BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE APPLICATION BY PHILIP WIND PARTNERS, LLC FOR ENERGY FACILITY PERMITS OF A WIND ENERGY FACILITY AND A 230 KV TRANSMISSION FACILITY IN HAAKON COUNTY, SOUTH DAKOTA FOR THE PHILIP WIND PROJECT

SD PUC DOCKET EL25-___

PRE-FILED DIRECT TESTIMONY OF MICHELLE PHILLIPS ON BEHALF OF PHILIP WIND PARTNERS, LLC

August 15, 2025

I. INTRODUCTION AND QUALIFICATIONS

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

A. My name is Michelle Phillips. I am a Manager, Environmental Compliance and Strategy at Invenergy LLC (Invenergy). My business address is One South Wacker Drive, Suite 1500, Chicago Illinois, 60606.

Q. On whose behalf are you providing this testimony?

A. I am providing this testimony on behalf of Philip Wind Partners, LLC (Philip Wind) in support of its Facility Permit Application (Application) to the South Dakota Public Utilities Commission. The Application is for a permit to construct and operate a wind energy facility which will have a nameplate capacity of up to 333 megawatts (MW) and deliver up to 300 MW to the point of interconnection (Wind Energy Facility), and a transmission facility which will operate at 230 kilovolts (kV) and be approximately 7 miles in length (Transmission Facility). The Wind Energy Facility and the Transmission Facility are collectively referred to as the Project.

Q. Briefly describe your educational background and professional experience.

A. I have a Bachelor of Science in environmental science and a minor in business administration from Tuskegee University. I also have a Master of Science in environmental management from the University of Houston Clear Lake. Prior to joining Invenergy, I was an environmental specialist with NextEra Energy Resources. There, I was responsible for advising multidisciplinary teams on permitting strategies to facilitate development of projects including renewable generation (wind and solar), battery storage, transmission, and other projects supporting decarbonization. I joined Invenergy in 2022 as a senior associate on the environmental compliance and strategy team and I am currently a manager, where I am responsible for developing environmental strategy for siting design, construction and operation of renewable energy facilities including natural resource assessment, risk analysis, permitting, regulatory compliance, and coordination with federal, state, and regional agencies.

II. PURPOSE OF TESTIMONY

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

A. I am responsible for overseeing the wildlife and wetlands survey work and environmental permitting for the Project, as well as other environmental analyses performed for the Project.

Q. What is the purpose of your Direct Testimony?

A. The purpose of my Direct Testimony is to describe the environmental review conducted by Western Area Power Administration (WAPA) as part of the Project's interconnection request. My Direct Testimony also provides information concerning existing environmental conditions in the area of the proposed Project (Project Area),[1] potential impacts of the Project on the existing environment, and how the Project will avoid or minimize potential impacts. In addition, I describe the environmental survey work conducted on behalf of Philip Wind to analyze the Project Area as well as the associated federal and state agency coordination. I also discuss the sections and appendices of the Application that I am sponsoring.

Q. Identify the sections of the Application that you are sponsoring for the record.

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

- Section 1.2: Project Background (with respect to WAPA environmental review)
- Section 9: Effect on Terrestrial Ecosystems
- Section 10: Effect on Aquatic Ecosystems
- Section 22.2.1: United States Fish and Wildlife Service and South Dakota Game, Fish, and Parks
- Section 22.2.2 South Dakota State Historic Preservation Office
- Section 22.3: Public and Agency Comments
- Appendix C: Environmental Commitments

[1] The Project Area is shown in Appendix A1.

- Appendix D: Finding of No Significant Impact
- Appendix G: Water Resources Analysis Report
- Appendix H: Grassland Habitat Assessment Report
- Appendix I: Environmental Assessment
- Appendix J: Prairie Dog Colony Status and Mapping Report
- Appendix K: Prairie Grouse Lek Survey Report
- Appendix L: 2023-2024 Large Bird Use Survey Report
- Appendix M: Raptor Nest Survey Report
- Appendix N: Eagle Utilization Distribution Monitoring
- Appendix O: Northern Long-Eared Bat Habitat Assessment
- Appendix P: Whooping Crane Habitat Assessment
- Appendix Q: Bird and Bat Conservation Strategy
- Appendix R: Whooping Crane Monitoring and Contingency Plan
- Appendix Y: Level III Intensive Archaeological Resources Survey (**Confidential**)
- Appendix Z: Historic-Age Resource Survey (**Confidential**)

III. WAPA ENVIRONMENTAL REVIEW

Q. Has the Project been subject to federal environmental review?

A. Yes. The Project has been the subject of federal National Environmental Policy Act (NEPA) review by WAPA as part of WAPA's review of the Project's interconnection request.

