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 ALEX CHANDLER 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 Alex Chandler. I am a Director, Renewable Development at Invenergy LLC (Invenergy). My business address is 1401 17th Street, Suite 1100, Denver CO 80202.

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's Degree in business administration, a Bachelor's Degree in accounting and finance, and a minor in economics from the University of Montana. Prior to joining Invenergy, I worked for various financial groups and firms, coordinating financial planning and analysis. I joined Invenergy in 2021 as a financial associate in renewable energy development, and assumed my current role as a director, renewable development in 2025 where I am responsible for leading project development of various renewable energy projects. My resume is attached as **Exhibit 1**.

Q. What is the relationship between Philip Wind and Invenergy with respect to the Project?

A. Philip Wind is an affiliate of Invenergy, and Invenergy is assisting with development of the Project.

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

A. As a privately held company with a 20+ year track record of responsibly developing, building, owning and operating wind, solar, energy storage, and natural gas generation facilities, Invenergy has developed more than 200 projects and 34 gigawatts of generating capacity in the Americas, Europe, and Asia. Invenergy is also developing transmission projects to build a more robust, resilient grid. Invenergy approaches operations with an owner's mindset by maintaining projects in top working condition to ensure optimal performance. Invenergy's comprehensive service capabilities are supported by dedicated staff continuously monitoring and improving the performance of the fleet.

II. PURPOSE OF TESTIMONY

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

A. I am responsible for managing the overall development of the Project, including permitting. I have been leading the development effort for the Project since September 2021. For Philip Wind, I worked with landowners to get new land lease agreements executed in 2022–2023, and worked with Southwest Power Pool (SPP) to obtain an Interconnection Agreement from SPP and Western Area Power Administration (WAPA) in 2022. I also supported the Project's environmental assessment and the NEPA process, and worked with many stakeholders to progress development of Project development over the past four years.

Q. What is the purpose of your Direct Testimony?

A. The purpose of my Direct Testimony is to provide a brief overview of the Project's development history, including Project site selection, site analysis, and layout and facility design. I also provide testimony regarding Project operational considerations and analysis of the Project's potential effect on the physical environment and cultural resources, and introduce the other witnesses who will testify on behalf of Philip Wind.

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 2: Purpose of, and Demand for, the Facility
- Section 3: Estimated Cost of the Facility
- Section 5: Alternative Sites and Siting Criteria
- Section 7: Effect on Physical Environment
- Section 8: Effect on Hydrology
- Section 11.1: Land Use
- Section 11.4: Visual Resources
- Section 16: Employment Estimates
- Section 17: Future Additions and Modifications
- Section 18: Decommissioning of Wind Energy Facilities
- Section 22.2.3 Haakon County
- Appendix A: Figures
- Appendix B: Proposed Permit Conditions
- Appendix E: Decommissioning Plan
- Appendix AA: Unanticipated Discovery Plan

Q. What exhibits are attached to your Direct Testimony?

A. I am sponsoring the following exhibit

- **Exhibit 1: Alex Chandler Resume**

Q. What other witnesses are testifying on behalf of Philip Wind?

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

- Ms. Brianna Gries, Senior Associate, Renewable Development, Invenergy, will testify regarding wind energy facility and transmission facility information, and is sponsoring Application Sections 1, 11.2, 12, 13, 14, 15, 20, 21, 22.1, and 22.4.
- Ms. Michelle Phillips, Manager, Environmental Compliance and Strategy, Invenergy, will testify regarding environmental review conducted for the Project

and is sponsoring Application Sections 1.2, 9, 10, 22.2.1, 22.2.2, 22.3, and Appendices C, D, G, H, I, J, K, L, M, N, O, P, Q, R, Y, and Z.

