

BEFORE THE SOUTH DAKOTA PUBLIC UTILITIES COMMISSION

DOCKET EL24-023

**IN THE MATTER OF THE APPLICATION BY DEUEL HARVEST WIND ENERGY
SOUTH LLC FOR ENERGY FACILITY PERMITS OF A WIND ENERGY FACILITY
AND A 345-kV TRANSMISSION FACILITY IN DEUEL COUNTY, SOUTH DAKOTA
FOR THE SOUTH DEUEL WIND PROJECT**



**DIRECT TESTIMONY OF JON THURBER
ON BEHALF OF THE COMMISSION STAFF
NOVEMBER 13, 2024**

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EXHIBITS

Exhibit_JT-1 South Deuel Wind's Responses to Staff Discovery

Exhibit_JT-2 Intervenors' Responses to Staff Discovery

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Exhibit_JT-4 Aerial Imagery of Bekaert's Residence

Exhibit_JT-5 Sample Construction Report

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 Bachelor 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, and wind
24 energy facility siting.
25

26 In my sixteen years of regulatory experience, I have either reviewed or prepared
27 approximately 200 regulatory filings. These filings include thirteen wind energy facility
28 siting dockets. I have provided written and oral testimony on the following topics: the
29 appropriate test year, rate base, revenues, expenses, taxes, cost allocation, rate design,
30 power cost adjustments, capital investment trackers, PURPA standards, avoided costs,
31 electric generation resource decisions, and wind energy facility siting dockets.
32
33

1 **II. PURPOSE OF TESTIMONY**

2
3 **Q. What is the purpose of your direct testimony?**

4 A. The purpose of my direct testimony is to discuss the review performed by Commission
5 Staff (“Staff”) of the Application, identify any issues or concerns with the representations
6 made in the Application or by the Applicant, and provide Staff’s recommendation on
7 whether the permit should be granted.
8

9 **III. REVIEW OF THE APPLICATION**

10
11 **Q. Have you reviewed Deuel Harvest Wind Energy South LLC’s (“South Deuel Wind”
12 or “Company” or “Applicant”) Application for energy facility permits of a wind
13 energy facility and a 345-kV transmission facility, Docket EL24-023?**

14 A. Yes. I also reviewed the Company’s prefiled testimony, appendixes, figures, and
15 responses to data requests produced by all parties as it pertains to the issues that I am
16 addressing.
17

18 **Q. Were other Staff involved in the review of the Application?**

19 A. Yes. Staff Analyst Darren Kearney and Staff Attorneys Amanda Reiss and Logan
20 Schaeffbauer also assisted in reviewing the Application.
21

22 **Q. Please explain the review process performed by Staff in Docket EL24-023.**

23 A. After receiving the Application, Staff completed a review of the contents as it relates to
24 the Energy Facility Siting statutes, SDCL 49-41B, and Energy Facility Siting Rules,
25 ARSD 20:10:22. Staff then identified information required by statute or rule that was
26 either missing from the Application or unclear within the Application and requested South
27 Deuel Wind to provide or clarify that information. Once interested individuals were
28 granted party status, Staff also issued discovery to the intervenors in order to
29 understand what concerns they have with the project. Please see Exhibit_JT-1 South
30 Deuel Wind’s Responses to Staff Discovery, and Exhibit_JT-2 for the Intervenors’
31 Responses to Staff Discovery.
32

33 In addition, Staff subpoenaed an expert from the South Dakota Department of Game,
34 Fish, and Parks to assist Staff with our review. Chad Switzer, Wildlife Division Deputy

1 Director, reviewed the potential impacts to wildlife and associated habitats. Mr. Switzer
2 filed direct testimony on behalf of Staff. Further, Commission Staff hired David Hessler,
3 Vice President at Hessler Associates, Inc., to review the information on the noise emitted
4 from the project.

5
6 Finally, Staff assisted the intervenors and affected landowners by providing responses to
7 questions on the wind energy facility, the siting process established by South Dakota
8 law, and the opportunities available for these individuals to be heard by the Commission.
9 If the landowners had specific concerns with the wind energy facility, Staff often
10 recommended that those individuals file comments in the docket for the Commission's
11 review. Where appropriate, Staff also included some of the landowners' questions or
12 concerns in Staff's data requests sent to South Deuel Wind to have them address the
13 issue.