Q. What type of environmental review did WAPA conduct?

A. WAPA prepared an environmental assessment (EA). WAPA issued the final EA in May 2025, along with a Finding of No Significant Impact (FONSI).

Q. Did Philip Wind support WAPA's environmental review?

A. Yes. Philip Wind coordinated with WAPA and other federal agencies as part of the environmental review process. Philip Wind also worked with WAPA to support consultation with federally recognized Tribes.

Q. Did WAPA consult the U.S. Fish and Wildlife Service (USFWS) as part of the environmental review process?

A. Yes. Philip Wind worked with both WAPA and USFWS throughout the environmental review process as part of compliance with the Endangered Species Act. Additional detail is provided in the Application, including in Section 1.2 of the Application.

Q. What was the result of WAPA's environmental review?

A. As I indicated previously, WAPA issued a FONSI. The FONSI stated that "the Project will not significantly impact the environment because of [Philip Wind's] commitment to avoidance and minimization measures."

Q. Are the avoidance and minimization measures to which Philip Wind has committed documented?

A. Yes. The measures are documented in the EA and FONSI, as reflected in Appendices D and I of the Application.

IV. ENVIRONMENTAL SURVEYS/STUDIES

Q. Please describe how the area of analysis for the Project's environmental surveys and studies has changed over time.

A. The Project has been in development for more than eight years and was acquired by Invenergy in 2019. Before Invenergy's acquisition of Philip Wind in 2019, representatives of Philip Wind met with environmental agencies to discuss the Project's environmental surveys. Philip Wind also completed surveys for eagle use, eagle nests, prairie grouse leks, and bat acoustics, as well as a whooping crane habitat assessment and grassland assessment . When Invenergy acquired Philip Wind, the Project Area encompassed approximately 71,000 acres.. Since then, the Project Area and pre-existing layout has been modified to address comments from regulatory agencies and the public. The Project facilities now avoid, minimize, or mitigate potential adverse impacts to environmental resources

based on collected field data. For example, Philip Wind applied setbacks from natural resources as described in the design avoidance and minimization measures listed in Section 9.3.4 of the Application. Philip Wind also refined Project design to shift turbine locations to avoid unbroken grasslands. Philip Wind also removed four turbine locations from the layout due to proximity to prairie grouse leks and Tier 3 modeled priority sharp-tailed grouse habitat.

Q. What was the overall approach to environmental analysis of the Project Area?

A. Philip Wind conducted or authorized various environmental surveys and studies in and around the Project Area. The purpose of this analysis was to identify the potential for sensitive species and their habitats, wetlands/waterways, and other environmental resources within the Project Area and identify strategies to avoid or minimize impacts to those resources. The surveys address numerous resources and have been conducted in coordination with the USFWS and South Dakota Game Fish and Parks (SDGFP), and to comply with applicable regulations and guidelines, including the USFWS Land-Based Wind Energy Guidelines (WEG), the USFWS Eagle Conservation Plan Guidance, and the South Dakota Siting Guidelines for Wind Projects. Survey results have informed Project siting efforts and have been used to develop avoidance or minimization strategies to be implemented in connection with construction and operations. The specific environmental analyses conducted for the Project are described in detail in Sections 9 and 10 of the Application and related appendices.

Q. Discuss the wetland surveys and/or studies conducted with respect to the Project.

A. Wetland delineations were conducted from June 13 to 16, 2023, and June 19 to 22, 2023, in accordance with the United States Army Corps of Engineers (USACE) *Wetlands Delineation Manual* and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0)* (Environmental Laboratory 1987; USACE 2010) methodologies. Field wetland delineations

focused on a survey area of approximately 2,068 acres, covering the proposed locations of the wind turbines, access roads, O&M building, and associated buffers rather than the entire Project Area. Project facility locations were shifted in response to the results to avoid impacts to wetlands and streams to the extent practicable, and any outstanding impacts will be appropriately permitted in compliance with the CWA. There are no turbines sited within field delineated wetlands or waterways. See Section 9.2 of the Application for further detail.

