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

#### 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

#### SD PUC DOCKET EL24-023

#### PRE-FILED REBUTTAL TESTIMONY OF MICHELLE PHILLIPS ON BEHALF OF DEUEL HARVEST WIND ENERGY SOUTH LLC

December 5, 2024

1	I.	INTRODUCTION
2	Q.	Please state your name.
3	Α.	My name is Michelle Phillips.
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5	Q.	Have you previously provided testimony in this docket?
6	Α.	Yes. I submitted Direct Testimony in this docket on behalf of Deuel Harvest Wind
7		Energy South LLC ("South Deuel Wind") in support of its Facility Permit Application
8		("Application") to the South Dakota Public Utilities Commission ("Commission") on
9		June 28, 2024.
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11	II.	PURPOSE OF TESTIMONY
12	Q.	What is the purpose of your Rebuttal Testimony?
13	Α.	The purpose of my Rebuttal Testimony is to respond to the testimonies of Chad
14		Switzer, South Dakota Game, Fish, and Parks ("SDGFP") Division of Wildlife,
15		Commission Staff witness Jon Thurber, and intervenor Arla Hamann Poindexter.
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17	III.	RESPONSE TO MR. SWITZER
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19	Q.	Have you reviewed the Direct Testimony of Mr. Chad Switzer, of the South
20		Dakota Game, Fish, and Parks Division of Wildlife, submitted on behalf of
21		Commission Staff?
22	Α.	Yes.
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24	Q.	What is your general response to Mr. Switzer's Direct Testimony?
25	Α.	South Deuel Wind appreciates Mr. Switzer's discussion of the coordination
26		between SDGFP and South Deuel Wind to site the Project in a way that minimizes
27		environmental and wildlife impacts. Through this coordination, SDGFP made
28		several recommendations, including siting recommendations to avoid sensitive
29		species potential habitat, suggestions on types of wildlife surveys, and siting
30		recommendations to avoid unbroken grasslands and minimize grassland

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- 31 fragmentation. South Deuel Wind agrees with Mr. Switzer's testimony that it 32 utilized the proper studies and wildlife surveys necessary to identify potential 33 impacts to the environment.
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## Q. On page 4, Mr. Switzer recommends avoiding the placement of turbines and roads in contiguous blocks of grassland. Did South Deuel Wind follow this recommendation?

- 38 Α. Yes. South Deuel Wind was very successful in minimizing impacts to grasslands 39 by avoiding and/or minimizing placement of turbines and access roads in contiguous grassland areas. There are no proposed turbine locations or access 40 41 roads located in unbroken grasslands. Only one turbine location and access road crosses broken grassland. Furthermore, South Deuel Wind sited all proposed 42 43 turbine locations outside of native habitat (including unbroken grasslands, forested habitat, and wetlands), prioritized using existing roads, and primarily placed new 44 45 roads in areas of existing disturbance or cultivated fields to avoid wildlife habitat 46 fragmentation. South Deuel Wind agrees with Mr. Switzer that avoidance of all 47 grassland types would be challenging. Therefore, any areas temporarily disturbed 48 during construction will be restored in accordance with pre-construction use.
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### 50Q.Mr. Switzer also refers to studies by Loesch (2013) and Shaffer and Buhl51(2016). Are you familiar with these studies?

- 52 A. Yes.
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#### 54 Q. In your opinion, how do these studies relate to the Project?