14
15 **Q. What is the purpose of Commission Staff's expert witnesses in this proceeding?**

16 A. Commission Staff sought experts within their respective fields to assess the merits and
17 deficiencies of the Application and supporting studies. Commission Staff requested that
18 the experts address whether the information submitted by South Deuel Wind aligns with
19 industry best practices, and if they agreed with the conclusion South Deuel Wind made
20 regarding the potential impacts from the project.

21
22 **Q. Did Staff request assistance from any other State Agencies in review of the**
23 **Application?**

24 A. Yes. Staff consulted with the State Historic Preservation Office ("SHPO").
25

26 **Q. Did SHPO communicate concerns to Staff specific to the South Deuel Wind**
27 **Project?**

28 A. At the time of writing this testimony, no concerns specific to the South Deuel Wind
29 Project were raised by the SHPO.
30

31 **Q. Why did Staff not request testimony from the SHPO in this proceeding?**

32 A. Staff is unaware of any unique issues or concerns with historic properties that would
33 need to be addressed through the state permitting process. Should any issues arise that
34 fall in their area of expertise, Staff may present the SHPO as a rebuttal witness.

1 **Q. Was South Deuel Wind’s Application considered complete at the time of filing?**

2 A. At the time of the filing, the application was substantially complete. However, as
3 identified above, Staff requested further information, or clarification, from South Deuel
4 Wind which Staff believed was necessary in order to satisfy the requirements of SDCL
5 49-41B and ARSD 20:10:22. It is Staff’s position that ARSD 20:10:22:04(5) allows for
6 the applicant to provide additional information throughout the Commission’s review
7 period. Finally, I would also note that an applicant supplementing its original application
8 with additional information as requested by Staff is not unusual for siting dockets.
9

10 **Q. What is the status of South Deuel Wind’s Conditional Use Permit (“CUP”)
11 application in Deuel County?**

12 A. South Deuel Wind was granted a CUP from Deuel County in 2023.
13

14 **Q. Please explain how obtaining the CUPs impact the Commission’s statutory
15 authority in the wind energy facility siting process.**

16 A. Pursuant to SDCL 49-41B-22, a wind energy facility that holds a conditional use permit
17 is determined not to threaten the social and economic condition of inhabitants or
18 expected inhabitants in the siting area; and determined not to unduly interfere with the
19 orderly development of the region. The granting of a CUP from the applicable local unit
20 of government demonstrates the Applicant met its burden of proof with part of SDCL 49-
21 41B-22(2) and SDCL 49-41B-22(4), and the associated administrative rules.
22

23 **IV. TURBINE MODEL FLEXIBILITY**
24

25 **Q. Please summarize South Deuel Wind’s request for turbine model flexibility.**

26 A. According to Section 4.2.1 of the Application, the Applicant is considering three different
27 turbine models: General Electric 3.8-154, Siemens Gamesa 4.4-165, and Vestas 163-
28 4.5. The specifications of each turbine model are identified in Table 4.2.1. South Deuel
29 Wind requests that the Permit allow for the use of turbine models of comparable capacity
30 and specifications, provided county siting standards are complied with and the
31 conditions specified in the Permit can be complied with.
32
33
34

1 **Q. Has the Commission allowed turbine model flexibility in past dockets?**

2 A. Yes, the Commission has allowed turbine model flexibility in previous dockets.
3 However, I believe the flexibility has been limited to a maximum of two different turbine
4 models.

5
6 **Q. Is it possible for the Applicant to identify the specific turbine model prior to the
7 hearing in this permit proceeding?**

8 A. South Deuel Wind indicated no. In response to Staff data request 1-18, Ms. Monterrosa
9 stated the turbine models are “relatively similar”, and “limiting a project to install a
10 singular turbine model significantly reduces a project’s ability to negotiate cost-effective
11 turbine supply agreements.”

12
13 **Q. Does the turbine model selected impact the number of turbine locations that get
14 constructed?**

15 A. Yes. On Page 21 of the Application, South Deuel Wind identified that up to 68 of the 73
16 proposed turbine locations will be constructed. In response to Staff data request 1-19,
17 the Company further clarified that while they likely will install turbines from one supplier,
18 they may elect to install turbines from multiple suppliers. Depending on the turbine
19 model or models selected by South Deuel Wind, between 57 and 68 turbine locations
20 will be constructed.

21
22 **Q. Has South Deuel Wind indicated a preference on turbine model?**

23 A. On Page 119 of the Application, South Deuel Wind stated that the decommissioning
24 analysis assumed fifty-seven Vestas 163-4.5 turbines because the turbine model is
25 anticipated to be the most optimal turbine for the site.