Q. Did Philip Wind conduct a grassland assessment?

A. Yes. Philp Wind hired Western EcoSystems Technology, Inc. (WEST) to conduct an updated grassland habitat assessment in 2022, which updates the results of an earlier 2018 assessment. The grassland assessment is included as Appendix H to the Application. The grassland habitat assessment was conducted using a two-stage process: a desktop analysis followed by field surveys in areas not surveyed in 2018. In total, 27,678 acres were identified as grasslands of varying quality. Of the grasslands identified, 12,192 acres (17.9% of the Project Area) were broken grassland, and 14,915 acres (21.9% of the Project Area) were unbroken grassland as defined by South Dakota State University (Bauman et al 2020).[2] The remaining 571 acres were not surveyed because they could not be accessed. Philip Wind has sited all turbine locations to avoid unbroken grasslands.

Q. Discuss Philip Wind's evaluation of wildlife in the Project Area.

A. Numerous wildlife studies were completed for the Project between 2017 and 2023, which are described in Section 9.3 of the Application. These studies helped Philip Wind understand wildlife that may be present in the Project Area. Table 9.3.1-1 in the Application lists the wildlife species that may be present in the Project Area, and Table 9.3.1-2 in the Application lists the wildlife studies conducted for the

[2] Bauman, P., B. Richardson, and T. Butler. 2020. Quantifying Undisturbed (Native) Lands in Western Sd: September 2020 Updated County Maps: Pdfs. South Dakota State University, Open Prairie. Available online: https://openprairie.sdstate.edu/data_land-westernSD/7

Project. See Section 9.3 of the Application for further detail on the analyses conducted and potential avoidance and minimization measures.

Q. Describe the analysis Philip Wind performed regarding avian wildlife.

A. Philip Wind retained WEST to perform several wildlife surveys and analyses in and around the Project Area, including a Whooping Crane Habitat Assessment (Appendix P), a Large Bird Use Survey (Appendix L), a Raptor Nest Survey (Appendix M), a Prairie Grouse Lek Survey (Appendix K), and a Bat Habitat Assessment for the Northern Long-Eared Bat (NLEB) (Appendix O). These reports and surveys were used to inform infrastructure siting and routing for the Project.

Q. Please summarize these studies.

A. The Whooping Crane Habitat Assessment was performed to identify potentially suitable whooping crane stopover habitat in the Project Area. The assessment and modeling used indicates that habitat within the Project Area has a 0.38% chance of use by the species during migration. Because of the low quantities of suitable wetland stopover habitat relative to the Project Area, and the very low likelihood of use by whooping cranes, the species is considered unlikely to occur in the Project Area. Additional information on the Whooping Crane Habitat Assessment is included in Section 9.3.2.1.4 of the Application and Appendix P.

Large Bird Use Surveys were conducted monthly from January 2022 to March 2023, and then again from April 2023 to August 2024 in the Project Area. These surveys were conducted to assess species composition, identify the temporal and spatial use of large birds; document observed threatened, endangered, and other species of concern; and document eagle observations within the Project Area. No federally or state-protected threatened or endangered species were recorded. Additional information on the Large Bird Use Surveys is included in Section 9.3.1.3 of the Application and Appendix L.

Raptor nest surveys were conducted to identify the location and occupancy status of potential raptor, including eagle, nests within and surrounding the Project Area. These surveys were conducted over a multi-year period and included aerial and ground observation methods. No federal- or state-threatened or endangered species were documented during these observations. Additional information on the Raptor Nest Surveys is included in Section 9.3.1.4 of the Application and Appendix M.

Prairie Grouse Lek Surveys were conducted in the Project Area and a 2-mile buffer surrounding the Project Area during three aerial flights between April 4 and May 11, 2022. Philip Wind conducted additional prairie grouse lek surveys in 2023, revisiting the 2022 active lek locations via one aerial survey, and three ground surveys based on a methodology designed in coordination with SDGFP. The ground surveys were conducted between March 27 and May 6, 2023 within the period when prairie grouse are active at leks. The aerial survey was conducted within the same timeframe to cover areas not accessible by the ground survey. There were 69 new and historical leks observed during the 2023 surveys. Additional information on the Prairie Grouse Lek Survey is included in Sections 9.3.1.2 and 9.3.4 of the Application and Appendix K. There are no turbines sited on unbroken grasslands within 1 mile of prairie grouse leks.