- Mr. Teddy Hines, Staff Engineer, Renewable Engineering, Invenergy, will testify regarding design and engineering considerations for the Project, and is sponsoring Application Sections 4, 6, 11.6, 19, and Appendices F, U, V, W, and X.
- Mr. Michael Hankard, President and Principal, Hankard Environmental, Inc, will testify regarding noise impact and mitigation of the Project and is sponsoring Application Section 11.3 and Appendix S.
- Ms. Joann Blank, Senior Scientist and Project Manager, Stantec Consulting Services Inc, will testify regarding shadow flicker impact and mitigation of the Project and is sponsoring Application Section 11.5 and Appendix T.

III. PROJECT OVERVIEW

Q. Who will own and operate the Project?

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

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

A. The Project includes a wind energy facility that will have a nameplate capacity of up to 333 MW and deliver up to 300 MW to the point of interconnection. The wind energy facility will include up to 87 wind turbines located on 91 potential turbine locations. The Project also includes an associated transmission facility, which will

operate at 230 kV and be up to 7 miles in length. The Project is located northwest of the town of Philip in Haakon County, South Dakota. Mr. Teddy Hines provides additional information related to the Project and its facilities in his Direct Testimony.

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

A. Philip Wind selected the state of South Dakota to develop the Project because of its robust wind resource, transmission infrastructure, residents and landowners who value diversifying their farm revenue, and business-friendly regulations and programs. Moreover, Philip Wind selected Haakon County based on its strong wind resource, access to transmission infrastructure, the compatibility of a wind project with existing land uses, strong landowner interest and community support, and the successful development and operation of the Project. These characteristics allow for the development of a successful wind project.

Q. Describe the steps Philip Wind took to evaluate natural resources within the Project Area.

A. As described in more detail in the Application and supported by the testimony of Philip Wind witness Ms. Michelle Phillips, throughout the Project planning and development process, Philip Wind coordinated with various federal, state, and local agencies to identify potential natural resources in the vicinity of the proposed Project. The environmental review of the Project included an Environmental Assessment by the interconnecting utility, WAPA which issued a finding of no significant impact for the Project. Philip Wind has had numerous meetings and consultations with staff from the United States Fish and Wildlife Service (USFWS), South Dakota Game, Fish and Parks (SDGFP), and South Dakota State Historical Society from 2017 to present to discuss the Project. Philip Wind is voluntarily following various guidance such as the USFWS Land-Based Wind Energy Guidelines (USFWS 2012), the USFWS Region 6 Wildlife Buffer Recommendations for Wind Energy Projects (USFWS 2020), the Eagle Conservation Plan Guidance (USFWS 2013), and United States Army Corps of Engineers (USACE) Guidelines, in addition to consultations with USFWS and

SDGFP staff. Furthermore, Philip Wind commenced numerous studies to evaluate the impact of the Project on natural resources, as discussed in the Application.

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

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

IV. PROJECT NEED AND BENEFITS

Q. Briefly describe the need for the Project.

A. The purpose of the Project is to generate electricity to supply the needs of entities that have an interest in procuring renewable energy. As discussed in Section 2.1 of the Application, the demand for renewable energy has significantly increased over recent years as aging coal and nuclear facilities are being retired for regulatory and financial reasons. Most, if not all, of regional power producers' resource plans call for increasing the use of fixed-cost resources, such as wind energy, with zero fuel cost, pollution, and carbon emissions as a necessity to provide cost-effective electricity to their customers. At the regional and state level significant increase in energy consumption is forecasted based on expanding data center loads, electrification, and increased manufacturing activity. Within SPP, a regional grid operator the proposed project is located in, load responsible entities forecast a 10% increase in the summer 2029 Net Peak Demand vs. 2024 summer peak. SPP is projected to have a capacity deficit of 5,950 MW by summer 2029, which is driven by the 10% rise peak load and planned retirement of 2,389 MW of coal and natural gas resources by 2029. This capacity deficit will need to be remedied by a combination of additional generators constructed, revised retirements, or reduced peak load. South Dakota has some of the nation's greatest wind resources, corroborated by the 55% in-state net generation rate provided by wind energy. The Project site, in particular, boasts an abundance of wind resources, enabling significant energy production with no fuel costs. Electricity

generated by the Project can be sold at more competitive prices compared to other forms of energy projects that rely on purchasing fuel for generation. This translates to cost-effective electricity for power purchasers and energy customers within the SPP service territory. Once online, up to 300 MW of electrical generation will be delivered to the SPP regional transmission system, which will be distributed and used to service electrical demand in the WAPA service territory.

