

**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-\_\_\_\_**

PRE-FILED DIRECT TESTIMONY OF MONICA MONTERROSA  
ON BEHALF OF DEUEL HARVEST WIND ENERGY SOUTH LLC

June 28, 2024

1 **I. INTRODUCTION AND QUALIFICATIONS**

2

3 **Q. Please state your name, employer and business address.**

4 A. My name is Monica Monterrosa. I am a Director, Renewable Development at  
5 Invenergy LLC (“Invenergy”). My business address is 1401 17th Street, Suite 1100,  
6 Denver, CO. 80202.

7

8 **Q. On whose behalf are you providing this testimony?**

9 A. I am providing this testimony on behalf of Deuel Harvest Wind Energy South LLC  
10 (“South Deuel Wind”) in support of its Facility Permit Application (“Application”) to  
11 the South Dakota Public Utilities Commission. The Application is for a facility  
12 permit to construct and operate a wind energy facility which will have a nameplate  
13 capacity of up to 260 megawatts (“MW”) and deliver up to 250 MW to the point of  
14 interconnection (“Wind Energy Facility”), and a transmission facility which will  
15 operate at 345 kilovolts (“kV”) and be approximately 6 miles in length  
16 (“Transmission Facility”). The Wind Energy Facility and the Transmission Facility  
17 are collectively referred to as the Project.

18

19 **Q. Briefly describe your educational background and professional experience.**

20 A. I have been involved in renewable energy development for nearly 15 years. I  
21 received my law degree from Universidad Católica de Colombia. Prior to joining  
22 Invenergy, I worked for Renewable Energy Systems Americas in Colorado  
23 between 2009 and 2019. There, I was responsible for analyzing and interpreting  
24 Latin American Energy regulations and establishing procedures and requirements  
25 for the development and construction of renewable energy projects in different  
26 Latin-American countries as well as supporting construction contracts for the  
27 company. I then took a position with Renewable Energy Systems Chile where I  
28 was involved in the development of wind energy projects, then transitioned to a  
29 manager role with Renewable Energy Systems to develop wind and solar energy  
30 projects in the United States. I joined Invenergy in 2019 as a Director of  
31 International Development in Colombia where I led the Colombia development

32 team on wind and solar project development. I assumed my current role in 2022  
33 where I lead a team in developing and permitting renewable energy projects in  
34 Minnesota, North and South Dakota. My resume is attached as **Exhibit 1**.

35

36 **Q. What is the relationship between South Deuel Wind and Invenergy with**  
37 **respect to the Project?**

38 A. South Deuel Wind is an affiliate of Invenergy, and Invenergy is assisting with  
39 development of the Project.

40

41 **Q. Briefly describe Invenergy's experience in the renewable energy industry.**

42 A. As a privately held company with a 20+ year track record of responsibly  
43 developing, building, owning and operating wind, solar, energy storage, and  
44 natural gas generation facilities, Invenergy has developed more than 200 projects  
45 and 32 gigawatts of generating capacity in the Americas, Europe, and Asia.  
46 Invenergy is also developing transmission projects to build a more robust, resilient  
47 grid. Invenergy approaches operations with an owner's mindset by maintaining  
48 projects in top working condition to ensure optimal performance. Invenergy's  
49 comprehensive service capabilities are supported by dedicated staff continuously  
50 monitoring and improving the performance of the fleet.

51

52 **II. PURPOSE OF TESTIMONY**

53

54 **Q. What is your role with respect to the Project?**

55 A. I am responsible for managing the overall development of the Project.

56

57 **Q. What is the purpose of your Direct Testimony?**

58 A. The purpose of my Direct Testimony is to provide a brief overview of the Project's  
59 development history, including Project site selection, site analysis, and layout and  
60 facility design. I also provide testimony regarding Project operational  
61 considerations and analysis of the Project's potential effect on the physical

62 environment and cultural resources, and introduce the other witnesses who will  
63 testify on behalf of South Deuel Wind.

