appraiser, a licensed appraiser, and for that  
19 appraiser to use the information that they receive,  
20 absent that person -- the person who's providing the --  
21 I'll say being an unlicensed person?

22 THE WITNESS: In my opinion and interpretation,  
23 that the licensed appraiser takes full responsibility and  
24 signs the report. If that assistant is providing  
25 professional opinions and signing the report, in my

1 opinion, that's incorrect. And that was not what was  
 2 done here. And that's what's done in every time I do  
 3 something out of state.  
 4 But do I use the assistance? Do I use a  
 5 computer? Do I use somebody to do editorial review?  
 6 Sure. Are they licensed to do appraisers -- appraisals?  
 7 No.  
 8 So the answer to your question, it's customary  
 9 practice, and I'm not aware of any issue by the way it  
 10 was done.  
 11 COMMISSIONER HANSON: I understand that's the  
 12 rule and law in South Dakota as well. As provided that  
 13 that person does not have contact with the public in a  
 14 fashion either signing information or providing  
 15 information.  
 16 For instance, someone's looking for that house,  
 17 and that person can't provide information on that  
 18 property, things of that nature. Is that how it is in  
 19 your --  
 20 THE WITNESS: Yes.  
 21 COMMISSIONER HANSON: Where you're from?  
 22 THE WITNESS: Yes. And I hold a broker's  
 23 license in Illinois also, but I don't practice brokerage.  
 24 COMMISSIONER HANSON: All right. And so you're  
 25 testifying that your 10 assistants who are -- whomever is

1 David Lawrence,  
 2 called as a witness, being first duly sworn in the above  
 3 cause, testified under oath as follows:  
 4 DIRECT EXAMINATION  
 5 BY MS. EDWARDS:  
 6 Q. Good morning. Could you please state your name and  
 7 business address for the record.  
 8 A. David Lawrence. I work at 4820 East 57th Street in  
 9 Sioux Falls.  
 10 Q. What is your professional title?  
 11 A. I'm a certified general appraiser in South Dakota.  
 12 Q. And did you submit prefiled testimony in this case?  
 13 A. Yes, I did.  
 14 Q. Did you submit prefiled Rebuttal or Surrebuttal  
 15 Testimony in this case?  
 16 A. Yes, I did.  
 17 Q. Do you have any additions, deletions, or corrections  
 18 to make at this time?  
 19 A. No.  
 20 Q. At the time of your testimony was it -- or at the  
 21 time of your prefiled testimony was it true and correct  
 22 to the best of your knowledge?  
 23 A. Yes, it was.  
 24 Q. Did you do additional research after you filed?  
 25 A. Yes, I did.

1 unlicensed, you're testifying did not breach that rule of  
 2 law?  
 3 THE WITNESS: Absolutely.  
 4 COMMISSIONER HANSON: Okay. Thank you.  
 5 MR. DE HUECK: Mr. MaRous, early in your  
 6 testimony you were talking about economic engines;  
 7 correct?  
 8 THE WITNESS: Yes.  
 9 MR. DE HUECK: And you had mentioned that small  
 10 towns with failing infrastructure inevitably lose their  
 11 best and brightest; correct?  
 12 THE WITNESS: I did.  
 13 MR. DE HUECK: And there are exceptions to that  
 14 rule; correct?  
 15 THE WITNESS: Of course there are.  
 16 MR. DE HUECK: Thank you.  
 17 I don't believe there's going to be redirect.  
 18 So, Mr. MaRous, you're all done.  
 19 THE WITNESS: Thank you. Sir.  
 20 (The witness is excused.)  
 21 MR. DE HUECK: We're going to transition back to  
 22 staff's direct.  
 23 MS. EDWARDS: Staff calls David Lawrence.  
 24  
 25

1 Q. And what prompted that research?  
 2 A. The rebuttal from Mr. MaRous indicated that there  
 3 was only one sale in South Dakota. After discussions  
 4 with staff, thought it was a good idea to look into it to  
 5 see if there was other research in South Dakota, which I  
 6 did.  
 7 Q. Mr. MaRous testified that he did an MLS search and  
 8 was unable to find more than that one sale. Are you  
 9 familiar with that testimony?  
 10 A. Yeah. I heard that this morning.  
 11 Q. Would you agree with that testimony?  
 12 A. As for MLS data, no.  
 13 Q. Did you utilize MLS in your research?  
 14 A. Yes. I used the MLS.  
 15 Q. And what was the result of that?  
 16 A. I found five sales on the MLS in Brookings County.  
 17 Q. You also heard that he did a significant amount of  
 18 research in a week's time. Were you here for that  
 19 testimony?  
 20 A. Yes, I was.  
 21 Q. Do you have an opinion on whether or not you could  
 22 do adequate research in one week's time?  
 23 A. On the 13 sales identified, no, I would not be able  
 24 to do adequate research in that amount of time.  
 25 Q. How much time would you need?



1 A. To do a thorough analysis of the 13 sales that I  
 2 identified, I think it would at least take me a couple  
 3 weeks. Two to three weeks to properly analyze that data.  
 4 Q. Okay. Referring to BK-2, do you know what that  
 5 document is?  
 6 A. Yes, I do.  
 7 Q. Does it show a change in value?  
 8 A. No. That sale did not show a change in value. That  
 9 showed, I think, roughly a 0 percent appreciation at  
 10 six years.  
 11 Q. Is that normal, in your experience?  
 12 A. In my experience across South Dakota, zero percent  
 13 appreciation on a residential house seems odd.  
 14 Q. Odd in what way?  
 15 A. Usually we see -- usually in South Dakota there is  
 16 appreciation on residential homes. Typically, I would  
 17 say, yes.  
 18 Q. What about BK-5?  
 19 A. BK-5. I don't have that in front of me. I'm trying  
 20 to remember it.  
 21 I think I might have found it.  
 22 Q. Okay. Can you tell us what that is?  
 23 A. This is a residential sale near a wind tower near  
 24 Brookings -- in Brookings County.  
 25 Q. Did it appreciate in value?

1 MS. EDWARDS: No further questions. We will  
 2 tender him for cross.  
 3 MS. AGRIMONTI: Thank you, Mr. Lawrence.  
 4 CROSS-EXAMINATION  
 5 BY MS. AGRIMONTI:  
 6 Q. When you talked about how long it would take you to  
 7 do a paired sales analysis, I wanted to ask you a few  
 8 questions to follow up on that.  
 9 How many people do you have in your office?  
 10 A. Referring to paired sales, which one are we talking  
 11 about?  
 12 Q. I'll withdraw that.  
 13 I'll start with how many people do you have in your  
 14 office, Mr. Lawrence?  
 15 A. I have three.  
 16 Q. When you say it would take you two to three weeks to  
 17 analyze the sales you identified in your Surrebuttal  
 18 Testimony, would that be work that you do by yourself?  
 19 A. No. I would have other people help me.  
 20 Q. And would you have other work responsibilities  
 21 during that time?  
 22 A. Well, I think -- I always have different clients.  
 23 But I'm saying to focus on analyzing that data would take  
 24 me two to three weeks.  
 25 Q. Thank you.

1 A. No. It actually went down in value 11 percent since  
 2 the owner purchased it.  
 3 Q. Okay. Also going back to the testimony you just  
 4 heard, I believe -- were you here when he testified as to  
 5 how many counties have wind farms in them in  
 6 South Dakota?  
 7 A. Yes, I was.  
 8 MS. AGRIMONTI: Objection. I believe Mr. MaRous  
 9 talked about how many counties had wind farms with more  
 10 than 25 operating turbines.  
 11 MR. DE HUECK: Any response?  
 12 MS. EDWARDS: I'll withdraw that question.  
 13 Q. Did you hear the testimony regarding researching  
 14 wind turbine sites of more than was it 25 megawatts?  
 15 A. Yes, I did.  
 16 Q. 25 turbines.  
 17 Do you agree with that testimony?  
 18 A. In what regards? Explain that a little.  
 19 Q. That it wouldn't be relevant to research smaller  
 20 wind facilities?  
 21 A. No. I think all wind projects in South Dakota would  
 22 be relevant for a study.  
 23 Q. Do you have any idea how many counties have wind  
 24 farms?  
 25 A. I think it's roughly 14 in South Dakota.

1 In your Direct Testimony you explained that most of  
 2 your experience as an appraiser with respect to utility  
 3 projects are linear right-of-way projects such as  
 4 transmission lines and pipelines; is that right?  
 5 A. No. I have done other projects.  
 6 Q. What other types of utility projects have you done?  
 7 A. Describe utility. Are you talking like energy?  
 8 Q. Energy projects.  
 9 A. No. My experience in South Dakota with energy  
 10 projects would be transmission lines, pipelines. Yeah.  
 11 That would be -- that would be what I've done a lot of.  
 12 Q. All right. And while you have extensive appraisal  
 13 background and you're an MAI just like Mr. MaRous, your  
 14 appraisal experience has not included any evaluation of a  
 15 wind farm?  
 16 A. Actually I have in preparations of my testimony.  
 17 Q. That's the only evaluation of a wind farm that  
 18 you've done; is that right?  
 19 A. Yes.  
 20 Q. All right. How many appraisals have you completed  
 21 in Clark County?  
 22 A. I wouldn't know that, the exact answer, but I've  
 23 done a lot of appraisal work in Clark County over the  
 24 years.  
 25 Q. In your testimony, and I'll direct you to page --

1 pages 8 and 9, you express concern -- yeah. You express  
 2 concern that there isn't a South Dakota-specific study.  
 3 Do you recall that?  
 4 A. Yes, I do.  
 5 Q. All right. And you recommended a comparable sales  
 6 not within the proximity of a wind project be used for  
 7 comparison projects that -- properties that are within  
 8 proximity to a wind farm. Is that also right?  
 9 A. I'm not -- I don't understand your question. You're  
 10 saying I didn't recommend? I don't remember that.  
 11 Q. Let me back up. When you were suggesting the type  
 12 of study that ought to be done it was a paired sales  
 13 analysis is that correct?  
 14 A. More than just a paired sales analysis, but that  
 15 would be one aspect of the study.  
 16 Q. All right. But the paired sales analysis would be  
 17 the -- well, back up. In your testimony you identify a  
 18 lot of data that should be collected, and that would feed  
 19 into a paired sales analysis; isn't that correct?  
 20 A. Yes. That's one of the aspects of the study that I  
 21 recommended.  
 22 Q. And when you say you suggested much more is that  
 23 fair to say that you suggested a broader geographic area  
 24 than what Mr. MaRous did?  
 25 A. Much -- what do you mean by "much more"?