Q. Describe some of the benefits of the Project.

A. By supplying domestic lower cost and carbon-free electricity to the grid, the Project will offer both environmental benefits and price stability. The Project will also provide numerous local and regional economic benefits. These include payments to landowners, increased local tax revenue, and job opportunities during both the short-term construction and the long-term operational phases of the Project. Additional information regarding the Project's local benefits is included in Section 2.1.3 of the Application. Philip Wind is also committed to delivering community-centered benefits and being involved in the community. During the development of the Project, this commitment has been demonstrated through membership in the Philip Chamber of Commerce, annual sponsor of the Philip Bronc Match, sponsor of Scotty Philip Days, and regular donations to the Philip Volunteer Fire Department.

V. PROJECT COST

Q. What is the estimated cost of the Project?

A. The current estimated capital cost of the Project is approximately $750 million based on indicative construction and wind turbine pricing cost estimates. This estimate includes lease acquisition, permitting, engineering, financing, procurement, and construction of the Project Facilities.

VI. ALTERNATIVES

Q. Discuss Philip Wind's evaluation of alternative site configurations.

A. The Project includes 91 proposed turbine locations, of which at most 87 will be constructed. The Project Layout reflects an optimized configuration given competing priorities including energy generation, landowner participation, environmental resource constraints and other stakeholder inputs. The Project avoids or minimizes impacts to residences, cultural resources, wetlands, waterways, grasslands, and sensitive species and their habitats. Additional discussion is included in Section 5 of the Application.

Q. Why is the Project proposing alternative turbine locations?

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

Q. Why does Philip Wind request the flexibility to use one of three turbine models or one of equivalent specifications and capacity?

A. The ability to select among several models helps Philip Wind negotiate with multiple suppliers to obtain a cost-effective model for the Project.

VII. EMPLOYMENT OPPORTUNITIES & COUNTY COORDINATION

Q. Describe the employment opportunities that the Project will present.

A. The Project is expected to create approximately 200 temporary construction jobs for Haakon County. Employees hired during construction will include skilled labor,

such as crane operators, specialized transport, structural engineers, mechanics, construction equipment operators, wind turbine operators, as well as unskilled laborers. During operations, the Project is expected to employ approximately 12 full-time employees. Employees hired during operation will include turbine technicians, facility manager(s), and administrative personnel as necessary.

VIII. FUTURE ADDITIONS

Q. Does Philip Wind anticipate future additions and modifications to the Project?

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

IX. DECOMMISSIONING

Q. What is the estimated life of the Project?

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

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

A. Yes. Decommissioning will comply with applicable state requirements, including any decommissioning conditions included by the Commission. As I mentioned previously, Haakon County does not have local zoning or regulations governing decommissioning of wind energy facilities. Philip Wind will be responsible for covering all anticipated decommissioning costs. Philip Wind understands that the

Commission has required decommissioning financial assurance for wind projects and is prepared to comply with the requirements imposed in Docket EL24-023 here, as well.

Q. Will Philip Wind obtain an indemnity bond with the County for road use as it concerns construction of the Transmission Facility?

A. Yes. Pursuant to SDCL 49-41B-38, Philip Wind will furnish an indemnity bond in the amount of $1 million to secure the restoration and repair of roads after construction of the Transmission Facility.

Q. What is Philip Wind requesting from the Commission in this docket?

A. Philip Wind requests that the Commission grant facility permits for the Wind Project and the Transmission Facility subject to the conditions set forth in Appendix B. These conditions are substantially the same as the conditions the Commission approved in Docket EL24-023.

X. CONCLUSION

Q. Does this conclude your testimony?

A. Yes.

Dated this 15th day of August, 2025

/s/ Alex Chandler

Alex Chandler