A. These studies found that wind turbines may have indirect displacement effects on
grassland birds (Shaffer and Buhl 2016) and waterfowl (Loesch 2013). That is,
they found that there was a lower density of grassland birds and waterfowl,
respectively, near turbines compared to areas farther away from turbines. These
studies suggest that a wind project could displace grassland birds and waterfowl.
As stated in Section 9.1.1 of the Application, most of the Project Area (Figure 1 to

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61 the Application) has been converted to agricultural use, with 73 percent of the 62 Project Area being used for cultivated crops. Only approximately 16 percent of the 63 entire Project Area has herbaceous cover. As detailed in Appendix F to the Application, the field assessment of the herbaceous cover found only a minimal 64 65 amount of unbroken grassland. Therefore, the existing grassland habitat in the 66 Project Area is already heavily fragmented and regularly disturbed for agricultural 67 activities. Given the limited amount of potential habitat, the disturbance of regular 68 agricultural activities, the Project's avoidance of unbroken grasslands, and the 69 minimization of infrastructure near suitable waterfowl stopover habitat, South 70 Deuel Wind expects minimal, if any, displacement effects. Further, the Project Area 71 does not contain habitat likely to concentrate avian species relative to the nearby 72 surrounding areas.

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Q. On page 13, Mr. Switzer recommends that turbines should not be placed in
 or near wetland basins and special care should be made to avoid areas with
 high concentrations of wetlands. Did South Deuel Wind incorporate this
 recommendation when siting its proposed turbine locations?

- A. Yes. No proposed turbine locations are located in wetland basins. Impacts to
   wetlands will be avoided or minimized through limiting disturbance of individual
   wetlands during project construction as well as identifying wetland boundaries by
   delineating them prior to construction. Mr. Switzer notes that these are appropriate
   measures.
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## Q. On pages 13-14, Mr. Switzer discusses the possibility of cumulative impacts of the Project and other wind projects in Deuel County. What is your response?

A. As noted in the Application, surveys and studies performed demonstrate that the Project will not have a significant impact on the environment when considered with the existing wind projects in proximity to the Project Area. Each turbine has been or will be sited in accordance with Deuel County and applicable state requirements, which are generally designed to avoid and minimize impacts on the community

- and the environment. Adherence to these standards will help reduce cumulativeimpacts.
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## 95 Q. On page 15, Mr. Switzer notes that there is one Game Production Area within 96 the Project Area boundary. Are any Project Facilities sited within this Game 97 Production Area Mr. Switzer references?

- A. No. Project Facilities have been sited to avoid state-owned lands. There is one
   walk-in hunting area located on privately-owned property participating in the
   Project that is anticipated to host Project Facilities.
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Q. On pages 16-17, Mr. Switzer proposes a permit condition recommending two
 years of post-construction avian and bat mortality monitoring. Is South
 Deuel Wind agreeable to that condition?

- A. Yes. South Deuel Wind is agreeable to a condition to complete two years of post-construction avian and bat mortality monitoring.
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#### 108 IV. RESPONSE TO MR. JON THURBER

- 109 Q. Did you review the Direct Testimony of Mr. Jon Thurber?
- 110 A.

Yes.

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### Q. On page 13, Mr. Thurber proposes a condition related to whooping cranes. Do you agree with this suggested condition?

114 Α. I do not believe the condition Mr. Thurber proposes regarding whooping cranes is 115 necessary. The condition is unnecessary given that whooping cranes are unlikely 116 to occur in the Project Area. The Project is not within the United States Fish and 117 Wildlife Service ("USFWS") whooping crane observation corridor, which is located 118 approximately 85 miles west of the Project Area. The whooping crane does not 119 appear in USFWS Information for Planning and Consultation results for the Project 120 Area nor was there any record of occurrence identified within 5 miles of the Project 121 Area in the South Dakota Natural Heritage Database guery results. No whooping

cranes were observed during any of the site visits or throughout the multiple years of avian surveys. Due to being outside of the observation corridor, whooping cranes are unlikely to occur in the Project Area. In an October 2022 coordination letter, SDGFP noted that the Project is outside the 95 percent whooping crane migration corridor and concluded that the Project likely does not pose a substantial risk to whooping cranes and neither the USFWS nor SDGFP recommended mitigation measures for potential impacts to whooping cranes.<sup>1</sup>

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- 130 Though it is unlikely that a whooping crane would occur in the Project Area, South
- 131 Deuel Wind is agreeable to the following order condition:
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133 Applicant will train all operations personnel at the Project to 134 identify whooping cranes. A poster of whooping crane identification will be displayed year-round in a common area 135 of the main office building to aid in the education and 136 137 identification of the species. If operations personnel observe 138 a whooping crane within two miles of a turbine at the Project, 139 the Site Manager (or their designee) will execute a procedure to shut down any operating turbines within two miles of the 140 141 observed whooping crane until it is greater than two miles 142 away from the nearest turbine.