26
27 **Q. How does South Deuel Wind’s request for turbine flexibility impact the public’s
28 participation in the docket?**

29 A. If the Company selects the Vestas turbine model as indicated, South Deuel Wind would
30 construct 57 of the 73 proposed turbine locations, resulting in 16 alternate locations.
31 Overstating the actual number of turbine locations by 16, or roughly 20% of the
32 proposed locations, also overstates the project impacts and the number of impacted
33 residences. Some of the intervenors’ concerns may be addressed if the Company
34 discloses the optimal site locations for the Vestas turbine model and reduces the number

1 of alternate locations. While the Commission has supported flexibility in the past, the
2 number of alternate locations in this Application may be excessive and lead to an
3 inefficient permitting process.
4

5 **Q. How many non-participating residences are within ¾ of mile of a proposed turbine**
6 **location assuming all 73 turbine locations are constructed?**

7 A. In response to Staff data request 2-1, South Deuel Wind indicated 50 non-participating
8 residences are within ¾ of a mile from a proposed turbine location, and 20 non-
9 participating residences are within a ½ mile from a proposed turbine location. The
10 number of non-participants near turbines for South Deuel Wind seems high in
11 comparison to other recently sited wind facility in the Deuel County area. For example,
12 the Tatanka Ridge Wind project had 14 non-participating residences within ¾ of a mile
13 from a proposed turbine location, and 3 non-participating residences within a ½ mile
14 from a proposed turbine location with approximately 56 turbines. The number of
15 impacted non-participants for South Deuel Wind may be lower, depending on how many
16 and which turbine locations are constructed.
17

18 **V. SETBACK MEASUREMENTS**
19

20 **Q. What is Deuel County’s setback from non-participating residences?**

21 A. According to Table 5.2 of the Application, distances from existing non-participating
22 residences and businesses shall be not less than four times the height of the wind
23 turbine. Non-participating property owners shall have the right to waive the respective
24 setback requirements.
25

26 **Q. For the wind turbine models under consideration, what is the setback in feet from**
27 **non-participating residences?**

28 A. In response to Staff data request 1-35, South Deuel Wind stated “for the GE 3.8-154
29 turbine model which has a tip height of 574 feet, the Deuel County non-participating
30 residence and business setback is 2,296 feet ... For the SG 4.4-164 and V163-4.5
31 turbine models which have tip heights of 589 feet, the Deuel County non-participating
32 residence and business setback is 2,356 feet ...” In terms of miles, a 2,296 feet setback
33 is approximately 0.419 miles and a 2,356 feet setback is approximately 0.430 miles.
34

1 **Q. How did the Company state setbacks are measured?**

2 A. On Page 37 of the Application, the Applicant stated setbacks are measured from the
3 center point of the turbine.
4

5 **Q. Does Staff agree with measuring setbacks from the center point of the turbine?**

6 A. Staff issued data request 1-34 for an explanation and support for that method. In
7 response to Staff data request 1-34, the Applicant indicated that statement “in the
8 Application was a typographical error. Setbacks from residences, businesses, and
9 public buildings are measured from the outside wall of the turbine tower. This is the
10 measuring point identified by the county zoning officer, Jodi Theisen, relying on Deuel
11 County Zoning Ordinance, Article III Definitions:
12

13 Setback Between Uses. Unless specifically mentioned within this ordinance, the
14 setback or separation distance between uses is the minimum horizontal distance
15 measured from the wall line of a neighboring principal building to the wall line of
16 the proposed building/structure/use.”
17

18 Staff is familiar with measuring compliance from the outside wall of the turbine tower and
19 supports this method.
20

21 **VI. SHADOW FLICKER**

22
23 **Q. Does Deuel County have a shadow flicker regulation?**

24 A. Yes. On Table 5.2 of the Application, South Deuel Wind states the “limit for allowable
25 shadow flicker at existing residences to no more than 30 hours annually.”
26

27 **Q. Is the proposed wind facility in compliance with this regulation?**

28 A. It is unclear to staff whether the project is compliant with Deuel County’s shadow flicker
29 regulation. While the Applicant states that no receptor will experience more than 30
30 hours of shadow flicker per year from the Project on Page 98 of the Application, the
31 Applicant included a footnote on that same page indicating the following:
32

33 “Prior to consideration of vegetative blocking or applied mitigation, the GE and SG
34 turbine models indicated three participating receptors may receive over 30 hours of
35 shadow flicker annually and the Vestas turbine model indicated the same at two
36 participating receptors, The final turbine locations and turbine model(s) selected for