1 Q. Well, I'll ask it back to you.  
 2 A. Okay.  
 3 Q. You said -- your testimony was that you wanted more  
 4 than just a paired sales analysis. What more were you  
 5 asking for other than just a paired sales analysis?  
 6 A. Okay. I understand your question now.  
 7 In these type of damage analysis studies when you're  
 8 trying to determine the impacts to property values,  
 9 whatever the impact may be, transmission line, power  
 10 line, pipeline, wind tower, there's a lot of steps in the  
 11 study that you need to do to have a thorough analysis to  
 12 answer the questions.  
 13 And in my Direct Testimony one of the things I did  
 14 say was the sales analysis, that you're analyzing sales  
 15 that are actually impacted or in proximity to a wind  
 16 tower.  
 17 The other thing you're going to be doing is  
 18 interview analysis. You're going to be doing on-site  
 19 expectations. Through the scope of work of the study  
 20 you're going to be looking at abstracts of the property,  
 21 identifying any other easements on the property,  
 22 interviews with buyers and sellers.  
 23 The verification process in these types of studies  
 24 is very important, just so you can understand all aspects  
 25 of the sale. It takes -- there's a tremendous amount of

1 work just in identifying -- when you identify paired  
 2 sales in these types of studies it's a thorough  
 3 research.  
 4 It's very important making sure that you're dealing  
 5 with an influenced sale that would have that externality  
 6 like the power line or a wind tower and making sure that  
 7 the sale that you're identifying that is not influenced  
 8 by that actionality is, I would just say, a true sale  
 9 that doesn't share the same effect so you can analyze  
 10 that.  
 11 Q. Mr. Lawrence, you didn't conduct that study; right,  
 12 for this wind farm?  
 13 A. For this wind farm, no, I have not conducted a  
 14 study.  
 15 Q. All right. And you're not aware of any study like  
 16 what you recommended in the state of South Dakota with  
 17 respect to wind farms; right?  
 18 A. That is correct. I'm not aware of any study.  
 19 Q. And you are not here to offer any opinion as to  
 20 whether this wind farm will or will not impact property  
 21 values; right?  
 22 A. No. Not at this time.  
 23 MS. AGRIMONTI: I have nothing further.  
 24 MR. DE HUECK: Mr. Almond.  
 25

1 CROSS-EXAMINATION  
 2 BY MR. ALMOND:  
 3 Q. Good morning, Mr. Lawrence.  
 4 A. I need to correct you on one thing. You called me  
 5 Dr. I appreciate the title, but I'm not a doctor.  
 6 Q. I thought I said Mr.?  
 7 A. I thought you said Dr. That's all right. You can  
 8 call me Dr.  
 9 Q. Mr. Lawrence?  
 10 A. I was referring to before.  
 11 Q. Before?  
 12 A. Yeah. When you were talking to MaRous.  
 13 Q. Okay. I apologize for giving you too much credit.  
 14 A. That's okay.  
 15 Q. You talk in your Direct Testimony about the need to  
 16 conduct a, you know, further study to actually determine  
 17 whether or not a wind project is going to have some sort  
 18 of detrimental effect on residential property values. Is  
 19 that correct?  
 20 A. Correct.  
 21 Q. And what did you say, approximately how long that  
 22 type of study would take?  
 23 A. To do a thorough analysis -- and it obviously  
 24 depends on the scope of work and what the client's  
 25 asking. But we have 13 operating wind projects in

1 South Dakota that are good comparables to look at. And I  
2 just know from other studies and damage impact analysis  
3 that I've completed in South Dakota it just takes time to  
4 get the research done, to be thorough and complete.

5 You know, six months is probably a reasonable time  
6 line. And that can change depending on the scope of work  
7 and what the client would ask, whether they limit that or  
8 extend that type of study.

9 Q. And do you have any idea approximately what the cost  
10 of such a study would be?

11 A. That's hard to answer that question because it comes  
12 back to scope of work and really what we're doing.  
13 It's -- that's difficult to answer.

14 I mean, these studies can get costly just because of  
15 the man hours and the time that's required to properly  
16 analyze the data.

17 Q. And is that because the study is so thorough it  
18 involves interviewing, you know, purchasers, sellers,  
19 et cetera, everything you just talked about with --

20 A. Yeah. In my experience in South Dakota dealing with  
21 a number of property owners and landowners, especially  
22 when it comes to energy projects, value becomes a very  
23 sensitive subject.

24 And so when you're doing these kind of studies  
25 especially you've just got to -- they rise to a very high

1 with a wind project until this docket. In my experience  
2 I've done numerous damage studies around South Dakota.  
3 The methodology's the same.

4 Whatever question you're trying to answer for,  
5 whether it's a flood, transmission line, pipeline,  
6 whatever thing's affecting the property, since I've  
7 become involved in this docket it is surprising to me --  
8 or I should say concerning.

9 I don't know the answer to the question yet, but in  
10 my research of 13 sales that I have not had the time to  
11 thoroughly analyze I think there's a couple sales in  
12 there that did raise questions to me that I would like  
13 the answers to. And that was one that was like BK-2 that  
14 did show zero appreciation in six months.

15 And based on my interview -- I attempted to try to  
16 figure out who the seller was just to talk to them about  
17 it because that sale did show some concerns. And the  
18 sellers were very private and wouldn't talk to me. And  
19 that's when I reached out to a colleague of mine in  
20 Brookings County that's fairly well known there. And he  
21 had knowledge of the sale, and he interviewed the seller  
22 for me and provided me information on that.

23 And then there's another sale that I had. I can't  
24 remember what number it was. But the one that showed  
25 depreciation of about 11 percent. I had concerns with

1 level of completeness and thoroughness, just because they  
2 seem to be quite criticized or peer reviewed. So you  
3 really got to take the time to make sure you're analyzing  
4 all the data properly.

5 Q. And I understood you to say this is the only wind  
6 farm project you've actually really looked into and  
7 hired. But in your experience have you gained any sort  
8 of understanding that there's any sort of stigma involved  
9 in owning residential properties around wind farms in  
10 South Dakota?

11 MS. AGRIMONTI: Objection. Mr. Lawrence doesn't  
12 have any experience in assessing wind farms except for  
13 this project.

14 MR. ALMOND: May I respond?

15 MR. DE HUECK: You may.

16 MR. ALMOND: He's certainly an expert in the  
17 field dealing with appraisals. He's talked with I assume  
18 hundreds, thousands of people about utility projects in  
19 general. The question was --

20 If you'd repeat it, please.

21 (Reporter reads back the last question.)

22 MR. DE HUECK: And I don't need your response.  
23 I'm going to allow the question, and the Commission can  
24 give it the weight it so deems.

25 A. Sure. I will say with -- I haven't been involved

1 that one. But, like I said, I haven't verified that to  
2 know what that is, whether it's a cause from the  
3 proximity to the wind tower, to the property or if there  
4 was something else going on with that sale.

5 Q. And based off of your understanding of the interview  
6 of the seller in BK-2?

7 A. Uh-huh.

8 Q. Given what you've learned, you have concerns about  
9 the possible negative effect that a wind farm could have?

10 A. Yeah. And I didn't talk directly to the seller.  
11 But what my colleague indicated is that there was a  
12 negative impact from the wind towers as a result of that  
13 sale. I have yet to personally confirm that.

14 And then just to add too, since I got involved in  
15 this docket and my information's been on the public  
16 record, surprisingly I have received a couple of e-mails  
17 from sellers in the Codington and Brookings area but I  
18 have not followed up factually on what they've told me.

19 Q. And what kind of e-mails?

20 A. Just e-mails saying that they -- one of them -- I  
21 had an e-mail from somebody in Codington that had their  
22 house under contract and before closing the deal fell  
23 through because the buyer became aware at the possibility  
24 of wind towers surrounding the property.

25 And I have no factual basis yet for that. I have

1 not verified that information to make any kind of  
 2 analysis on that.  
 3 MS. AGRIMONTI: I would move to strike. If he  
 4 has no information, he's speculating. It shouldn't be  
 5 part of the record.  
 6 MR. DE HUECK: Sustained.  
 7 Q. Have you looked at the number of residences that are  
 8 located both in and around the project area of this  
 9 project?  
 10 A. I don't know the exact number so I couldn't answer  
 11 that. I have been to Crocker. I have been in the  
 12 project area. I'm familiar with residences in the area,  
 13 but I couldn't give you the exact number of how many  
 14 there are.  
 15 Q. Are you familiar generally with not the specific  
 16 numbers but the number of residences in and around other  
 17 wind farms around South Dakota?  
 18 A. No, I'm not.  
 19 Q. Okay.  
 20 MR. ALMOND: No further questions.  
 21 MR. DE HUECK: Commissioner Hanson, I'd go to  
 22 you first, unless you'd like some more time.  
 23 COMMISSIONER HANSON: No, that's fine.  
 24 Good morning, Mr. Lawrence.  
 25 THE WITNESS: Good morning.

1 COMMISSIONER HANSON: Pleasure to hear your  
 2 testimony and have you here.  
 3 You heard a question, I assume.  
 4 THE WITNESS: I've heard a lot of questions.  
 5 COMMISSIONER HANSON: I mentioned your name when  
 6 I was asking previous testimony pertaining to yours and  
 7 Mr. MaRous's apparent conflict of opinion.  
 8 Do I need to repeat it?  
 9 THE WITNESS: That would be helpful if you  
 10 would.  
 11 COMMISSIONER HANSON: On one side of the issue  
 12 of what information should be and should not be used --  
 13 or should not be used is that you would like to use  
 14 information on the 13 different wind farms in  
 15 South Dakota, a variety of areas. And Mr. MaRous says  
 16 no, for reasons which you've no doubt read and you have  
 17 replied to.  
 18 And on the other hand, Mr. MaRous would like to  
 19 use information from four other states, and you oppose  
 20 that for somewhat similar reasons why he opposes your  
 21 wanting to use the 13 sites in South Dakota because of  
 22 the disparity of locations. And somewhat I guess the  
 23 argument is -- from each of you is a comparison  
 24 standpoint, can't compare the apple to the orange, but  
 25 you're both -- seem to be arguing the same point for

1 different reasons.  
 2 THE WITNESS: Okay. Well, I think I understand  
 3 the round-about question you were asking me there.  
 4 I would -- looking at this wind project or wind  
 5 projects around South Dakota, it's my opinion that if the  
 6 Commission truly wants to understand the impacts wind  
 7 projects in South Dakota, we need to look to what  
 8 South Dakota has for the answer to that question. And we  
 9 have 13 operating windmill projects in South Dakota, I  
 10 think, since about 1990 that would provide a lot of that  
 11 data.  
 12 And in my initial preliminary review which  
 13 resulted in the research of Brookings County, I was  
 14 surprised to find in a short amount of time those 13  
 15 sales. That was a lot more sales population than I  
 16 thought I'd identify. And there's much other areas  
 17 around South Dakota we could look at with operating wind  
 18 towers to answer those questions.  
 19 I think the studies that Mr. MaRous and Crocker  
 20 have provided through Thayer and other resources have --  
 21 you know, I think they're a good starting point to read  
 22 through and look at those. I don't want to discredit any  
 23 study that's been produced, but I do believe if we really  
 24 want to answer the question about the impacts of property  
 25 value in South Dakota, we need to look at South Dakota

1 market evidence and analyze that so we can understand the  
 2 impacts.  
 3 And so that would be -- that would be my  
 4 opinion or my answer to the question -- to your question  
 5 on that.  
 6 COMMISSIONER HANSON: Thank you. On page 14 of  
 7 your testimony -- not your Surrebuttal -- you state at  
 8 the bottom of the page, "While I do agree these studies  
 9 provide useful insight to understand the general impact  
 10 on residential property values," and I'll stop there.  
 11 Isn't that of value to us in making our decision  
 12 here?  
 13 THE WITNESS: I would say that those studies do  
 14 provide useful information. However, we don't know how  
 15 they can be -- or how the market evidence in South Dakota  
 16 answers the same question. Those studies are mostly done  
 17 by credible authors. However, those are from different  
 18 areas around the United States and different countries  
 19 even.  
 20 And I do think that information is a good  
 21 starting point, but we don't know the question in  
 22 South Dakota because we haven't researched it yet. And  
 23 so there is that gap with what South Dakota landowners  
 24 and property owners say about the impacts of wind  
 25 projects in South Dakota we don't know.