A summer foraging and roosting habitat assessment specific to NLEB was completed in September 2022. The evaluation consisted of an initial desktop review, followed by a field reconnaissance visit to ground-truth results of the desktop review. As a result of this habitat assessment, 65 acres of potential summer habitat and 1,508 acres of connected habitat were identified in the study area; most of this potential habitat is outside the Project Area. Additional information on the NLEB Habitat Assessment is included in Sections 9.3.1.5.1 and 9.3.2.1.1 of the Application and Appendix O. There are no turbines within ½ mile of known or presumed occupied foraging, roosting, and commuting NLEB habitat.

Q. How will Philip Wind minimize and mitigate impacts to the environment and to wildlife?

A. The Project facilities have been sited to avoid protected lands, potential habitat for sensitive species, and other environmental resources identified and mapped within the Project Area. For example, no Project Facilities have been sited on USFWS critical habitat or USFWS easements. Likewise, to the extent practicable, Project facilities are sited in upland areas, avoiding low-lying wetlands and streams. Philip Wind will also use best management practices to further reduce the Project's environmental impact. Philip Wind prepared a Bird and Bat Conservation Strategy in accordance with the USFWS WEG that will be implemented to minimize impacts to avian and bat species during construction and operation of the Project. Though it is unlikely northern long-eared bats would occur in the Project, Philip Wind commits to increase turbine cut-in speeds to 5.0 m/sec from ½ hour before sunset to ½ hour after sunrise during the fall migration period from August 16–October 31. Though it is unlikely whooping cranes would occur within the Project, Philip Wind developed and will implement a whooping crane monitoring and contingency plan to minimize potential impacts to whooping cranes during Project construction and operations. Additionally, Philip Wind commits to fund 5.0 acres of wetland offsets for potentially impacted whooping crane stopover habitat to be implemented by a third party. Additional mitigative measures are discussed in the Application in several different sections including Sections 7, 8, 9, 10, and 11.

V. AGENCY COORDINATION

Q. Discuss Philip Wind's agency coordination efforts.

A. As discussed in Sections 22.2 and 22.3 of the Application , throughout Project planning and development, Philip Wind has coordinated with various federal, state, and local agencies to identify potential natural and cultural resources in the vicinity of the proposed Project. Philip Wind held multiple meetings and consultations with the staff of the USFWS and SDGFP to discuss the Project.

Prior to Invenergy's acquisition of Philip Wind, Philip Wind met with USFWS and SDGFP multiple times in 2018 to discuss the Project. After the acquisition, meetings with USFWS and SDGFP were conducted from 2022 through 2024. Key agency communications included project overviews, data sharing, and the solicitation of feedback on study methodologies and siting considerations. In response to agency input, Philip Wind redesigned the project to address concerns about birds, bats, and sensitive habitats, including shifting the project area and project facilities, and proposing additional environmental surveys.

Q. Did Philip Wind receive input from the agencies?

A. Yes. Philip Wind considered input and comments from agencies and the public in siting the Project Area and in identifying potential turbine locations. Some of the adjustments made during Project siting and design, in response to comments, included the avoidance of impacts to state and federal lands within or near the Project, to the extent practicable, and avoidance or minimization of impacts to unbroken grasslands, wetlands, and other habitats within or near the Project Area.

Q. Has Philip Wind also consulted with the South Dakota State Historic Preservation Office (SHPO) regarding cultural resources?

A. Yes. As discussed in Section 22.2.2 of the Application, SHPO consultation was conducted during WAPA's EA scoping period that was held from January 19 to February 13, 2023. Consistent with this consultation, a Level III Archaeological Survey and a Historic-Age Resource Survey were conducted for the Project by Philip Wind. These surveys are included as Application Appendices Y and Z. For any cultural resources identified during the surveys, a recommendation of National Register of Historic Places (NRHP)-eligibility of the resource has been made. Sites determined to be NRHP-eligible will be avoided by the Project. Philip Wind also developed an Unanticipated Discovery Plan (Appendix AA) which provides procedures to follow to address any unanticipated discoveries of cultural resources during Project construction, including previously undiscovered archaeological sites and other remains.

Q. What steps will Philip Wind take to avoid, minimize, and/or mitigate impacts to cultural resources?

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

VI. CONCLUSION

Q. Does this conclude your testimony?

A. Yes.

Dated this 15th day of August, 2025

Michelle Phillips

_____

Michelle Phillips