1 construction will be modeled at these residences to confirm less than 30 hours of
2 expected shadow flicker annually.”
3

4 **Q. Can a participating residence waive the Deuel County shadow flicker regulation?**

5 A. The information provided in the Application did not specify whether the regulation may
6 be waived by a participating residence.
7

8 **Q. Does the Applicant have a mitigation plan to limit shadow flicker to 30 hours at
9 each receptor?**

10 A. In response to Staff data request 1-58(b)(i), the Applicant stated it would need to perform
11 an updated shadow flicker analysis once the turbine model is selected to remove the
12 impacts from alternate turbine locations that are not used. If the modeling still shows
13 receptors exceeding 30 annual hours of shadow flicker, South Deuel Wind will conduct
14 additional site-specific analyses considering existing screening on the receptor. If
15 modeling continues to predict more than 30 hours of shadow flicker annually, the
16 Company committed to take steps to keep the shadow flicker below 30 hours. These
17 steps may include the use of turbine control software to curtail turbines at certain times
18 of the day.
19

20 **Q. Does Staff have concerns about the modeled shadow flicker exceedances?**

21 A. Since the modeled exceedances occur at participating residences, Staff is less
22 concerned. South Deuel Wind should clarify whether a participating residence can
23 waive Deuel County’s shadow flicker regulation.
24

25 **VII. DECOMMISSIONING**

26
27 **Q. Did the Applicant provide a decommissioning plan, an estimate of monetary
28 costs, and a description of the site condition after decommissioning as required
29 by ARSD 20:10:22:33:01?**

30 A. Yes. South Deuel Wind provided the decommissioning plan and required information in
31 Appendix X of the Application and summarizes the findings in Section 18 of the
32 Application.
33
34
35

1 **Q. Did Commission Staff have any concerns regarding the decommissioning plan?**

2 A. Yes. In Section 1.2 of Appendix X, the Applicant states “Project facilities will be removed
3 to a depth of 42 inches below grade, in accordance with the Deuel County Zoning
4 Ordinance B2022-01 requirements.” The Commission has historically required the
5 removal of turbine foundations to a depth of 4 feet for past wind facilities to allow for
6 normal agricultural activities unless landowner agreements specify a greater depth.
7 While not our preference, the removal of all other facilities to a depth of 42 inches is
8 acceptable to staff.

9

10 Without additional support for 42 inches as a removal depth, Staff would recommend the
11 Applicant remove turbine foundations to a depth of four feet below grade.

12

13 **Q. What is South Deuel Wind’s estimate for the current cost of decommissioning?**

14 A. South Deuel Wind estimates the current cost of decommissioning in 2023 dollars is
15 approximately \$1,299,950 for the Project, or \$22,806 per turbine, assuming salvage and
16 no resale of project components. A summary of the decommissioning estimates for
17 activities associated with the major components of the Project is provided in Table A-1 of
18 the decommissioning plan.

19

20 **Q. Does Staff have any concerns with the underlying assumptions of the
21 decommissioning plan?**

22 A. Yes. South Deuel Wind assumed 57 Vestas 163-4.5 turbines because the turbine model
23 is anticipated to be the most optimal turbine for the site. With the Company’s request for
24 turbine model flexibility, South Deuel Wind may construct up to 68 turbines. Since
25 decommissioning cost is directly related to the number of turbines, staff recommends
26 assuming the maximum number of turbines that may be constructed of 68 to determine
27 a reasonable estimate.

28

29 **Q. Did Staff request an updated decommissioning cost estimate to reflect 68 wind
30 turbines?**

31 A. Yes. In response to Staff data request 1-59(a), Ms. Monterrosa stated that South Deuel
32 Wind is currently in the process of preparing a Decommissioning Plan for 68 GE 3.8-154
33 turbines. The Applicant committed to supplement the response to Staff data request 1-

1 59(a) when the analysis is complete, but South Deuel Wind has not provided an updated
2 cost estimate prior to drafting this testimony.

3
4 **Q. Does Staff have any concerns with the decommissioning cost estimate as
5 provided in Appendix X?**

6 A. The estimate of future decommissioning costs is based on assumptions that can lead to
7 a wide range of potential costs. Based on the decommissioning cost estimates provided
8 to the Commission for past wind facilities and the Commission's requirements for
9 decommissioning escrow funding of \$5,000 per turbine per year over 30 years for other
10 wind energy facilities, the Company's estimate of \$22,806 per turbine appears low.