1 And so without looking at the data in  
 2 South Dakota, we don't know if the national research is  
 3 consistent with what's going on in South Dakota.  
 4 COMMISSIONER HANSON: So I may get the footings  
 5 and foundation and structure in reverse order here  
 6 depending upon your opinion. However, would you say that  
 7 this information that it's referring to is a good  
 8 footings or foundation to the structure, or would you say  
 9 it's the structure itself?  
 10 THE WITNESS: As I have said, I think it's a  
 11 good start. I think a number of those -- a number of  
 12 those studies that I did read through had different  
 13 conclusions. Some said no effect. Some said some  
 14 effect. Some said, you know, a large effect.  
 15 How you apply that exactly to a specific  
 16 property I'm not sure, but -- so there are different  
 17 answers to the question around the United States.  
 18 Being from South Dakota and worked across  
 19 South Dakota, as an appraiser I have a really hard time  
 20 trying to take data from around the United States and  
 21 trying to apply it to South Dakota without having any  
 22 information or evidence from South Dakota to compare it  
 23 to.  
 24 COMMISSIONER HANSON: Just caused me to think of  
 25 another question.

1 first item is, "Identify properties affected by a  
 2 South Dakota wind energy project since the time of the  
 3 project became operational." And in another area you  
 4 refer to, "from the operational date."  
 5 Wouldn't it be better to start prior to rather  
 6 than once it's -- once the operation has begun?  
 7 THE WITNESS: I would say no because prior to we  
 8 don't have any effect from a wind project. So it's going  
 9 to be a normal sale, arms-length sale with no effects  
 10 from a project area.  
 11 I would say after the project is installed and  
 12 becomes operational, that would be the point that I would  
 13 look at.  
 14 COMMISSIONER HANSON: But don't you have to have  
 15 a base from which to work from where there is no effect  
 16 and then you sign -- scientifically wouldn't you want to  
 17 have a -- a sale that is totally unaffected by the wind  
 18 farm so that you can compare that with sales that are  
 19 affected?  
 20 THE WITNESS: Yes. I think we're saying the  
 21 same thing. I'm saying -- when I'm saying identify sales  
 22 since operation, I'm saying those affected sales or  
 23 influenced sales.  
 24 So once we have -- if it became operational in  
 25 2000, that's your effective date of research for that

1 It's been a long time since I did appraisals.  
 2 Is it the Marshall's book that's national that one looks  
 3 at for reviewing valuations and then making adjustments  
 4 on that?  
 5 THE WITNESS: I think you're referring to the  
 6 Marshall Value & Swift?  
 7 COMMISSIONER HANSON: Yes.  
 8 THE WITNESS: It's a cost manual that we use in  
 9 our profession to -- I suppose to re-create cost of  
 10 improvements with real property.  
 11 COMMISSIONER HANSON: Okay. So that's for a  
 12 cost valuation, not for a sales.  
 13 THE WITNESS: Yes.  
 14 COMMISSIONER HANSON: Thank you.  
 15 THE WITNESS: But I can tell you have some  
 16 background with real estate appraisal with the questions  
 17 you've been asking.  
 18 COMMISSIONER HANSON: Let's see.  
 19 So you did review the studies that were referred  
 20 to? Were you previously familiar with them?  
 21 THE WITNESS: Yeah. I'd say familiar. I  
 22 wouldn't say I reviewed them. I read through them a  
 23 month ago when I was preparing my Direct Testimony.  
 24 MR. HANSON: You talk about a 10-level study.  
 25 And in just two parts of it you refer to -- well, the

1 wind project. You're going to go research -- you're  
 2 going to research every sale, you know, around that  
 3 project, establish a population of sales -- make up a  
 4 number -- five.  
 5 So we've got five influenced sales that have  
 6 sold since the project has gone operational. We're going  
 7 to take those sales. We're going to research them.  
 8 We're going to research the title information. Maybe  
 9 even before. We'll see if they've sold before the  
 10 project. That will be great information to analyze.  
 11 Sometimes that will happen.  
 12 We're going to talk to the buyers and sellers of  
 13 the sale. We're going to go look at the property. We're  
 14 going to observe. We're going to do interview questions.  
 15 And then from there now that we have a set of influenced  
 16 sales, we're going to go outside the project area and  
 17 we're going to find those sales that do not have any  
 18 influence from the project and we're going to compare  
 19 them.  
 20 And when we compare them it's like doing a sales  
 21 comparison approach, which it sounds like you're very  
 22 familiar with. And we're going to find sales that we can  
 23 find that are most similar, and we're going to make  
 24 adjustments just like we're doing an appraisal on that  
 25 property.

1 We're going to find sales that are superior, and  
 2 we're going to bracket the high end that adjust downward  
 3 and we're going to find sales that are lower that adjust  
 4 upward and we're going to compare it to what's happening  
 5 around the market in those sales to see -- to see if the  
 6 market evidence shows that those sales have sold for less  
 7 because of their proximity to the wind tower, more, or  
 8 not at all.

9 And we're also going to -- and that's why that  
 10 verification process is so important to talk to property  
 11 owners to see if what they're telling us matches up with  
 12 the sales evidence that we're finding.

13 COMMISSIONER HANSON: Would you agree that there  
 14 would be a significant number of ancillary or external  
 15 influences on the value of property when you're looking  
 16 at it from a time standpoint of that nature?

17 THE WITNESS: Time, yes. But if you're using  
 18 older sales, yes. I think -- you know, if I'm finding a  
 19 sale that sold next to a wind tower that sold in  
 20 whatever. Make up -- in 2014.

21 My dates of trying to establish uninfluenced  
 22 sales are going to -- in perfect appraisal period are  
 23 going to be around that 2014 time period. Because when  
 24 we have sales that occur in different times of the market  
 25 then you've got to establish a market time adjustment.

1 And just to do that adjustment alone, now you've got to  
 2 go out and find data of properties that have sold during  
 3 that time to establish some kind of a trend of the market  
 4 in -- you know, around Crocker has been appreciating  
 5 1 percent or 2 percent to apply to those changes.

6 So there's a lot of work and adjustments that  
 7 you've got to do. And in appraisal work you just can't  
 8 say I think so or based on my experience this is what the  
 9 adjustment is. You have got to have actual, you know,  
 10 evidence and proof to back up whatever that adjustment is  
 11 for, you know, square footage of a basement, outbuilding.  
 12 If an acreage has 20 acres or 10 acres, you've got to  
 13 figure it out.

14 COMMISSIONER HANSON: You stated that in order  
 15 to complete a 10-point plan, if I may refer to it as  
 16 that, would take six months. However, in your testimony  
 17 you stated that it would not include a variety of items  
 18 such as contract services, discovery, investigation,  
 19 preparing testimony, et cetera.

20 How long do you think -- and I guess that's  
 21 subjective too. Do you have an idea approximately how  
 22 long all of that would take to accomplish?

23 THE WITNESS: As an appraiser I always hate  
 24 being put in a box or a time line. But what it comes  
 25 down to and probably why I can't say within 100 percent

1 certainty of the time is because of experience enough  
 2 across South Dakota working in counties and courthouses  
 3 and doing appraisal work, if I was looking at 13  
 4 operating wind projects in South Dakota, you know, what  
 5 happens if I find, you know, 10 sales in every county?

6 And I think I said there was 14. Well, man, I  
 7 got a lot of work to do. You know, what happens if I go  
 8 out there and I find two sales, you know? Now I don't  
 9 have that much work to do. And so the time line of what  
 10 the requirement would be to complete that type of study  
 11 is -- it's difficult to estimate until you know what kind  
 12 of sales population you're dealing with, but in my  
 13 experience in South Dakota completing these studies for a  
 14 number of different type of energy projects, I think six  
 15 months is a reasonable time frame to try to accomplish  
 16 the research -- research and, you know, write the report  
 17 and what you need to finish the study.

18 COMMISSIONER HANSON: Just getting permission  
 19 from my Chair.

20 You heard the question posed by Commissioner  
 21 Chair Fiegen, I suspect, regarding guaranteed valuation  
 22 for adjacent property owners.

23 Do you have an opinion on that?

24 THE WITNESS: Yes, I do. That's -- I find that  
 25 interesting. A theory or thought. I would have to say I

1 agree with Mr. MaRous on that topic.

2 I think that from the appraisal side just being  
 3 experienced with appraisals, that is a hard process to  
 4 manage to be consistent of how you'd establish some kind  
 5 of a baseline for the market value of a property prior  
 6 and then a time line of what happens if you were going to  
 7 appraise it later. I just --

8 I think that would be difficult. I don't know  
 9 how you'd manage that process. That would be the answer  
 10 that I would give you.

11 COMMISSIONER HANSON: Thank you.

12 Thank you.

13 COMMISSIONER NELSON: Thank you for being here.

14 Did you hear the question that I asked

15 Mr. MaRous regarding his Exhibit A22?

16 THE WITNESS: Yes. If you'd re-answer [sic] it,  
 17 that would be great.

18 COMMISSIONER NELSON: Yeah. And the question I  
 19 asked him was this exhibit shows the six paired sales  
 20 that he analyzed. And my question for him was in his  
 21 analysis did he find any lessening of value for those  
 22 residences that were approximate to a wind turbine? His  
 23 answer was no.

24 I ask you that same question. As you've  
 25 looked at his Exhibit A22, do you see any lessening in

1 value?  
 2 THE WITNESS: And I spoke about this before with  
 3 two sales. You know, I completed that research and  
 4 identified those 13 sales a few weeks ago. I would have  
 5 liked to continue with it. I just didn't have the time  
 6 to complete the research.

7 But in completing the research, two sales, you  
 8 know, there were sales that were -- you know, maybe  
 9 really didn't show much concern. There were some  
 10 farmland sales that identified with some auctions in  
 11 South Dakota that actually had operating wind towers on  
 12 which those seemed to actually sell -- have a pretty  
 13 strong selling price from the wind towers.

14 But with two residential sales, the ones I  
 15 described earlier that had zero appreciation in six years  
 16 in Brookings County and the information that was provided  
 17 to me from Northern Plains Appraisal from his perspective  
 18 and interview did have impacts from damage on that sale.

19 And then the other one was I can't remember the  
 20 number, but it had an 11 percent depreciation, you know,  
 21 so the seller bought it and sold it for less. And it was  
 22 near wind towers. It's in a map that I provided.

23 Those two sales did raise concerns for me, but I  
 24 don't know the answer to the question of really what --  
 25 you know, I could -- I would need to personally verify

1 those to figure out what the sale details are to be able  
 2 to tell you, yeah, those were impacted, no, they weren't,  
 3 you know, what was going on with those.

4 COMMISSIONER NELSON: And would you acknowledge  
 5 that in all six of these cases the residence that was  
 6 used that was proximate to the wind turbine is closer to  
 7 the turbine than what would be allowed for a  
 8 nonparticipating landowner in the Crocker situation?

9 THE WITNESS: I think the Crocker situation,  
 10 correct me if I'm wrong, was around 3,900 feet? Does  
 11 that sound correct?

12 COMMISSIONER NELSON: Correct.

13 THE WITNESS: Yeah. Okay. I'd have to go back  
 14 and look at those sales to answer the question. I do  
 15 know that there was a couple situations where there were  
 16 wind towers closer than 3,900 feet to a property,  
 17 absolutely. I just don't remember if that was the sales  
 18 that showed a decline or not. I don't remember that.

19 COMMISSIONER NELSON: Thank you.

20 And I will just say as I've reviewed these I  
 21 think all six of these are closer to a wind turbine than  
 22 what would be allowed for the nonparticipants in Clark  
 23 County.