64

65 **Q. Identify the portions of the Application that you are sponsoring for the**  
66 **record.**

67 A. I am sponsoring the following portions of the Application:

- 68 • Section 2: Purpose of, and Demand for, the Facility
- 69 • Section 3: Estimated Cost of the Facility
- 70 • Section 5: Alternative Sites and Siting Criteria
- 71 • Section 7: Effect on Physical Environment
- 72 • Section 8: Effect on Hydrology
- 73 • Section 11.1: Land Use
- 74 • Section 11.4: Visual Resources
- 75 • Section 13: Water Quality
- 76 • Section 14: Air Quality
- 77 • Section 12: Local Land Use Controls
- 78 • Section 15: Community Impact
- 79 • Section 16: Employment Estimates
- 80 • Section 17: Future Additions and Modifications
- 81 • Section 18: Decommissioning of Wind Energy Facilities
- 82 • Section 22.2.2 South Dakota State Historic Preservation Office
- 83 • Section 22.2.3 Deuel County
- 84 • Appendix A: Figures
- 85 • Appendix B: Conditional Use Permit, Associated Findings, and Wind Energy
- 86 System Zoning Ordinance
- 87 • Appendix U: Level III Intensive Archaeological Resources Survey (Confidential)
- 88 • Appendix V: Historic-Age Resource Survey (Confidential)
- 89 • Appendix W: Unanticipated Discovery Plan
- 90 • Appendix X: Decommissioning Plan

91

92 **Q. What exhibits are attached to your Direct Testimony?**

93 A. I am sponsoring the following exhibit:

- 94 • **Exhibit 1:** Monica Monterrosa Resume

95

96 **Q. What other witnesses are testifying on behalf of South Deuel Wind?**

97 A. The following witnesses will provide direct testimony in this case:

- 98 • Mr. Aidan O'Connor, Manager, Renewable Development, Invenergy, will testify  
99 regarding wind energy facility and transmission facility information, and is  
100 sponsoring Application Sections 1, 20, 21, 22.1, and 22.4.

- 101 • Ms. Michelle Phillips, Manager, Environmental Compliance and Strategy,  
102 Invenergy, will testify regarding environmental review conducted for the Project  
103 and is sponsoring Application Sections 9, 10, 11.2, 22.2.1, 22.3, and  
104 Appendices D, E, F, G, H, I, J, K, and L.

- 105 • Ms. Alexandra Thompson, Senior Project Engineer, Invenergy, will testify  
106 regarding design and engineering considerations for the Project, and is  
107 sponsoring Application Sections 4, 6, 11.6, 19, and Appendices O, P, Q, R, and  
108 S.

- 109 • Mr. Michael Hankard, President and Principal, Hankard Environmental, Inc, will  
110 testify regarding noise impact and mitigation of the Project and is sponsoring  
111 Application Section 11.3 and Appendix M.

- 112 • Ms. JoAnne Blank, Senior Scientist and Project Manager, Stantec Consulting  
113 Services Inc, will testify regarding shadow flicker impact and mitigation of the  
114 Project and is sponsoring Application Section 11.5 and Appendix N.

- 115 • Mr. David Loomis, Emeritus Professor of Economics, Illinois State University,  
116 and President, Strategic Economic Research, LLC, will testify regarding the  
117 anticipated economic impact of the Project and is sponsoring Application  
118 Appendix C.

- 119 • Mr. Michael MaRous, Owner and President, MaRous & Company, will testify  
120 regarding the market impact of the Project and is sponsoring Application  
121 Appendix T.

122

123 **III. PROJECT OVERVIEW**

124

125 **Q. Who will own and operate the Project?**

126 A. South Deuel Wind may directly or indirectly through its affiliates own, construct,  
127 and operate the Project. Alternatively, South Deuel Wind may sell or assign the  
128 Project, or a portion thereof, to one or more public utilities or other qualified entity  
129 or entities at any time. Any future buyer or assignee will be required to meet all  
130 permit conditions and any power purchase agreement obligations associated with  
131 the Project or portion thereof. As part of any such sale or assignment, South Deuel  
132 Wind or an affiliate may function as the engineering, procurement, and  
133 construction contractor to construct the Project and/or function as the operations  
134 and maintenance services provider to operate and maintain the Project.

135

136 **Q. Briefly describe the Project, including where it is located.**

137 A. The Project includes a wind energy facility that will have a nameplate capacity of  
138 up to 260 MW and deliver up to 250 MW to the point of interconnection. The wind  
139 energy facility will include up to 68 wind turbines. The Project also includes an  
140 associated transmission facility, which will operate at 345 kV and be approximately  
141 6 miles in length. The Project is located in the townships of Blom, Brandt, Clear  
142 Lake, Norden, and Scandinavia in Deuel County, South Dakota. Ms. Alexandra  
143 Thompson provides additional information related to the Project and its facilities in  
144 her Direct Testimony.