11
12 **Q. What is the Applicant proposing for the useful life of the Project?**

13 A. On Page 120 of the Application, South Deuel Wind states it anticipates that the
14 operational life of the Project will be approximately 30 years. Staff believes this
15 assumption is reasonable.

16
17 **Q. What is South Deuel Wind's proposal for the periodic review and update of
18 decommissioning costs?**

19 A. The Applicant proposed no periodic review and update of decommissioning costs.

20
21 **Q. Does Staff support the Applicant's proposal for no periodic decommissioning
22 review?**

23 A. No. Staff recommends reviewing decommissioning costs beginning in year 10 following
24 commercial operation of the Project and each fifth year thereafter. The periodic review
25 of decommissioning costs is necessary to ensure that the amount is sufficient as factors
26 like inflation, technological advancements, and market conditions can impact
27 decommissioning costs over time. The Commission has established a precedence of
28 reviewing decommissioning costs in this manner, and Staff is unaware of any compelling
29 justification to change this practice.

30
31 **Q. What type of financial assurance did South Deuel Wind propose in its Application
32 for the decommissioning of the Project?**

33 A. South Deuel Wind requests that the Commission authorize the posting of a bond for
34 financial assurance for decommissioning costs of the Project. The Company cited the

1 Commission's recently approved bonds for wind energy facilities in 2021 and 2022
2 during those projects' ten-year review.

3
4 **Q. What was the estimated decommissioning cost per turbine for the two surety
5 bonds referenced by the Applicant?**

6 A. For Docket EL09-028, the Commission approved a surety bond in the amount of
7 \$15,112,233 for PrairieWinds SD1, resulting in a per turbine cost of \$139,928 based on
8 108 turbines. In Docket EL08-031, the Commission approved a surety bond in the
9 amount of \$10,870,523 for Buffalo Ridge II, resulting in a per turbine cost of \$103,529
10 based on 105 turbines. South Deuel Wind's proposed decommissioning cost of \$22,806
11 per turbine is not close to the amounts approved by the Commission.

12
13 **Q. Did the Applicant provide a detailed surety bond proposal for Commission
14 consideration?**

15 A. No. Staff issued data request 5-8 to obtain a draft surety bond with all relevant terms for
16 Commission review. The discovery request was due on November 8 and the draft was
17 not available for Staff to review prior to drafting this testimony.

18
19 **Q. Please summarize your position on South Deuel Wind's decommissioning
20 proposal.**

21 A. Staff does not agree with the underlying assumption that turbine foundations be
22 removed to a depth of 42 inches, and instead recommends removal to a depth of 48
23 inches or 4 feet. The original decommissioning plan assumed only 57 turbines are
24 constructed while the Applicant requests to construct up to 68 turbines. Commission
25 Staff asked for an updated study on September 13, 2024, to reflect the maximum
26 requested turbines and has not received a revised study. If the Applicant uses similar
27 assumptions in the updated decommissioning estimate as the original decommissioning
28 plan that supported a decommissioning cost per turbine of \$22,806, staff is concerned
29 that the updated estimate will not provide adequate funds to complete the reclamation
30 and restoration process. Staff recommends periodically reviewing decommissioning
31 plans and cost estimate during the life of the facility consistent with past Commission
32 decisions and updating the financial assurance as necessary. Finally, Staff is unable to
33 form an opinion on the Applicant's decommissioning bond request until a detailed draft is
34 available to review.

1 **VIII. INDEMNITY BOND FOR ROAD DAMAGE**

2
3 **Q. Did South Deuel Wind provide a proposal for an indemnity bond for road damage**
4 **pursuant to SDCL 49-41B-38?**

5 A. Yes. In response to Staff data request 1-53, South Deuel Wind proposes to furnish an
6 indemnity bond in the amount of \$1,000,000 to secure the restoration and repair of roads
7 after construction. The South Deuel Wind transmission line is approximately 6 miles in
8 length. For the Crocker Wind Farm in Docket EL17-055, the Commission ordered a
9 \$1,000,000 road bond for a 5.2-mile transmission line. South Deuel Wind requests the
10 same bond amount as the Crocker Wind Farm since the length of the transmission line
11 is similar.

12
13 **Q. Does 49-41B-38 provide a method to calculate an amount of the indemnity bond?**

14 A. No. The statute states the bond should be furnished in “a reasonable amount.”

15
16 **Q. Does Commission Staff agree with this proposal for the indemnity bond?**

17 A. Staff agrees that the bond amount ordered for the Crocker Wind Farm transmission line
18 is a reasonable proxy. While there has been significant inflation since 2018 that may
19 warrant an adjustment to the bond amount, Invenergy also satisfactorily fulfilled all road
20 repair obligations associated with the Deuel Harvest Wind Farm in Docket EL18-053.
21 Considering all factors, Staff is comfortable with the Company’s proposal.