24 THE WITNESS: Okay.

25 COMMISSIONER NELSON: Thank you.

1 THE WITNESS: Yeah. Yes.

2 MR. DE HUECK: Mr. Lawrence, listening to you  
 3 discuss things with Gary, it sounds like there's a lot of  
 4 adjustments you can make during an appraisal process,  
 5 evaluation process. So if two appraisers had the exact  
 6 same data set, could they come up -- in terms of your  
 7 six-month study, if you gathered all that data that is  
 8 necessary to complete your six-month study and you had  
 9 two appraisers doing the study, you could come up with  
 10 different results?

11 THE WITNESS: I would say if two appraisers that  
 12 were knowledgeable in these type of settings set out to  
 13 do -- with the same kind of similar scope of work, I  
 14 think there could be -- just depending on the data, I  
 15 think if you have credible appraisers looking at  
 16 everything, I think they're going to come to the same  
 17 conclusions. I think there could be some slightly  
 18 different conclusions, but I think you would find the  
 19 same overall conclusion of the study from two appraisers  
 20 looking at the data.

21 MR. DE HUECK: And if we had this six-month  
 22 study done and then a year from now another wind farm  
 23 came in to South Dakota, would we be able to use that  
 24 same study and -- or would another six-month study need  
 25 to be run?

1 And does it depend on if it were in a different  
 2 part of the state?

3 THE WITNESS: I would say that that study could  
 4 be used again. Could it be used in the different parts  
 5 of the state? I think if it's representative of the  
 6 property types, I would say yes.

7 MR. DE HUECK: Okay. Thank you.  
 8 Any redirect?

9 Oh. Mr. Rislov.

10 MR. RISLOV: If I may.

11 MR. DE HUECK: Yeah. You bet.

12 MR. RISLOV: Okay. Assuming -- going back to  
 13 the last question, assuming that study could be used  
 14 again, would the time necessary to complete that study be  
 15 shortened for subsequent studies?

16 THE WITNESS: Subsequent studies, as you mean by  
 17 specific areas?

18 MR. RISLOV: Okay. You do a study. You said it  
 19 could be used again. Would the next study take less time  
 20 to complete than the initial?

21 THE WITNESS: You mean like if you're updating  
 22 the study?

23 MR. RISLOV: Well, you said it could be used  
 24 again.

25 THE WITNESS: Yeah. You wouldn't have to redo

1 the study. Once you have the study done it's done.  
 2 MR. RISLOV: So it's just applied to the next  
 3 one? You don't have to make any changes?  
 4 THE WITNESS: Changes to -- you're talking your  
 5 conclusions?  
 6 MR. RISLOV: Okay. Let me clarify.  
 7 The one on Crocker, the Crocker Wind Farm.  
 8 Let's say the next one is, I don't know, Perkins County.  
 9 If you apply the same study, you don't have to change a  
 10 thing?  
 11 THE WITNESS: I would say as long as the  
 12 property types are represented within the study, I would  
 13 not see why you need to change anything.  
 14 MR. RISLOV: How long would it take just to, you  
 15 know, change the punctuation, names, and all that type of  
 16 thing?  
 17 THE WITNESS: I don't see why you need to change  
 18 any of that. Once you have a study completed, it should  
 19 be applicable to all areas of South Dakota.  
 20 MR. RISLOV: How often would it have to be  
 21 updated?  
 22 THE WITNESS: I think you'll get varying  
 23 opinions on that, but as time moves on things become out  
 24 of date because more sale transactions occur in the  
 25 marketplace.

1 I think that would go to the lines of what the  
 2 client would want. But I would say that if a year passed  
 3 and we're looking at a large sale population that has  
 4 occurred with maybe some different data to analyze or  
 5 different questions that have come up or impacts, we'd  
 6 probably want to look at that.  
 7 MR. RISLOV: Okay. Those were easy questions  
 8 compared to this one.  
 9 What would it cost for the initial study to do  
 10 one in a manner you consider complete?  
 11 THE WITNESS: I don't have that answer, but I  
 12 could -- they can be very costly because of the time.  
 13 MR. RISLOV: Could you round it to the nearest  
 14 100,000.  
 15 THE WITNESS: I would say a study of this type  
 16 could easily range in a couple hundred thousand dollars.  
 17 MR. RISLOV: So once it was out of date and a  
 18 new one had to be performed, would you be looking at the  
 19 same cost to perform that subsequent updated study a year  
 20 or two or three down the road?  
 21 THE WITNESS: I would believe no. Because once  
 22 you have your data established, I wouldn't assume that  
 23 you're going to have the same number of sales to have to  
 24 analyze. So, you know, it's a time -- it's a time game.  
 25 So if two years from now you're saying go update

1 the study, it's just a matter of going out to the  
 2 courthouses in South Dakota, performing the research to  
 3 identify the sales, and find out what's there to analyze.  
 4 And I would assume in a year's time in  
 5 South Dakota in the rural areas the population of sales  
 6 is not going to be as strong as the population of looking  
 7 from, say, to 2010 to 2018.  
 8 MR. RISLOV: Is there a key to the initial study  
 9 and the Commission approving a specific methodology or  
 10 manner of doing that study and that could be replicated  
 11 at a lower cost in the future?  
 12 In other words, is the methodology key to the  
 13 cost and completion of the study and the answers  
 14 necessarily derived from that?  
 15 THE WITNESS: So I think I understand your  
 16 question. There was a lot there to it.  
 17 But the methodology is going to drive the time  
 18 commitment. I think there's things -- you know, in my  
 19 business as an appraiser I like to be overly thorough,  
 20 which probably not every client -- that doesn't -- that  
 21 doesn't meet the expectations of every client because  
 22 sometimes they need less analysis than more analysis.  
 23 In this type of study I think there is a scope  
 24 of work that is required to have credible results. Does  
 25 it need to go to the analysis -- the extent of everything

1 that I have said? I think there's ways to reduce that.  
 2 But you still -- it still comes back to you still have to  
 3 have enough data to analyze to answer the questions about  
 4 impacts on value.  
 5 I mean, you've got to have more than one sale.  
 6 And so there could be the point where you continue your  
 7 research and you set out the goal of 14 counties across  
 8 South Dakota and after looking at six you have 50 sales  
 9 to analyze that cover the land classes in South Dakota,  
 10 it probably warrants talking to the client saying, hey,  
 11 this is what we have so far. We've got a, you know,  
 12 fairly large population covering a pretty good  
 13 geographical area. Do you want us to continue with the  
 14 other seven counties?  
 15 I've had those type of questions with clients.  
 16 MR. RISLOV: Thank you.  
 17 MR. DE HUECK: Can I follow up?  
 18 Mr. Lawrence, in this situation who is the  
 19 client? Because this sounds like a purely academic study  
 20 that you're describing.  
 21 THE WITNESS: Well, I don't -- it's fictitious,  
 22 the client, whoever that is. You know, I don't know who  
 23 that would be.  
 24 MR. DE HUECK: We certainly don't want the wind  
 25 company to pay for it.



1 THE WITNESS: I'm not suggesting that anyone  
2 needs to pay for it. You know, I'm not saying -- I'm not  
3 suggesting that they have to order the study.

4 MR. DE HUECK: Okay. It's academic.

5 THE WITNESS: No. I wouldn't say it's academic.  
6 I do these type of studies quite often in right-of-way  
7 work where there's damage property cases. Just to the  
8 extent of what level of study goes to what the  
9 requirements and needs of the client are.

10 And client in general, what the project is,  
11 what the questions are being asked from my client about  
12 value.

13 MR. DE HUECK: And here to some degree we're  
14 saying the State of South Dakota is the client because we  
15 want to know the effect of wind towers on property values  
16 across the entire state.

17 THE WITNESS: Okay. I understood that.

18 MR. DE HUECK: Any redirect?

19 MS. EDWARDS: Thank you. No.

20 MR. DE HUECK: And, with that, you may step  
21 down.

22 (The witness is excused.)

23 MR. DE HUECK: Next witness.

24 MS. REISS: I believe staff had asked  
25 Darren Kearney to the stand, and we had turned him over

1 for cross-examination when we left off with his  
2 testimony.

3 MS. SMITH: Sorry. I had to remember exactly  
4 where we were at yesterday so I was getting some input  
5 from counsel. I apologize.

6 CROSS-EXAMINATION

7 BY MS. SMITH:

8 Q. So, Mr. Kearney, you had talked about cumulative  
9 impacts in your testimony; is that right?

10 A. That's correct.

11 Q. As I understand it, the projects that are near this  
12 particular project are not energy conversion facilities  
13 under the siting act; is that correct?

14 A. That would be my read of the rules based on the  
15 definition in 49-41B.

16 Q. And, therefore, are you no longer necessarily saying  
17 that there has to be a cumulative impacts analysis done  
18 with respect to those facilities?

19 A. As it relates to the ARSD 20:10:22.13 and the  
20 definition or the language used in that rule  
21 specifically, I would say that, yeah, that is the case.

22 Q. And you do acknowledge that there was some  
23 information provided by cumulative impacts that was  
24 provided in Brie Anderson's Rebuttal Testimony?

25 A. Yes. I did see some information provided by

1 Ms. Anderson. However, you know, if you wanted to have a  
2 true accumulative impacts analysis, I think it could have  
3 been a little bit more detailed.

4 And I think part of that was because based on my  
5 Direct Testimony she thought I was just focusing on the  
6 grasslands part. And I just used the grasslands part to  
7 kind of emphasize why a cumulative impacts analysis would  
8 be important in these situations. But we're getting wind  
9 farms being sited next to each other.

10 Q. Yeah. And, again, you said that it wasn't required  
11 under the rules?

12 A. Not under that specific rule. However, I think  
13 there's another rule that would allow the Commission to  
14 ask for that information, should they want.

15 Q. And I believe that you didn't cite that in your  
16 testimony; correct?

17 A. That is correct.

18 Q. And there has been cumulative impacts information  
19 provided throughout portions of the Application?

20 A. I think that there has been information provided.

21 Q. Thank you.

22 A. I am satisfactorily -- myself, I think that the  
23 information provided satisfactorily addresses that issue.

24 Q. Thank you.

25 MS. SMITH: I have no further questions.

1 MR. DE HUECK: Mr. Almond.

2 CROSS-EXAMINATION

3 BY MR. ALMOND:

4 Q. In your opinion, do you believe it's appropriate for  
5 the Commission to consider the cumulative effects that  
6 this wind farm -- that would be caused by putting this  
7 wind farm next to two other wind farms?

8 A. I believe that's what I indicated would be  
9 important, for the Commission to consider those.

10 Q. In your written testimony you reference the Willow  
11 Creek Project and the Prairie Winds Project. Do you  
12 recall referencing those projects?

13 A. Willow Creek Project I remember. Prairie Winds I do  
14 not recall.

15 Q. I believe it's on -- the reference with Prairie  
16 Winds would be with respect to the transmission bond.  
17 Does that sound familiar?

18 A. Yes, it does. Now that you refreshed my memory I  
19 used those two as an example to come up with the length  
20 of transmission lines when bondage was required for that.

21 Q. Are you familiar with both of those projects?

22 A. I'm familiar in the sense that for the Prairie Winds  
23 project I could read the Application and the Commission's  
24 Order. For the Willow Creek Project, I worked on that

25 project.