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#### 144 V. RESPONSE TO INTERVENOR ARLA HAMANN POINDEXTER

- 145Q.Have you reviewed the Direct Testimony and data request responses146submitted by Ms. Arla Hamann Poindexter included as Exhibits JT-2 and JT-
- 147 **3 in this proceeding?**
- 148 A. Yes.

<sup>&</sup>lt;sup>1</sup> See Appendix D to the Application, at p. 126 (containing a letter from the South Dakota GFP dated October 3, 2022, stating "The proposed project is located 41 miles east of the 95% migration corridor, and likely does not pose a substantial risk to whooping cranes.").

### 150 Q. What is your overall response to Ms. Hamann Poindexter's Direct 151 Testimony?

152 Α. Ms. Hamann Poindexter has concerns about the potential environmental impacts 153 of the Project. Ms. Hamann Poindexter describes her own land conservation and 154 her stewardship of her family's land. In response I would emphasize that South 155 Deuel Wind designed and sited the Project in an environmentally responsible way 156 using industry best practices. South Deuel Wind's success in minimizing Project 157 impacts is recognized and discussed in the Direct Testimony of SDGFP witness 158 Mr. Switzer. I would further note that since Ms. Hammon Poindexter is not 159 participating in the Project, no facilities are proposed to be located on her property 160 and thus will not directly impact her conservation efforts.

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162Q.On page 4 of her Direct Testimony, Ms. Hamann Poindexter suggests that163the Project will negatively impact wildlife in the area. Ms. Hamann Poindexter164also states in discovery response 1-2(b), contained in Exhibit JT-2 that she165believes the Project will diminish biodiversity of native species, including166less birds and insects. What is your response to these concerns?

- A. South Deuel Wind undertook multiple studies to analyze potential impact on wildlife
  and habitat. For example, the Project conducted bird surveys in the Project Area
  as prescribed by the USFWS and SDGFP. The survey methods and results were
  shared with those agencies and are available in Appendices G and K to the
  Application.
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Potential impacts to migrating birds as a result of the Project are discussed in Appendix K to the Application. Project Facilities have been sited to avoid protected lands, potential habitat, and other environmental resources identified and mapped within the Project Area. South Deuel Wind conducted detailed assessments for habitat that may support protected insect species and has sited the Project to avoid those habitats. The majority of insects in the Great Plains are residents of an area and are not migratory. These insects have populations based at a local or regional

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level. The Project conducted detailed assessments for habitat that may support
protected insect species and has sited components to avoid those habitats. These
efforts are detailed in various sections of the Application as well as in the
appendices. As such, construction and operation of the Project are not anticipated
to impact protected insect species. South Deuel Wind is not aware of any studies
in South Dakota or the region demonstrating changes to insect migration due to
turbine construction.

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188 There are no land features, habitat types, or seasonal differences known to occur 189 in the Project Area relative to the overall landscape of the region that would 190 concentrate prey and potential use by raptors. The Project has also conducted 191 multiple assessments to identify wildlife habitat, and these are detailed in various 192 sections of the Application as well as the appendices. South Deuel Wind does not 193 propose any mitigation for wildlife habitats given that Project Facilities have been 194 sited primarily on regularly disturbed agricultural lands. The Project has also 195 coordinated with SDGFP and the USFWS to characterize use of the site by wildlife 196 as detailed in the Application and followed the agencies' recommended survey methods and guidance documents to assess wildlife.<sup>2</sup> For example, no Project 197 198 Facilities have been sited on USFWS critical habitat or USFWS easements. 199 Likewise, to the extent practicable, Project Facilities are sited in upland areas, 200 avoiding low-lying wetlands and streams. South Deuel Wind will also use best 201 management practices to further reduce the Project's environmental impact.