22
23 **IX. POTENTIAL IMPACTS TO WHOOPING CRANES**

24
25 **Q. Did South Deuel Wind assess the wind facility’s potential impacts to whooping**
26 **cranes?**

27 A. Yes. On Page 78 of the Application, South Deuel Wind stated the following:

28
29 “The whooping crane corridor area accounts for 95% of whooping crane
30 sightings. The Project Area is not located within the USFWS whooping crane
31 migration corridor, which is located approximately 85 miles west of the Project
32 Area (Appendix G). No whooping cranes were observed during any of the site
33 visits or throughout the multiple years of avian surveys. Due to being outside of
34 the migratory corridor, whooping cranes are unlikely to occur in the Project Area.”
35
36

1 **Q. Did the Commission include a whooping crane condition in the permit for the**
2 **adjacent Tatanka Ridge Wind facility in Docket EL19-026?**

3 A. Yes. The Commission required the condition below to minimize the potential impacts to
4 whooping cranes:

5
6 Applicant shall establish a procedure for preventing whooping crane collisions
7 with turbines during operations by establishing and implementing formal plans for
8 monitoring the project site and surrounding area for whooping cranes during
9 spring and fall migration periods throughout the operational life of the project and
10 shutting down turbines and/or construction activities within 2 miles of whooping
11 crane sightings. The South Dakota Game, Fish, and Parks will be consulted on
12 the procedure to minimize impacts to whooping cranes.

13
14 **Q. Is the Applicant willing to agree to this condition to minimize the risk to whooping**
15 **cranes?**

16 A. No. In response to Staff data request 3-3(c), witness Michelle Phillips stated that “South
17 Deuel Wind does not believe the above permit condition is appropriate because
18 whooping cranes are unlikely to occur in the Project area and therefore would not agree
19 to the condition.”

20
21 **Q. Does Staff recommend a condition for South Deuel Wind to establish procedures**
22 **for preventing whooping crane collisions?**

23 A. The Commission ordered the above whooping crane condition for the Tatanka Wind
24 Farm, which is immediately adjacent to the South Deuel Wind project area. The
25 effectiveness of these procedures will be significantly diminished if they are not uniformly
26 implemented by all wind facilities in the immediate area. Commission Staff supports the
27 consistent application of whooping crane mitigation measures in an area.

28
29 **X. AERIAL SPRAYING**

30
31 **Q. Has the Commission ordered any conditions to facilitate aerial spraying in the**
32 **vicinity of wind turbines for facilities in Deuel County?**

33 A. Yes. In Docket EL19-027, the Commission ordered the Crowned Ridge Wind II Project
34 to coordinate with aerial applicators through the following condition:

1
2 Project owner must cooperate with agricultural spray applicators in shutting down
3 turbines as needed to facilitate safe and effective spray operation and
4 application.
5

6 **Q. Did South Deuel Wind make any commitments regarding aerial spraying in the**
7 **Application?**

8 A. Yes. In Section 15.4.3.2 of the Application, South Deuel Wind states it will “work with
9 landowners to coordinate crop dusting activities to further reduce risks to crop dusters.”
10

11 **Q. Is South Deuel Wind willing to agree to the most recent aerial spraying condition**
12 **ordered by the Commission?**

13 A. No. The Commission ordered the following condition for the North Bend Wind Project in
14 Docket EL21-018:
15

16 Applicant will cooperate with agricultural spray applicators, who inquire, by
17 shutting down wind turbines as needed in order to accommodate safe and
18 effective spray operation and application when conditions allow for aerial
19 spraying.
20

21 In response to Staff data request 1-54(b), South Deuel Wind offered the following
22 amendments to the proposed condition:
23

24 Applicant will cooperate with agricultural spray applicators who request for South
25 Deuel Wind to temporarily shut down wind turbines as needed to accommodate
26 safe and effective spray operation and application when conditions allow for
27 aerial spraying. South Deuel Wind shall accommodate reasonable requests
28 provided the agricultural spray applicator provides notice of intent to spray 3 days
29 prior, and subsequent notices 12 hours and 2 hours prior to spraying.
30

31 **Q. Did South Deuel Wind explain the need for the proposed amendments?**

32 A. No. South Deuel Wind provided no explanation for the need of specific notice
33 requirements in the aerial spraying condition.
34
35
36
37