1 Q. So you vetted the Willow Creek Project?  
 2 A. Yes. I assisted in staff's review of that project.  
 3 Q. But the Prairie Winds you weren't involved with -- I  
 4 don't think you were working for the PUC at that time,  
 5 were you?  
 6 A. Correct.  
 7 Q. But you have reviewed the Application, reviewed the  
 8 Commission's Order?  
 9 A. Yes.  
 10 Q. And you've heard a few questions from the  
 11 Commissioners over the last few days asking about other  
 12 wind projects that they've permitted.  
 13 Have you heard those questions from the  
 14 Commissioners?  
 15 A. Yes, I have.  
 16 Q. So I'm getting the sense they're kind of looking for  
 17 some sort of comparison here so I'd like to do that with  
 18 you here.  
 19 Let's start with the Willow Creek Project. Do you  
 20 recall approximately how many acres that project was, the  
 21 total project area?  
 22 A. I want to say it was in the 20,000s but subject to  
 23 check. And there were only 45 --  
 24 MS. SMITH: Objection. Outside the scope of  
 25 testimony.

1 A. There are probably other areas in South Dakota with  
 2 the equivalent wind speeds.  
 3 Q. Do they provide -- Crocker provide any sort of map  
 4 or support to support that statement that it's especially  
 5 good wind resources?  
 6 A. Not that I'm aware of. But there are publicly  
 7 available maps out there produced by the National  
 8 Renewable Energy Laboratory, and I think that -- well, I  
 9 won't go down that.  
 10 I don't think we have it posted on our website. I  
 11 can't remember for sure if we do or not.  
 12 Q. Page 12 of your testimony you recommend that the  
 13 Commission require Crocker to submit an updated  
 14 decommissioning plan and company financials 10 years  
 15 after the date of operation so that the Commission can  
 16 then determine whether a bond is warranted and for what  
 17 amount.  
 18 Do you remember that part of your Direct Testimony?  
 19 A. That's correct. Yep. I do.  
 20 Q. I guess my question is if that's what the Commission  
 21 ultimately does, will participating landowners who have  
 22 agreed to put a turbine on their land be adequately  
 23 protected if the owner of the project goes under between  
 24 now and that 10-year period?  
 25 A. That's a good question. That physical plant will

1 MR. DE HUECK: Sustained.  
 2 MR. ALMOND: May I respond?  
 3 MR. DE HUECK: Go ahead.  
 4 MR. ALMOND: Mr. Kearney testified in his direct  
 5 about his experience working with wind farms. He further  
 6 talked about the Willow Creek and specifically referenced  
 7 it in his testimony. I think that's fair game.  
 8 MS. SMITH: I would disagree. He referenced it  
 9 in terms of the bond. Lots of witnesses have referenced  
 10 lots of projects that they have worked on on lots of  
 11 things, and that doesn't make them relevant to their  
 12 testimony.  
 13 MR. DE HUECK: I agree. In terms of -- he  
 14 referenced it in terms of the bond and not discussing  
 15 specific parameters of the other wind farms.  
 16 Q. This may be outside of your area, but in its  
 17 Application Crocker -- I believe it was in its  
 18 Application, but it's indicated that the project area has  
 19 especially good wind resources.  
 20 Do you have a comment on that? I mean, are there  
 21 other areas in South Dakota that have equally good  
 22 resources?  
 23 MS. SMITH: Objection. Outside of the scope of  
 24 testimony.  
 25 MR. DE HUECK: You may continue, Mr. Almond.

1 obviously have some value to it that if the owner goes  
 2 under, I'm guessing somebody would be looking at buying  
 3 that project and keeping it in service.  
 4 When you look at trying to come up with a bond or  
 5 financial assurance, you're kind of mitigating the risk  
 6 of a project going under, and early on in the life of a  
 7 project staff felt that there wasn't a lot of risk to  
 8 that occurring in the first 10 years, particularly due to  
 9 the dollars on the table with the production tax credit.  
 10 Q. My understanding, the production tax credit is  
 11 phasing out; correct?  
 12 A. I think that Crocker has testified that they're  
 13 currently qualified for the full PTC, which will be that  
 14 amount for the whole 10 years.  
 15 Q. Okay. So, again, hypothetically, Crocker, if they  
 16 continue to manage this project, goes under five, six,  
 17 eight years from now and let's say a buyer doesn't want  
 18 to buy the entire project or no buyer wants to buy the  
 19 project at all.  
 20 I guess then what protection is in place for the  
 21 landowners that have turbines on their property that want  
 22 to have them removed?  
 23 A. That's a good question. There will probably be no  
 24 dollars in a kitty for them to be removed. It would be  
 25 up to the project being held to their word and following

1 whatever the easement language requires and implementing  
2 the decommissioning plan.

3 MR. ALMOND: No further questions.

4 MR. DE HUECK: Commission questions. I bet  
5 we've got a boatload for you, Darren. We'll start with  
6 Commissioner Nelson.

7 COMMISSIONER NELSON: Thank you. And I want to  
8 follow up on the last line of questioning.

9 Do you remember the conversations that I had  
10 regarding decommissioning with witnesses from the  
11 company?

12 THE WITNESS: It's been a lot of conversations,  
13 but I remember, yes, the general line of questioning.

14 COMMISSIONER NELSON: And if I could refresh  
15 you, I had asked a representative of the company if they  
16 would be willing to commit to some kind of a financial  
17 assurance at this point, whether it be a bond or  
18 an escrow or letter of credit, and their response was  
19 that they would, in fact, be willing to do that as long  
20 as they could have some input in crafting that.

21 Would staff be comfortable with that type of  
22 arrangement being established now as opposed to 10 years  
23 from now?

24 THE WITNESS: If the company is willing to do  
25 that, staff has no concerns with that. It would just be

1 perspective because the Application is based on the  
2 configuration that's proposed.

3 You heard a lot of testimony about how Crocker  
4 minimized impacts. Well, if you take the turbine and you  
5 move it from along a grassland edge and put it into the  
6 center of the grassland, now those impacts are changing.

7 So how do you account for that update, the  
8 potential impacts and what that flexibility is that  
9 wouldn't drive that additional review. I guess I didn't  
10 have any way to defend a certain amount.

11 COMMISSIONER NELSON: And so I'm -- and I  
12 appreciate all of that explanation, but at this point  
13 does staff have a specific recommendation, or is it, in  
14 fact, zero?

15 THE WITNESS: At this point it's zero. And if  
16 the Commission finds there's enough necessity or if  
17 the -- the flexibility desired by the Applicant is  
18 prudent, then you can come up with a threshold that you  
19 think that would protect the environment, the  
20 nonparticipants, the participants, and so forth and allow  
21 for that opportunity of public comment.

22 COMMISSIONER NELSON: So whatever that number is  
23 that we ultimately settle on, the Applicant stressed that  
24 if there was a need to move outside of that boundary for  
25 whatever reason, that there needed to be a very quick

1 added protection for the participating landowners.

2 COMMISSIONER NELSON: And that's what we're all  
3 about here so I appreciate that answer.

4 The other issue that I'd like to explore with  
5 you a little bit is this 1,000-foot radius for the  
6 micrositing. Does staff have any -- you know, I think  
7 some of the original numbers that were tossed around were  
8 325 or 500. And then this 1,000 foot really at least for  
9 me came out of the blue. You've heard the company's  
10 explanation as to why they feel they need that.

11 Does staff have an opinion on what the  
12 appropriate number should be and why?

13 THE WITNESS: That's a good question. We've had  
14 a lot of conversations internally with staff what that  
15 appropriate amount is.

16 If we came up with a certain radius, 325, 500,  
17 1,000, staff would have to defend that; right? And so I  
18 think our approach was we're going to say zero feet.  
19 Come back in for approval. The approval process is -- in  
20 our experience has been not too difficult or lengthy of a  
21 process for a material deviation change, and it could be  
22 addressed by the Commission at that time.

23 We felt that the 325-foot proposal in that  
24 letter Crocker filed in EL17-028 was probably reasonable,  
25 but I don't know how to defend that from a technical

1 process for having that approved so that there wouldn't  
2 be an impediment to construction.

3 So my question for you is whatever number we  
4 choose, what would you recommend for the best process for  
5 the company to follow if they needed to go outside of  
6 that boundary?

7 THE WITNESS: I think that in my initial  
8 testimony staff requested 30 days for the review and to  
9 flag any issues or maybe bring it to the Commission for  
10 approval.

11 We don't have concerns with Crocker's language  
12 where they would say if nobody raises concerns or flags  
13 anything, it gets automatically approved. That part of  
14 the language we don't have concerns about, right?

15 It's just the amount of time it would take for  
16 staff to conduct a review, to allow interested parties to  
17 maybe comment on the turbine change if it is, in fact, a  
18 large one where it might warrant some type of additional  
19 comment.

20 We think five days is a little tight to complete  
21 our review, especially if people are on vacations or  
22 traveling or working on other docket workload. The last  
23 we were talking with Crocker was, well, okay, what about  
24 10 calendar days? Yeah. We're getting into something  
25 that's probably workable for staff to review and come up

1 with. Preferably we'd like 30 days but --  
2 COMMISSIONER NELSON: So do I take it that you  
3 and the Applicant are still in discussions on that  
4 particular point?

5 THE WITNESS: On the duration, yes. On the  
6 threshold amount, 1,000 feet, 0 feet, 325 feet. We just  
7 are kind of throwing it out to the Commission to figure  
8 out what's reasonable.

9 COMMISSIONER NELSON: That's what I was just  
10 going to say. Ultimately there's three of us here that  
11 are going decide that so you're off the hook with that  
12 particular question.

13 So after the 10 or the 30 days, whatever might  
14 be settled on, do you anticipate the Commission would  
15 have to give the final approval? What do you anticipate?

16 THE WITNESS: Only if either staff, Commission,  
17 or interested party, to be defined, that that would flag  
18 it and say, hey, wait a minute. We want the Commission  
19 to review and consider these aspects of it, then yes, it  
20 would come to the Commission at a regularly scheduled  
21 Commission meeting for approval.

22 Otherwise, if nobody says anything, it gets  
23 filed in the docket, goes out on the Service List.  
24 Nobody writes a letter to the Commission or files a  
25 letter requesting formal Commission approval, then it

1 would be automatically approved.

2 COMMISSIONER NELSON: Very good. Thank you,  
3 Mr. Kearney.

4 COMMISSIONER HANSON: Good morning, Mr. Kearney.

5 THE WITNESS: Good morning.

6 COMMISSIONER HANSON: Am I pronouncing that  
7 correctly?

8 THE WITNESS: Yes.

9 COMMISSIONER HANSON: During the discussions and  
10 your testimony, your written testimony and some of the  
11 testimony that you've given in response to the  
12 discussions that have taken place after that, I'm not  
13 quite positive on what your position is -- or what  
14 staff's position is in relationship to the three items  
15 that were touched upon where your -- prior to the  
16 meetings that we've had here the past couple days --  
17 several days here.

18 You gave a list of the three rules that you felt  
19 you needed additional information on. Could you give me  
20 an update exactly where you are on one, two, three on  
21 those?

22 THE WITNESS: Well, Crocker has addressed some  
23 of the concerns. We still have some factual concerns  
24 with the -- number one is I believe -- is that the  
25 property valuation section of the rule, based on our

1 witness's testimony. And the second one would be the  
2 cultural resources. We would have some concerns with  
3 that still.

4 COMMISSIONER HANSON: But you're satisfied --  
5 excuse me. You're satisfied with the third item at this  
6 juncture?

7 THE WITNESS: For cumulative impacts and  
8 providing the information, yes. For addressing any  
9 potential environmental concerns, I think we still have  
10 some concerns around that regarding possible mitigation.

11 COMMISSIONER HANSON: And Commissioner Nelson  
12 said that you are off the hook on the 1,000 feet versus  
13 350 feet or whatever. 325. Excuse me. I'm going to put  
14 you back on the hook just a little bit.