145

146 **Q. How was the location of the Project initially identified?**

147 A. South Deuel Wind selected the state of South Dakota to develop the Project  
148 because of its robust wind resource, transmission infrastructure, residents and  
149 landowners who value diversifying their farm revenue, and business-friendly  
150 regulations and programs. Moreover, South Deuel Wind selected Deuel County  
151 based on its strong wind resource, access to transmission infrastructure, the  
152 compatibility of a wind project with existing land uses, strong landowner interest  
153 and community support, and the successful development and operation of the

154 Deuel Harvest Wind Farm. These characteristics allow for the development of a  
155 successful wind project.

156

157 **Q. Describe the steps South Deuel Wind took to evaluate natural resources**  
158 **within the Project Area.**

159 A. As described in more detailed in the Application and supported by the testimony  
160 of South Deuel Wind witness Ms. Michelle Phillips, throughout the Project planning  
161 and development process, South Deuel Wind has coordinated with various federal,  
162 state, and local agencies to identify potential natural resources in the vicinity of the  
163 proposed Project. South Deuel Wind has had numerous meetings and  
164 consultations with staff from the United States Fish and Wildlife Service  
165 (“USFWS”), South Dakota Game, Fish and Parks (“SDGFP”), and South Dakota  
166 State Historical Society from 2016 to present to discuss the Project. South Deuel  
167 Wind is following the Land-Based Wind Energy Guidelines (USFWS 2021), Eagle  
168 Conservation Plan Guidance (USFWS 2013), and United States Army Corps of  
169 Engineers (“USACE”) Guidelines, in addition to consultations with USFWS and  
170 SDGFP staff. Furthermore, South Deuel Wind commenced numerous studies to  
171 evaluate the impact of the Project on natural resources, as discussed in the  
172 Application.

173

174 **Q. Has South Deuel Wind also consulted with the South Dakota State Historic**  
175 **Preservation Office (“SHPO”) regarding cultural resources?**

176 A. Yes. As discussed in Section 22.2.2 of the Application, SHPO consultation was  
177 conducted outside of Section 106 of the National Historic Preservation Act of 1966,  
178 and South Deuel Wind has had multiple meetings with SHPO staff regarding the  
179 Project. Consistent with this consultation, a Level III Archaeological Survey and a  
180 Historic Architectural Resources Reconnaissance Survey were conducted for the  
181 Project by South Deuel Wind. These surveys are included as Application  
182 Appendices U and V. For any cultural resources identified during the surveys, a  
183 recommendation of National Register of Historic Places (“NRHP”)-eligibility of the  
184 resource has been made. Sites determined to be NRHP-eligible will be avoided by

185 the Project. If a site cannot be avoided, South Deuel Wind will work with SHPO to  
186 develop appropriate minimization or mitigation measures. South Deuel Wind also  
187 developed an Unanticipated Discovery Plan (Appendix W) which provides  
188 procedures to follow to address any unanticipated discoveries of cultural resources  
189 during Project construction, including previously undiscovered archaeological sites  
190 and possible human remains.

191  
192 **Q. What steps will South Deuel take to avoid, minimize, and/or mitigate impacts**  
193 **to cultural resources?**

194 A. Known sites or historic architectural resources determined to be NRHP-eligible are  
195 avoided by Project Facilities.

196  
197 **Q. Has the Project identified an off-taker for the energy it will produce?**

198 A. No, not at this time. The Project is being actively marketed to potential off-takers,  
199 including public utilities serving South Dakota customers and commercial industrial  
200 companies.

201  
202 **IV. PROJECT NEED AND BENEFITS**

203  
204 **Q. Briefly describe the need for the Project.**

205 A. The purpose of the Project is to generate electricity to supply the needs of entities  
206 that have an interest in procuring renewable energy. As discussed in Section 2.1  
207 of the Application, the demand for renewable energy has significantly increased  
208 over recent years as aging coal and nuclear facilities are being retired for  
209 regulatory and financial reasons. In addition to national resource planning trends,  
210 the Midcontinent Independent System Operator, Inc. (“MISO”) regional  
211 transmission system has specifically been identified as an area with “immediate  
212 need for generation investment” as fossil fuel capacity is retired. South Dakota has  
213 some of the nation’s greatest wind resources, corroborated by the 55 percent in-  
214 state net generation rate provided by wind energy. The Project site in particular  
215 boasts an abundance of wind resources, enabling significant energy production



216 with no fuel costs. Electricity generated by the Project can be sold at more  
217 competitive prices compared to other forms of energy projects that rely on  
218 purchasing fuel for generation. This translates to cost-effective electricity for power  
219 purchasers and energy customers within the MISO service territory. Once online,  
220 the Project will deliver up to 250 MW of electrical capacity to the MISO regional  
221 transmission system, which will be distributed and used to service electrical  
222 demand in the MISO service territory.