1 **Q. Does Staff have a position on South Deuel Wind’s proposed aerial spraying**
2 **condition?**

3 A. Staff recommends South Deuel Wind explain why three separate notices are necessary
4 to accommodate aerial spraying. Without explanation, three separate notices seem
5 excessive and unreasonably burdensome to aerial sprayers.
6

7 **XI. CONSTRUCTION PROGRESS REPORTS**

8
9 **Q. Are there any other conditions Staff would recommend?**

10 A. Yes. Wind energy facilities are high profile projects in the community and Staff receives
11 many inquiries regarding wind facilities before, during, and after construction. A periodic
12 progress report that provides South Deuel Wind’s current activities and tracks permit
13 compliance would help Staff monitor the project and provide interested parties with
14 timely updates.
15

16 **Q. Has the Commission shown support for adding a periodic reporting requirement**
17 **as a condition for a wind energy facility?**

18 A. The Commission required periodic progress reports for the North Bend Wind Farm in
19 Docket EL21-018.
20

21 **Q. What information should be included in the report?**

22 A. The report should include a summary on the work completed and the activities to be
23 completed for the project. Also, a summary of consumer contacts is helpful in tracking
24 issues of importance and making sure issues get resolved timely. Finally, a permit
25 condition checklist with all required filings provides a means to manage and review
26 compliance.
27

28 **Q. Does Staff have a sample report that can be used as a template for the report?**

29 A. Yes. Please see Exhibit_JT-5 for a report that can be used as a template.
30

31 **Q. What is the proposed frequency for this reporting requirement?**

32 A. Staff requests monthly reports during construction, and quarterly reports prior to
33 construction and after the date of commercial operations until reclamation is complete.
34

1 **Q. Are there any other key construction milestones that should be reported to the**
2 **Commission?**

3 A. Yes. There are multiple permit conditions with deadlines based on the date construction
4 commences, the date of commercial operations, or the date reclamation is completed.

5 To notify the Commission of these key milestones, Staff requests the following filings:

- 6 ▪ Report the date construction will commence as soon as it is known, but no later
7 than five business days prior to commencement;
- 8 ▪ Report the date construction was completed within five business days of
9 completion;
- 10 ▪ Report the date of commercial operation within five business days of operation;
11 and
- 12 ▪ Report the date reclamation was completed within five business days of
13 completion.

14

15 **XII. INTERVENOR CONCERNS**

16

17 **Q. Did the Commission grant intervention to any interested persons in this docket?**

18 A. Yes. The Commission granted intervention to Matthew Holden, Arla Hamann
19 Poindexter, Lake Cochrane Improvement Association (“LCIA”), Jay Grabow, and Josh
20 Bekaert.

21

22 **Q. Did Staff receive responses to discovery from all individuals granted party status?**

23 A. Staff did not receive responses from Jay Grabow or Josh Bekaert prior to drafting this
24 testimony.

25

26 **Q. At the public input meeting on August 22, 2024, Mr. Bekaert stated concerns about**
27 **his ability to travel to and from his residence during construction on a dead-end**
28 **access road, and the ability of South Deuel Wind to successfully cross the culvert**
29 **on the access road near his residence with heavy equipment. Do you have any**
30 **information to provide the Commission regarding this concern?**

31 A. In response to Staff data request 1-28, South Deuel Wind stated “they are aware of the
32 culvert near Mr. Bekaert’s property. South Deuel Wind has spoken with Mr. Bekaert
33 about his concerns and received culvert specifications from Deuel County to further
34 inform the evaluation of road improvements needed, if any. South Deuel Wind’s review

1 is currently in process.” Staff recommends South Deuel Wind provide an update on their
2 work on Mr. Bekaert’s concerns in rebuttal testimony. Please see Exhibit_JT-4 for the
3 aerial imagery of Mr. Bekaert’s residence, associated access road and culvert, and
4 proposed turbine location 75.
5

6 **Q. Please summarize South Deuel Wind’s impacts to the Bekaert’s residence.**

7 A. Please see South Deuel Wind’s response to Staff data request 2-3, Exhibit 2-3 (in
8 Exhibit_JT-1) for a map that shows all proposed turbines within 2 miles of Mr. Bekaert’s
9 residence. South Deuel Wind is proposing eight turbine locations within 2 miles of Mr.
10 Bekaert’s residence, including two turbines within 2,753 ft. of his residence. The
11 projected sound level at the residence is 39.2 dBA, 41.4 dBA or 44.4 dBA, depending on
12 the turbine model. The projected annual shadow flicker amount is 12 hours 36 minutes,
13 12 hours 54 minutes, or 11 hours 46 minutes, depending on the turbine model.
14