15 What is your Christmas morning opening up the  
16 package footage that you'd like to see?

17 THE WITNESS: That I would like to see?

18 COMMISSIONER HANSON: Yeah. Well, that staff  
19 would like to see.

20 THE WITNESS: That I would like to see or have  
21 to defend? I think 325 would be reasonable.

22 COMMISSIONER HANSON: What footage do you  
23 believe to be the most responsible?

24 THE WITNESS: The most responsible would  
25 probably be zero because then it would afford all parties

1 to review and allow GF&P, SHPO to comment and be included  
2 in the process, and it would be the most transparent.

3 COMMISSIONER HANSON: Thank you for reiterating  
4 that portion for me.

5 I think that all of them have been covered. All  
6 the other questions I had have been covered. Thank you  
7 for your testimony.

8 CHAIRWOMAN FIEGEN: We're getting down to the  
9 end. And I just have a couple questions for you.

10 First of all, I have a question on your road  
11 bond. It looks like the dockets were from '15 and '09.  
12 And what kind of formula did they use? Did the staff go  
13 out and assess the different roads?

14 THE WITNESS: Early on I think in the early  
15 2000s they had a formula, but as we worked on these  
16 siting dockets it's moved to kind of what have we done in  
17 the past? How does it kind of match up with this project  
18 and what we felt would be a reasonable amount to protect  
19 the roads?

20 CHAIRWOMAN FIEGEN: Okay. I just wanted to make  
21 sure the adjustment that you made in there had some type  
22 of foundation that the staff did prior. So thank you for  
23 that.

24 THE WITNESS: And I --

25 CHAIRWOMAN FIEGEN: You know, we're talking a

1 lot about this 1,000 foot and you talk about it a lot in  
2 your testimony and the reasonableness not only to the  
3 developer but the reasonableness to the public.

4 So the staff possibly in their negotiations that  
5 are private because we don't get to hear those as a  
6 Commission -- could there be some type of conditions on  
7 those negotiations? For example, let's just say you  
8 choose 100 feet or 200 feet. I don't know. 300 feet.

9 If they move onto grasslands or if they move  
10 onto native lands or if they move into a wetland area,  
11 then it would come in front of the Commission, or is  
12 there something you could do in your condition that  
13 really protects the public?

14 I mean, if it would go into a cropland area,  
15 that would be a bonus.

16 THE WITNESS: That's a very good question. And  
17 in order to do that, you'd probably have to go turbine by  
18 turbine and say you're moving it in this area. If you  
19 move it west, you're going to hit grassland so you can't  
20 move it west, but you can have 1,000 feet east into  
21 cropland.

22 And so it's difficult to tell. I mean, the  
23 Application is based on the turbine layout that's  
24 presented, and all the studies are done based on the  
25 turbine layout that's presented. And so it would be a

1 case-by-case deal where you'd have to go through and  
2 predict every possible situation and then imbed that in  
3 the conditions. So I think it would be difficult to try  
4 to predict every situation.

5 CHAIRWOMAN FIEGEN: And it's not necessarily to  
6 predict every situation. But when a situation comes to a  
7 developer and they move 200 feet and it didn't affect  
8 grasslands or native lands -- or native prairie, maybe  
9 there's an easier process that they could just -- in that  
10 situation they could notify you, hey, we haven't moved  
11 into grasslands. We haven't moved into native prairie.  
12 Just want to notify the staff to confirm that that's what  
13 we did.

14 I don't know that you have to look at every  
15 120 towers, but you could look at that one tower and make  
16 the process much simpler.

17 THE WITNESS: Yes. You could make some general  
18 conditions to that language that would, you know, afford  
19 them to notify staff or have some type of review if  
20 you're hitting any possible sensitive areas.

21 CHAIRWOMAN FIEGEN: And then that could go to  
22 the staff instead of the Commission. The staff could  
23 look at it -- I can't remember what we look at sometimes  
24 and we get notification if we don't respond, it's okay.

25 And I can't remember what process that is. But

1 there is a process that we have that the Commission sees  
2 something and don't necessarily vote on it because of a  
3 condition or whatever we've put on before.

4 THE WITNESS: The Commission has afforded staff  
5 the ability to review and not require a formal approval  
6 in some cases. Not necessarily for these material  
7 deviations.

8 For material deviations, if there was one that  
9 was outside the parameters of the permit, then it has  
10 come to the Commission for review and approval.

11 For other modifications it could be  
12 automatically approved. If nobody brings it up to the  
13 Commission level for approval, and I think that's the  
14 process that -- I would prefer imbedded rather than just  
15 leaving staff review and then end it at that.

16 CHAIRWOMAN FIEGEN: Thank you. I think that's  
17 all my questions.

18 MR. DE HUECK: Any redirect?

19 MS. REISS: Just briefly. Thank you.

20 REDIRECT EXAMINATION

21 BY MS. REISS:

22 Q. Mr. Kearney, there was a lot of discussion regarding  
23 turbine flexibility with the Commissioners. Did you talk  
24 to any agencies regarding their opinion of flexibility?

25 A. Yes. I believe that was a question asked in our

1 Direct Testimony of the agencies.

2 Q. Did you receive any feedback from the agencies?

3 A. I indicated it would kind of -- it may change their  
4 opinion on a project or their assessment of the project.

5 Q. Which agencies had that opinion?

6 A. I believe it was SHPO and Game, Fish & Parks.

7 MS. REISS: Nothing further. Thank you.

8 MR. DE HUECK: Any recross?

9 MS. SMITH: No.

10 MR. DE HUECK: Any recross?

11 Mr. Kearney, have you started researching the  
12 differences between letter of credit, the other tools for  
13 putting up money up front?

14 THE WITNESS: No, I have not researched that. I  
15 have only researched what amount would be needed up  
16 front. If the Commission were to go that route, for  
17 example, of a bond, if the Commission so chooses to put a  
18 bond, I've kind of looked at what we've done in the past.

19 MR. DE HUECK: Okay. And I -- what is that  
20 amount?

21 THE WITNESS: For the Willow Creek Project,  
22 which I think Commissioners were kind of looking to how  
23 we've handled in the past, that amount was about \$111,000  
24 per turbine.

25 So for this project, right, that was a

1 45 turbine project, a \$5 million bond. This project  
2 you'd be sitting around a \$15 million bond. And then you  
3 would have to account for inflation in that.

4 But it kind of goes to the difficulties of  
5 establishing a bond up front because you don't know the  
6 specific decommissioning costs at this time.

7 MR. DE HUECK: Absolutely. Yeah. Okay. I  
8 suspect we'll see more of that posthearing, writing,  
9 briefing, or something. Maybe.

10 THE WITNESS: That wasn't our position so I  
11 don't know if we're going to include that information,  
12 but we can if the Commission requests it.

13 MR. DE HUECK: Okay. Anybody?  
14 Thank you.

15 (The witness is excused.)

16 MR. DE HUECK: Staff, do you have more  
17 witnesses?

18 MS. REISS: Staff has completed its direct case.  
19 Thank you.

20 MR. DE HUECK: All right. We will take lunch.

21 MS. SMITH: Excuse me. I really think that we  
22 could finish if we went for another 15 minutes,  
23 20 minutes, depending on questions if that would be okay  
24 with everyone.

25 Can we have five minutes to discuss?

1 MR. DE HUECK: Sure.

2 MS. SMITH: Thank you.

3 (A short recess is taken.)

4 MR. DE HUECK: We'll call the hearing back to  
5 order. We're moving on to Crocker's final case.

6 MS. SMITH: So there were a few cleanup items  
7 that we tracked, and so I'm going to address those.

8 So one is Commissioner Nelson had asked for  
9 citations on the information that was cited by Michael  
10 Morris. That has been filed in the docket as A10-2 this  
11 morning so that is information that is provided to the  
12 Commission.

13 And we would offer that I guess as an exhibit,  
14 assuming that was the intent of Commissioner Nelson. I  
15 think either way you wanted the information; right?

16 COMMISSIONER NELSON: It wasn't my intent, but  
17 as I thought about it overnight, I thought that probably  
18 should be. So thank you.

19 MR. DE HUECK: Any objection to that? I dare  
20 you.

21 MR. ALMOND: Given the request from Commissioner  
22 Nelson to see that, I'm not going to object.

23 MR. DE HUECK: All right.

24 Yes. I double dog dare you.

25 MS. EDWARDS: I'm going to object on foundation.

1 I'm not. No objection.

2 MR. DE HUECK: So admitted.

3 MS. SMITH: And the second was a question about  
4 insurance so I will read slowly, but we are just going to  
5 read the insurance provision from the lease into the  
6 record.

7 "Section 4.5: Insurance. Lessee shall obtain  
8 and maintain, enforce policies of insurance covering the  
9 wind facilities and lessee's activities on the premises  
10 at all times during the term, including specifically  
11 comprehensive general liability insurance with a minimum  
12 combined occurrence and annual limitation of \$1 million  
13 for the period prior to commencement of construction of  
14 any wind facilities on the premises other than  
15 meteorological towers and \$3 million for the period  
16 commencing on the construction date. Such insurance  
17 coverage for the wind facilities and premises may be  
18 provided as part of a blanket policy that covers other  
19 wind facilities or properties as well. Any such policies  
20 shall name lessor as an additional insured. Lessee  
21 agrees to provide lessor with not less than 30 days'  
22 prior written notice of any cancellation or material  
23 change in such insurance. Lessee shall provide lessor  
24 with copies of certificates of insurance evidencing this  
25 coverage upon request by lessor. Policies shall provide

1 coverage for any costs of defense or related fees  
2 incurred by lessor. Lessee shall also reimburse lessor  
3 for any increase in lessor's insurance premiums relating  
4 to the premises to the extent that such increase is  
5 directly caused by the installation of the wind  
6 facilities or lessee's operations on the premises."

7 MR. ALMOND: And I would request that the entire  
8 lease be admitted into the record. She's reading from a  
9 document. I would request that the document be admitted  
10 into the record.

11 MS. SMITH: And I would object because it's  
12 confidential, and we are providing the terms that were  
13 specifically requested by Commission.

14 MS. EDWARDS: I request that the entire document  
15 be provided as confidential.

16 MR. DE HUECK: I would go along with a complete  
17 redaction except for the portion that pertained to the  
18 Commission question that led to the reading of this  
19 document into the record.

20 MR. ALMOND: May I make my record, please.

21 MR. DE HUECK: You bet.

22 MR. ALMOND: As far as the confidentiality of  
23 that document, the Public Utilities Commission,  
24 specifically ARSD 20:10:01:39 through 42, have very  
25 specific procedures for how information becomes

1 confidential.

2 It's the Applicant's burden to provide such

3 information and to satisfy the burden. I don't think

4 they've done so on the record here today.

5 MS. SMITH: I would object on relevancy then

6 because it is not relevant to the request that was made

7 by the Commission and that has nothing to do with

8 confidentiality.

9 MR. DE HUECK: Agree. You didn't have to read

10 this lease language into the record today. And it was in

11 response to a Commission question. I believe that was

12 yesterday.

13 MS. SMITH: Yes. It was one of these

14 three days. Yes.

15 MR. DE HUECK: Okay. Commissioner Nelson.

16 COMMISSIONER NELSON: If I might ask just a

17 follow-up related question that I asked at the time that

18 I got into this whole issue, there was this -- and I

19 think it was in one of the data request responses, this

20 reference to the \$6.4 million judgment.

21 Do you know, was that judgment against the

22 landowner or against the tower owner? Nobody has been

23 able to clarify that for me.

24 MS. SMITH: I do not know, but I was also going

25 to read into the record the indemnification provision

1 you.