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203Q.In discovery response 1-3, contained in Exhibit JT-2, Ms. Hamann Poindexter204expresses concern regarding South Deuel Wind's environmental study205process, stating that "the grassland study only used an on-site inspection

<sup>&</sup>lt;sup>2</sup> See, e.g., Siting Guidelines for Wind Power Projects in South Dakota, South Dakota Game, Fish, and Parks, available at <u>https://gfp.sd.gov/userdocs/docs/wind-energy-guidelines.pdf</u>; Land-Based Wind Energy Guidelines, U.S. Fish and Wildlife Service (Mar. 23, 2012), available at <u>https://tethys.pnnl.gov/sites/default/files/publications/USFWS-Wind-Energy-Guidelines.pdf</u>; Eagle Conservation Plan Guidance: Module 1 – Land-Based Wind Energy, U.S. Fish and Wildlife Service (Apr. 2013), available at <u>https://www.fws.gov/sites/default/files/documents/eagle-conservation-plan-guidance.pdf</u>.

## 206on one day at the end of the traditional grazing season," and that "The Raptor207Nest Study uses an aerial inspection on a date prior to the full migration of208prey species." What is your response?

209 Α. Ms. Hamann Poindexter's concerns are not well-founded given the thorough 210 environmental analyses undertaken for the Project. Burns & McDonnell conducted 211 a series of desktop reviews and field surveys related to grasslands. In-field review 212 for grassland assessment efforts occurred on October 10, 11, and 12, 2022 as well 213 as July 31 and August 1, 2023. The timing of the field effort was completed prior 214 to the end of the growing season as determined by ground temperatures and when 215 herbaceous species targeted for identification (as detailed in Appendix F of the 216 Application) were still present and therefore are sufficient.

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218 The grassland assessment of the 244 grassland observation points determined 219 that the majority of the Project Area did not include potentially unbroken grassland. 220 Of the 244 grassland observation points, 138 were determined to be a "low" 221 classification, 73 were determined to be a "medium" classification, and 11 were 222 determined to be a "high" classification. Two observation points were inaccessible 223 from public roads and 20 did not have grassland present and were therefore not 224 given a classification. The 11 grassland observation points within the Project Area 225 classified as "high," were identified as potentially unbroken grassland, and totaled 226 335 acres or approximately 1 percent of the Project Area.

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Raptor nest surveys were conducted to identify the location and occupancy status of potential raptor nests within and surrounding the Project Area. These surveys included aerial and ground observation and occurred within the survey times recommended by the USFWS Region 6 survey protocols. These multi-year surveys were conducted in various different months, including March, April, May, June, July, and August. No federal- or state-threatened or endangered species were documented during these observations.

# South Deuel Wind coordinated with both the USFWS and SDGFP on the analyses, shared survey results, and discussed setbacks and siting decisions in response to the data. Neither USFWS nor SDGFP expressed concerns with South Deuel Wind's methodologies or the final study results.

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## Q. In discovery response 1-4, contained in Exhibit JT-2, Ms. Hamann Poindexter suggests that wind projects have affected the migratory patterns of Canadian geese in the area. What is your response?

The avian surveys in the Project Area followed USFWS and SDGFP guidance. The survey methods and results were shared with those agencies and are available in Appendices G and K to the Application. While geese in South Dakota migrate at high altitudes, the Project coordinated with the USFWS and SDGFP to minimize infrastructure near suitable waterfowl stopover habitat. Therefore, the Project does not anticipate having an impact on migratory Canadian geese.

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#### 251 VI. CONCLUSION

- 252 Q. Does this conclude your testimony?
- 253 A. Yes.
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  256 Dated this 5<sup>th</sup> day of December, 2024
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  259 Michelle Phillips
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