223

224 **Q. Describe some of the benefits of the Project.**

225 A. By supplying zero-emission electricity to the grid, the Project will offer both  
226 environmental benefits and price stability. The Project will also provide numerous  
227 local and regional economic benefits. These include payments to landowners,  
228 increased local tax revenue, and job opportunities during both the short-term  
229 construction and the long-term operational phases of the Project. Additional  
230 information regarding Project benefits is included in Section 2.1.3 of the  
231 Application. South Deuel Wind is also directly engaged in the local community. For  
232 example, Invenergy has consistently donated \$30,000 annually to the Invenergy  
233 Deuel School Scholarship Fund in 2021-2024, totaling \$120,000 to date. South  
234 Deuel Wind will continue to engage with the Deuel County community throughout  
235 construction and operation of the Project and will donate an additional \$25,000  
236 annually during the operation of the Project.

237

238 **V. PROJECT COST**

239

240 **Q. What is the estimated cost of the Project?**

241 A. The current estimated capital cost of the Project is approximately \$621 million  
242 based on indicative construction and wind turbine pricing cost estimates. This  
243 estimate includes lease acquisition, permitting, engineering, financing,  
244 procurement, and construction of the Project Facilities.

245

246 **VI. ALTERNATIVES**

247

248 **Q. Discuss South Deuel Wind’s evaluation of alternative site configurations?**

249 A. The Project Layout includes 73 proposed turbine locations, of which at most 68 will  
250 be constructed. The Project Layout reflects an optimal configuration for a  
251 competitive Project within the Project Area, while avoiding or minimizing impacts  
252 to residences, cultural resources, wetlands, waterways, grasslands, and sensitive  
253 species and their habitats. Additional discussion is included in Section 5 of the  
254 Application.

255

256 **Q. Why is the Project proposing alternate turbine locations?**

257 A. Alternate turbine locations are proposed to provide optionality during final micro-  
258 siting and design of the Project. Alternate turbine locations help prevent  
259 unforeseen findings from reducing the size of the Project or from significantly  
260 injuring the productivity of the Project. In all cases, the final turbine locations  
261 constructed will be located on leased land, specified noise and shadow flicker  
262 thresholds will not be exceeded, County siting standards will be complied with,  
263 cultural resource impacts and documented habitats for listed species will be  
264 avoided, and wetland impacts will be avoided or in compliance with applicable  
265 USACE regulations.

266

267 **VII. LOCAL LAND USE, COMMUNITY IMPACTS, AND EMPLOYMENT**

268

269 **Q. Describe the existing land use in the Project Area.**

270 A. Land use within the Project Area is predominantly agricultural, with land cover  
271 consisting of a mix of cultivated crops and herbaceous vegetation. The remaining  
272 land cover in the Project Area consists of grasslands, emergent herbaceous  
273 wetlands; developed land, open space; hay/pastureland; open water; deciduous  
274 forest; developed, low intensity; developed, medium intensity; mixed forest; woody  
275 wetlands; developed, high intensity; and shrub/scrub vegetation.

276

277 **Q. Is the Project compatible with existing land uses and future development in**  
278 **and around the Project Area?**

279 A. Yes. In 2023, South Deuel Wind received a Conditional Use Permit (“CUP”) for the  
280 Project from Deuel County. Deuel County’s granting of the CUP demonstrates that  
281 the Project will not threaten the social and economic condition of inhabitants or  
282 expected inhabitants in the siting area. Additionally, the CUP also demonstrates  
283 that the Project will not unduly interfere with the orderly development of the region  
284 Moreover, the Project is compatible with existing land uses, which are primarily  
285 agricultural. Wind energy facilities are particularly compatible with agricultural land  
286 because crops can be grown, and livestock can graze, up to the turbines.