2 MS. SMITH: So I believe there were two other

3 items.

4 There was a question from Commissioner Fiegen

5 about turbine locations on Jody Obermeier's property.

6 Commissioner, it's a bit complicated because

7 Jody and her husband own a parcel by themselves. We know

8 that there is one proposed location on that land. They

9 own land jointly with all of their other family members

10 that we would rather not dig into because they are not

11 here and didn't testify. We haven't talked to them. But

12 there are other turbine locations on other parcels that

13 they have an interest in.

14 I believe the last was the decommissioning. So

15 we had been asked some questions about decommissioning.

16 I am authorized on behalf of Crocker to say the company

17 would commit to providing some form of financial

18 assurance with flexibility, including a letter of credit

19 at least 30 days prior to operation of the project, in an

20 amount to be determined, and they would request the

21 ability to address what the amount that should be imposed

22 would be in briefing, as we have not had a chance to

23 really analyze that issue.

24 That's where we stand on that issue today.

25 COMMISSIONER NELSON: If I might respond, I

1 because I believe our position would be that if -- I

2 don't know the circumstances of that particular case, but

3 from a legal perspective, if a third party flew into the

4 tower, it would either be -- and something happened on

5 the owner's property because of the tower, it would not

6 be the landowner's responsibility.

7 It may be the person that flew into the tower's

8 responsibility. It may be the lessee's responsibility as

9 far as, you know, the wind farm because it's their

10 facilities. We don't see how it would be the

11 landowner's. We would have to understand the specifics

12 of the case.

13 As you know, it always depends in law, and I

14 hate to say that but that's our position and that's why

15 we're going to provide the indemnification provision from

16 our lease.

17 COMMISSIONER NELSON: And you'll provide that as

18 unredacted when you file. And I don't need you to read

19 it in unless you think you need to as long as you file it

20 unredacted.

21 MS. SMITH: As long as you're fine with that.

22 COMMISSIONER NELSON: Yes.

23 MS. SMITH: I'm happy not reading it again. And

24 I'm sure Cheri is as well.

25 COMMISSIONER NELSON: My thought exactly. Thank

1 appreciate your going to that level. I will tell you

2 I've got an amount right here, and so I'm going to be

3 very curious to see what you all come up with.

4 MS. SMITH: Can we ask you what yours is?

5 COMMISSIONER NELSON: I'll see what you all come

6 up with.

7 MS. EDWARDS: Can we get some clarification?

8 Will you be filing that language from the lease as

9 confidential? The whole lease?

10 MS. SMITH: No. We're going to redact

11 everything but those two provisions from the lease and

12 file it.

13 MS. EDWARDS: I would object and ask that the

14 entire thing be filed confidential or otherwise. There

15 were several questions about protections for landowners

16 so the whole document has been relevant, and you guys

17 chose to read it into the record.

18 MR. DE HUECK: Objection noted. I'm fine with

19 the redaction. I appreciate the fact we're getting any

20 of it.

21 MS. SMITH: With that, we have nothing further.

22 And at this point we would waive any final comments and

23 address it in briefing.

24 MR. DE HUECK: Well, that's going to conclude

25 the evidentiary part of the hearing. And I'm going to

1 let Commissioner Nelson move on to posthearing procedure.  
 2 COMMISSIONER NELSON: Thank you.  
 3 As you know, February 26 the Commission signed  
 4 an order with the procedural schedule. I am going to  
 5 propose for my fellow Commissioners' consideration two  
 6 changes to that going forward.  
 7 The very last line of that schedule reads,  
 8 "Posthearing briefs and proposed findings due May 28,  
 9 2018."  
 10 I would move that we amend that by changing  
 11 May 28 to 5:00 p.m. on May 29 and that we strike the  
 12 words "proposed findings due" and replace it with "at  
 13 your option, proposed findings and conditions."  
 14 Mr. Chair, may I discuss the motion? Madam  
 15 Chair, may I discuss the motion?  
 16 CHAIRWOMAN FIEGEN: I know. I kept on asking  
 17 him do you have the gavel or do I have the gavel and he  
 18 kept on saying could you just listen to the motion. So I  
 19 assumed that he was keeping the gavel.  
 20 Go ahead with your discussion on the motion.  
 21 COMMISSIONER NELSON: Thank you.  
 22 Obviously, the date issue, May 28 is Memorial  
 23 Day, and if you all want to work that weekend and have it  
 24 in that day, I guess that's fine. But as we've talked  
 25 about internally how we're going to deal with that once

1 it comes in, we're certainly fine with 5 o'clock on the  
 2 29 to just give you all an extra day, particularly a  
 3 workday, to get that in.  
 4 So far as the other change, if any of you have  
 5 proposed conditions, we want to welcome those for our  
 6 consideration. And also that we will not require you to  
 7 propose findings but certainly at your option if you wish  
 8 to. We want to make that flexibility available.  
 9 CHAIRWOMAN FIEGEN: One quick question on your  
 10 motion. So you're still asking for a brief, but they  
 11 have options in their briefs?  
 12 COMMISSIONER NELSON: Yes. And so that line  
 13 would read, "Posthearing briefs and, at your option,  
 14 proposed findings and conditions due May 29, 2018."  
 15 CHAIRWOMAN FIEGEN: Thank you.  
 16 COMMISSIONER NELSON: 5:00 p.m.  
 17 CHAIRWOMAN FIEGEN: Are there other questions or  
 18 discussion on that motion?  
 19 Hearing none, all in favor say aye; opposed,  
 20 nay.  
 21 Commissioner Nelson.  
 22 COMMISSIONER NELSON: Aye.  
 23 CHAIRWOMAN FIEGEN: Commissioner Hanson.  
 24 COMMISSIONER HANSON: Aye.  
 25 CHAIRWOMAN FIEGEN: Commissioner Fiegen votes

1 aye. Motion carries.  
 2 Is there anything else that comes before the  
 3 Commission?  
 4 MS. SMITH: No. Thank you very much. We  
 5 appreciate your time.  
 6 CHAIRWOMAN FIEGEN: Anything else that comes  
 7 before the Commission before I make a closing comment?  
 8 I just want to thank everybody for coming to  
 9 South Dakota. Some of you came to South Dakota. Some of  
 10 you are South Dakotans and came to your State Capitol,  
 11 and I certainly appreciate that.  
 12 I appreciate the decor of the hearing. It was  
 13 very professional and everybody was very respectful and I  
 14 certainly appreciate that.  
 15 Otherwise, is there a --  
 16 MR. ALMOND: I would also like to add that me,  
 17 my clients, and my office certainly appreciate the PUC  
 18 staff and the hard work that they have put into this.  
 19 They have been beyond exceptional in our opinions so I  
 20 just want them to be recognized.  
 21 CHAIRWOMAN FIEGEN: I would totally agree.  
 22 I don't know if there's a motion to adjourn, but  
 23 we're going to take it anyway.  
 24 Is there a motion to adjourn?  
 25 COMMISSIONER HANSON: Move to adjourn.

1 CHAIRWOMAN FIEGEN: All in favor say aye;  
 2 opposed, nay.  
 3 Commissioner Nelson.  
 4 COMMISSIONER NELSON: Aye.  
 5 CHAIRWOMAN FIEGEN: Commissioner Hanson.  
 6 COMMISSIONER HANSON: Aye.  
 7 CHAIRWOMAN FIEGEN: Commissioner Fiegen votes  
 8 aye. We are adjourned.  
 9 (The hearing is concluded at 12:10 p.m.)  
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1 STATE OF SOUTH DAKOTA)  
2 :SS CERTIFICATE  
3 COUNTY OF SULLY )  
4  
5 I, CHERI MCCOMSEY WITTLER, a Registered  
6 Professional Reporter, Certified Realtime Reporter and  
7 Notary Public in and for the State of South Dakota:  
8 DO HEREBY CERTIFY that as the duly-appointed  
9 shorthand reporter, I took in shorthand the proceedings  
10 had in the above-entitled matter on the 11th day of  
11 May, 2018, and that the attached is a true and correct  
12 transcription of the proceedings so taken.  
13 Dated at Onida, South Dakota this 22nd day of  
14 May, 2018.  
15  
16  
17  
18 /s/ Cheri McComsey Wittler  
19 Cheri McComsey Wittler,  
20 Notary Public and  
21 Registered Professional Reporter  
22 Certified Realtime Reporter  
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Est. Refl Payment  
**\$661/mo**

19937 473rd Ave, White, SD is a single family home that contains 2,748 sq ft and was built in 1908. It contains 5 bedrooms and 2 bathrooms. This home last sold for \$169,500 in May 2015.


The Rent Zestimate for this home is \$1,350/mo, which has increased by \$50/mo in the last 30 days. The property tax in 2010 was \$444. The tax assessment in 2010 was \$32,700.

### Facts and Features

 **Type**  
Single Family

 **Year Built**  
1908

 **Heating**  
Baseboard, Forced air

 **Cooling**  
Central

 **Parking**  
No Data

 **Lot**  
14.8 acres

### INTERIOR FEATURES

#### Bedrooms

Beds: 5

#### Heating and Cooling

Heating: Baseboard, Forced air

Heating: Electric, Propane butane

Cooling: Central

#### Basement

Unfinished basement

#### Appliances

Appliances included: Dishwasher, Dryer, Freezer, Microwave, Range / Oven, Refrigerator, Washer

#### Flooring

Floor size: 2,748 sqft

Flooring: Carpet, Hardwood, Linoleum / Vinyl, Softwood



[CORRECT HOME FACTS](#)   [SAVE](#)   [SHARE](#)   [HIDE](#)   [GET UPDATES](#)    [Q](#)

[Public View](#)   [Owner View](#)

South Dakota · Brookings · 57006 · 5705 Rathum Loop

# 5705 Rathum Loop, Brookings, SD 57006

3 beds · 1 bath ·  
2,078 sqft

**SOLD: \$142,000**

Sold on 06/05/15

Zestimate®:  
\$163,687

EST. REFI  
PAYMENT

Est. Refi  
Payment:  
\$581/mo



[See current rates](#)

## Home Shoppers are Waiting



Ask an agent about market conditions in your neighborhood.

*Note: This property is not currently for sale or for rent. The description below may be from a previous listing.*

Here is your chance to own a home with nearly a 1/2 acre lot just a few minutes from Brookings. The home has had many updates over the past years including new roof, flooring, wall coverings, cabinetry and much more. The home was appraised for \$156,000.00 over two years ago. Priced at just \$149,000.00 this place can be yours today at a great value, call for a private tour!!!

#### WHAT I LOVE ABOUT THE HOME

This home offers over 2,000 finished sq ft. and has a very nice country setting with room to build a nice detached shop.

#### Facts and Features

 <b>Type</b> Single Family	 <b>Year Built</b> 1973	<b>Heating</b> Forced air
 <b>Cooling</b> Central	<b>Parking</b> 3 spaces	<b>Lot</b> 0.49 acres

#### INTERIOR FEATURES

##### Bedrooms

Beds: 3

##### Attic

Attic

##### Heating and Cooling

Heating: Forced air

Heating: Propane  
butane

Cooling: Central

##### Appliances

Appliances included:  
Dishwasher, Dryer,  
Range / Oven,  
Refrigerator, Washer

**Flooring**

Floor size: 2,078 sqft

**Other Interior Features**

Fireplace  
Ceiling Fan  
Room count: 9

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**SPACES AND AMENITIES**

**Size**

Unit count: 0

**Spaces**

Jetted Tub

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**CONSTRUCTION**

**Type and Style**

Structure type:  
Bungalow  
Single Family

**Dates**

Built in 1973

**Other Construction Features**

Stories: 1

**Materials**

Roof type: Composition  
Exterior material:  
Shingle, Vinyl

Foundation type:  
Crawl/Raised



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**EXTERIOR FEATURES**

**Patio**

Deck  
Porch

**Lot**

Lot: 0.49 acres

**Other Exterior Features**

**Yard**

Lawn

Parcel #:

040901104928120

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**PARKING**

Parking: Off street,  
Attached Garage,  
Detached Garage, 3  
spaces, 764 sqft garage

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**UTILITIES**

**Green Energy**

Good solar potential  
Sun Number™: 62 ?