15 **Q. Please summarize the LCIA’s concerns.**

16 A. In its Application for Party Status, the LCIA stated its interests include the “safe
17 operation of, access to, and departure from the Lake Cochrane Seaplane Base.” In
18 response to Staff data request 1-2, LCIA stated its “concerned that the three towers
19 closest to the Lake Cochrane Seaplane Base, at a proposed height of 594 feet, are too
20 close to the safe aircraft operation area for arriving and departing aircraft, and thus
21 constitute obstructions to flight operations. If turbine locations 21, 22, and 49 were
22 removed from the project plan, those concerns would be obviated.”
23

24 **Q. Did the LCIA conduct any technical analysis to support the removal of turbine
25 locations 21, 22, and 49?**

26 A. In response to Staff data request 2-1(a), the LCIA stated it “has not conducted any
27 technical analysis to the concerns expressed.”
28

29 **Q. Is there a specific setback from Lake Cochrane that the LCIA would recommend
30 that would allow a safe aircraft operation area for arriving and departing planes?**

31 A. The LCIA did not provide a recommended setback from Lake Cochrane in response to
32 Staff data request 2-1(d).
33
34

- 1 **Q. Do any members of the LCIA own and operate a seaplane?**
- 2 A. The LCIA indicated no in response to Staff data request 1-5.
- 3
- 4 **Q. How many seaplanes have landed/taken off at the Lake Cochrane Seaplane Base**
- 5 **annually over the last three years (2022, 2023, and 2024 to date)?**
- 6 A. In response to Staff data request 1-6, the LCIA stated “it is not possible to quantify the
- 7 number [of] aircraft operations at Lake Cochrane Seaplane Base because we lack the
- 8 facilities many land airports provide ... It is only possible to say that arrivals-departures
- 9 have been observed in the past, and the undersigned member of LCIA board [Matt
- 10 Holden] believes such traffic has transpired during the current calendar year.” In
- 11 response to Staff data request 2-3, the LCIA was unable to provide an estimate, stating
- 12 “Mr. Holden doesn’t reside on the lake year-round and is unable to give an accurate
- 13 estimate.”
- 14
- 15 **Q. Has the LCIA proposed any conditions for South Deuel Wind?**
- 16 A. On November 6, 2024, the LCIA filed a procedural schedule and status update with the
- 17 Commission. In the last paragraph, the LCIA urged “that any PUC approval of sites 21,
- 18 22, and 49 in this matter be made contingent upon any future FAA’s findings that none of
- 19 them, in fact, are deemed to be hazards to aviation.”
- 20
- 21 **Q. Does Staff support the condition recommend by the LCIA?**
- 22 A. Yes. In response to Staff data request 3-2(c), South Deuel Wind stated it “will not
- 23 construct any turbine location that has received a final determination of hazard.” Staff
- 24 believes there is broad support the LCIA’s proposed condition.
- 25
- 26 **Q. Are Mr. Holden’s concerns similar to the LCIA’s concerns in this docket.**
- 27 A. Based on responses to discovery, it appears that Mr. Holden’s concerns and proposed
- 28 resolution are very similar to the LCIA.
- 29
- 30 **Q. Did Ms. Hamann Poindexter provide responses to Staff discovery?**
- 31 A. Yes. Staff included her responses to Staff discovery in Exhibit_JT-2. Staff will consider
- 32 the evidence provided by Ms. Hamann Poindexter through pre-filed direct testimony and
- 33 at the evidentiary hearing before offering any recommendations on her positions.
- 34

1 **XIII. STAFF'S PERMIT RECOMMENDATION**

2
3 **Q. Does Staff recommend the Application be denied because of Staff's issues and**
4 **concerns?**

5 A. Not at this time. Because South Deuel Wind can address outstanding issues on rebuttal
6 and, to an extent, through the evidentiary hearing, Staff reserves any position on
7 granting the permit until such time as we have a complete record upon which to base
8 Staff's position. Staff would also note that some of the outstanding issues may be
9 addressed through conditions should the Commission grant a permit.

10
11 **Q. Does this conclude your testimony?**

12 A. Yes, this concludes my written testimony. However, I will supplement my written
13 testimony with oral testimony at the hearing to respond to South Deuel Wind's rebuttal
14 testimony, testimony submitted by any party to the docket, and responses to discovery.