287

288 **Q. Will the Project alter local land use?**

289 A. Construction of the Project will result in conversion of a small portion of the land  
290 within the Project Area. Approximately 1,058 acres of temporary ground  
291 disturbance impact is expected during construction of the Project, approximately  
292 51 acres of which will be long-term for the operational life of the Project  
293 (approximately 0.1 percent of the total land within the Project Area) to host  
294 aboveground Project Facilities. Following completion of construction, all temporary  
295 construction workspaces will be cleaned up and restored to pre-construction  
296 conditions pursuant to the lease and easement agreements, which primarily  
297 consist of cultivated croplands and pastureland/grassland.

298

299 **Q. Is South Deuel Wind working with local Deuel County personnel regarding**  
300 **additional Project approvals?**

301 A. Yes. South Deuel Wind has consulted with Deuel County representatives through  
302 meetings, phone calls, and electronic communications, including the application  
303 and receipt of a CUP from the County. In addition, South Deuel Wind is working  
304 with Deuel County personnel to enter into an agreement for road use and  
305 restoration of haul roads. The agreement provides for pre- and post-use  
306 inspections of county roads, as well as repair and payment mechanisms. South

307 Deuel Wind also anticipates working with the County to obtain an overweight and  
308 oversize permit for use in hauling equipment and Project components.

309

310 **VIII. FUTURE ADDITIONS**

311

312 **Q. Does South Deuel Wind anticipate future additions and modifications to the**  
313 **Project?**

314 A. Apart from the final micro-siting flexibility requested in Section 4.2 of the  
315 Application, South Deuel Wind does not currently have any plans for future  
316 additions to or modifications of the Project.

317

318 **IX. DECOMMISSIONING**

319

320 **Q. What is the estimated life of the Project?**

321 A. South Deuel Wind anticipates that the operational life of the Project will be  
322 approximately 30 years. At the end of commercial operation, South Deuel Wind  
323 will assess whether to decommission the Project or seek to extend the life of the  
324 Project. Subject to applicable regulatory approval, should South Deuel Wind  
325 decide to pursue continued operations, it will evaluate whether to continue with the  
326 existing equipment or to upgrade the facility with newer technologies.

327

328 **Q. If the Project is decommissioned, will the Project comply with all applicable**  
329 **state and local requirements for structure removal and site restoration?**

330 A. Yes. Decommissioning will comply with applicable state and local requirements,  
331 including any Deuel County requirements. South Deuel will be responsible for  
332 covering all anticipated decommissioning costs. Within 120 days of completion of  
333 construction, South Deuel will submit to the County a Decommissioning Plan  
334 describing the manner in which South Deuel anticipates decommissioning the  
335 Project in accordance with the requirements set forth in Section 1215.09(b) of the  
336 Deuel County Zoning Ordinance.

337

338 **Q. Does South Deuel Wind have any recommendations as to financial**  
339 **assurances for the Project's decommissioning costs?**

340 A. Yes. South Deuel Wind respectfully requests that the Commission authorize South  
341 Deuel Wind to post a bond for financial assurance for decommissioning costs in  
342 lieu of an escrow. While the Commission has typically required an escrow account  
343 for financial assurance for decommissioning costs, the Commission recently  
344 approved bonds for wind energy facilities in 2021 and 2022 during those projects'  
345 ten-year review.<sup>1</sup> We believe that these recent decisions support the use of a bond  
346 for security for the Project.

347

348 **Q. Will South Deuel Wind obtain an indemnity bond with the County for road**  
349 **use as it concerns construction of the Transmission Facility?**

350 A. Yes. Pursuant to SDCL 49-41B-38, South Deuel Wind will furnish an indemnity  
351 bond to secure the restoration and repair of roads after construction of the  
352 Transmission Facility.

353

354 **X. CONCLUSION**

355

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

357 A. Yes.

358

359

360 Dated this 28<sup>th</sup> day of June, 2024

361

362

363   
\_\_\_\_\_  
Monica Monterrosa

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<sup>1</sup> See *In the Matter of the Application by PrairieWinds SD1, Inc., A Subsidiary of Basin Electric Power Cooperative, for a Wind Energy Facility Permit for the PrairieWinds SD1 Wind Farm and Associated Facilities*, Docket No. EL09-028; *In the Matter of the Application by Buffalo Ridge II LLC a subsidiary of Iberdrola Renewables, Inc., for an Energy Conversion Facility Permit for the Construction of the Buffalo Ridge II Wind Farm and Associated Collection Substation and Electric Interconnection System*, Docket No. EL08-031.