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**OTHER**

Last sold: Jun 2015 for  
\$142,000

Last sale price/sqft: \$68

Garage Count: 1 Car

Garage, Water: Well,

Age: 41-50 Years Old,

Flooring: Mixed, Sewer:

Septic, Area Description:

Country Living, General:

Window Treatments,

Bath Tub and Shower,

Fireplace Description:

Wood Burning Stove

[County website](#) [See data sources](#)

[See Less Facts and Features ^](#)

## Home Value

Zestimate<sup>®</sup>

**\$163,687**

ZESTIMATE  
RANGE <sup>?</sup>

\$156,000 -  
\$172,000

LAST 30 DAY  
CHANGE

+\$2,353  
(+1.5%)

[Zestimate history & details v](#)

## Owner Dashboard

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

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**IN THE MATTER OF THE  
APPLICATION BY DAKOTA RANGE I,  
LLC AND DAKOTA RANGE II, LLC  
FOR A PERMIT OF A WIND ENERGY  
FACILITY IN GRANT COUNTY AND  
CODINGTON COUNTY, SOUTH  
DAKOTA, FOR THE DAKOTA RANGE  
WIND PROJECT**

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**STAFF'S FIRST SET OF DATA  
REQUESTS TO INTERVENORS**

**EL18-003**

**Submitted by Teresa Kaaz on 4/27/2018**

Below, please find Staff's First Set of Data Requests to Intervenors. Please submit responses within 10 business days, or promptly contact Staff to discuss an alternative arrangement.

- 1-1) Provide copies of all data requests submitted to or by you and copies of all responses provided to those data requests. Provide this information to date and on an ongoing basis.

This information will be provided.

- 1-2) Refer to SDCL 49-41B-22.
- a. Please specify particular aspect/s of the applicant's burden that the individuals granted party status intend to personally testify on.
  - b. Please specify particular aspect/s of the applicant's burden of proof you intend to call a witness to testify on.

We are still evaluating the Application and Dakota Range I, LLC and Dakota Range II, LLC ability to satisfy the provisions of SDCL-49-41B-22. At the present time, we the Intervenors intent to illicit testimony on all four points of SD-49-41B-22 already identified by Dakota Range I. LLC and Dakota Range II, LLC and the PUC Staff (via subpoenas). We the intervenors are still evaluating whether to call additional witnesses.

- 1-3) Refer to SDCL 49-41B-25. Identify any "terms, conditions, or modifications of the construction, operation, or maintenance" that you would recommend the Commission order. Please provide support and explanation for any recommendations.

I recommend the Commission require a decommission plan prior to the approval of the application., also that the Commission require a performance bond of \$200,000 per turbine., with periodic increases for inflation, decommissioning, and reclamation. I also recommend the Commission require the decommissioning and reclamation of any turbine that remains nonfunctional or out of compliance for more than 12 consecutive months.

I recommend the Commission order proof of liability insurance in the amount of 10 million dollars, minimum. Due to recent settlement that resulted in a fatality.. and \$6.7million settlement. Article published

I recommend the Commission require the Applicant provide a Property Value Guarantee Surety, PVS, for all properties located within two miles of the footprint. Applicant to be responsible for all appraisal costs, and must be completed a minimum of 6 months prior to any construction. This would allow affected homeowners to recoup their loss if they elect to relocate away from the turbine project and cannot sell for pre-project market value of their properties.

I recommend another rapture nest survey be completed, recorded, and turbine sites adjusted, as the last survey was completed June 20<sup>th</sup> 2017 is fast approaching and many new young eagles have been spotted in the immediate area, also I have a Great Horned Owl nesting in my immediate area for several years that is not shown to be recorded in the 2017 study. I believe the study is gravely understated.

I recommend the Commission require the installation, the only lighting, and use of an Aircraft Detection Lighting System which meets FAA standards.

I recommend the commission establish a 3-mile wind turbine free zone around Punished Women Lake and town of South Shore to protect migratory birds, eagles, pelicans, and many other wildlife species, and historical value.

Conditional Use Permits granted Dakota Range I and II, do not match Application to PUC as to the number of turbines to be sited. The Grant County Conditional Use Permit says up to 150 turbines in Grant County. Is this an open door to add many more turbines with no permitting process.

- 1-4) Please list with specificity the witnesses you intend to call. Please include name, address, phone number, credentials and area of expertise.

See response to Request 1-2.

- 1-5) Do you intend to take depositions? If so, of whom?

Not at this time



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

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**IN THE MATTER OF THE  
APPLICATION BY DAKOTA RANGE I,  
LLC AND DAKOTA RANGE II, LLC  
FOR A PERMIT OF A WIND ENERGY  
FACILITY IN GRANT COUNTY AND  
CODINGTON COUNTY, SOUTH  
DAKOTA, FOR THE DAKOTA RANGE  
WIND PROJECT**

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**STAFF'S FIRST SET OF DATA  
REQUESTS TO INTERVENORS**

**EL18-003**

**Submitted by Kristi Mogen on 4/27/2018**

Below, please find Staff's First Set of Data Requests to Intervenors. Please submit responses within 10 business days, or promptly contact Staff to discuss an alternative arrangement.

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I recommend the Commission require a decommission plan prior to the approval of the application, also that the Commission require a performance bond of \$200,000 per turbine, with periodic increases for inflation, decommissioning, and reclamation. I also recommend the Commission require the decommissioning and reclamation of any turbine that remains nonfunctional or out of compliance for more than 12 consecutive months.

I recommend the Commission require a study on industrial standards on cement specks for Turbines in this project. Lincoln County MN, turbines are being decommissioned.

I recommend the Commission order proof of liability insurance in the amount of 10 million dollars, minimum. Due to recent settlement that resulted in a fatality... and \$6.7million settlement. Article published

I recommend the Commission require turbine installation and operating manuals to better evaluate the safety of Industrial Wind Turbines to employees, near by residents, EMS workers, fire fighters and the environment.

I recommend the Commission require “no sale” homes and homes abandoned, within 2 miles of an Industrial Wind Turbine, to be included in the Property Value Studies.

I recommend the Commission require the Applicant provide a Property Value Guarantee, for all properties located within two miles of an Industrial Wind Turbines. Applicant to be responsible for all appraisal costs and must be completed a minimum of 6 months prior to any construction. This would allow affected homeowners to recoup their loss if they elect to relocate away from the turbine project and cannot sell for pre-project market value of their properties.

I recommend the Commission require a Socioeconomic Study of the unique rural lifestyle, requiring the confidentiality agreement in landowner contracts be void for a full and true evaluation, beginning 3 years prior to continue until 3 years after the last turbine installation is completed.

I recommend the Commission require an economic study (net tax report) of the costs to South Dakota taxpayers including but not limited to the production tax credits, payment in lieu of taxes, rate reductions compared to AG production taxes, tax dollars received from taxpayers through economic development, loss of AG production taxes and property value losses.

I recommend the Commission work to protect the participating landowners from contracts allowing Dakota Range to mortgage or collaterally assign or otherwise encumber and grant security interest of Dakota Range Property. (State of Illinois, Docket 14-09577, 12/19/2014)

I recommend the Commission require Dakota Range provide the methods used to determine the flicker and noise studies, so that the submitted study can be fully evaluated.

I recommend the Commission require noise levels at non-participatory landowner’s property line not to exceed 35 dB(A) and 50 dB(C).

I recommend the Commission require studies by noise control engineers and acousticians.

I recommend the Commission, based on Roberts exhibit 4 pages 8-9, require studies and testimony on human health effects from Industrial Wind Turbines. Shirley Wind Farm, WI and more.

I recommend the Commission require the installation, the only lighting, and use of an Aircraft Detection Lighting System which meets FAA standards.

I recommend the Commission require a study on the effects of massive amounts of cement being poured into the aquifers of South Dakota.

I recommend the Commission require a Cradle to Grave Carbon Footprint study of the Dakota Range Project and its true cost to the native prairies and unique South Dakota Environment.

I recommend the Commission investigate the Codington County and Grant County Conditional Use Permits as they do not align with the Dakota Range PUC application. One instance, The Dakota Range PUC application page 44, 10.2 points to some of the changes, that then leads to changes in noise and flicker to non-participating landowners.

I recommend the Commission request clarification concerning letter of support from Grant County Commissioners, (March 20<sup>th</sup>, 2018 Commissioner minutes), letter of support from the Punished Women Lake Association and the statements to the public in Waverly concerning the amount of taxes to the schools and property value stability.

I recommend the Commission uphold US Constitution Article [V] and South Dakota Article VI, Bill of Rights and allow no trespass of flicker, noise, vibration, air turbulence, wake, electromagnetic, and any other effects, including but not limited to, electrical and radio frequency interference, attributed to the Wind Farm on non-participatory landowner's property ("effects easement" in participating landowner contracts). A 2-mile property line setback from non-participating landowners, allowing a waiver exception. This will mitigate many concerns, and level the playing field for all residents living near Industrial Wind Turbines, by having Dakota Range negotiate the cost of doing business with impacted land owners.

- 1-4) Please list with specificity the witnesses you intend to call. Please include name, address, phone number, credentials and area of expertise.

See response to Request 1-2.

- 1-5) Do you intend to take depositions? If so, of whom?

Not at this time



600 East Capitol Avenue | Pierre, SD 57501 P 605.773.3361 F 605.773.5683

Office of the Secretary

October 13, 2017

**RECEIVED**  
**OCT 13 2017**  
**SOUTH DAKOTA PUBLIC  
UTILITIES COMMISSION**

Public Utilities Commission Staff  
SD Public Utilities Commission  
Capitol Building, 1st floor  
500 East Capitol Avenue  
Pierre, SD 57501-5070

Re: PUC Docket EL17-028 - In the Matter of the Application by Crocker Wind Farm, LLC for a Permit of a Wind Energy Facility and a 345 kV Transmission Line in Clark County, South Dakota, for Crocker Wind Farm

Dear PUC Staff:

The South Dakota Department of Health has been requested to comment on the potential health impacts associated with wind facilities. Based on the studies we have reviewed to date, the South Dakota Department of Health has not taken a formal position on the issue of wind turbines and human health. A number of state public health agencies have studied the issue, including the Massachusetts Department of Public Health<sup>1</sup> and the Minnesota Department of Health<sup>2</sup>. These studies generally conclude that there is insufficient evidence to establish a significant risk to human health. Annoyance and quality of life are the most common complaints associated with wind turbines, and the studies indicate that those issues may be minimized by incorporating best practices into the planning guidelines.

Sincerely,

A handwritten signature in cursive script that reads 'Kim Malsam-Rysdon'.

Kim Malsam-Rysdon  
Secretary of Health

<sup>1</sup> <http://www.mass.gov/eea/docs/dep/energy/wind/turbine-impact-study.pdf>

<sup>2</sup> [www.health.state.mn.us/divs/eh/hazardous/topics/windturbines.pdf](http://www.health.state.mn.us/divs/eh/hazardous/topics/windturbines.pdf)