

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE APPLICATION BY ENGIE NORTH AMERICA, INC. FOR A
PERMIT FOR A WIND ENERGY FACILITY IN HUGHES AND HYDE COUNTIES, SOUTH
DAKOTA, FOR NORTH BEND WIND PROJECT

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PRE-FILED DIRECT TESTIMONY OF CASEY WILLIS
ON BEHALF OF ENGIE NORTH AMERICA, INC.

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1 Q. **Please state your name, employer and business address for the record.**

2 A. My name is Casey Willis and I am a Senior Advisor, Project Development with Engie North
3 America, the owner of North Bend Wind Project, LLC. My office location is 3760 State Street,
4 Suite 200, Santa Barbara, CA 93105

5 Q. **Briefly describe your educational background.**

6 A. I have two Bachelor of the Arts degrees in Environmental Studies and Geography,
7 respectively, from the University of California, Santa Barbara, a Master's Degree in City and
8 Regional Planning (MCRP) from California Polytechnic State University, San Luis Obispo and a
9 Master of Business Administration (MBA) from California State University, Channel Islands. I
10 have 19 years of experience in renewable energy development, project entitlements/permitting,
11 and environmental review. I have been involved in the successful development of multiple
12 utility scale wind energy projects across the plains and Midwest. My work involves the
13 oversight and management of the development of the North Bend Wind Project.

14 Q. **Briefly describe your professional experience.**

15 A. I have been employed in renewable energy development for the past 15 years. Prior to
16 the that time, I worked as an environmental consultant.

17 Q. **Have you attached a resume or CV.**

18 A. Yes, my resume is attached.

19 Q. **Have you previously submitted or prepared testimony in this proceeding in South
20 Dakota?**

21 A. No, I have not submitted testimony in this proceeding.

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

23 A. Provide clarification and confirmation of information related to the permit application

24 and the overall development of the North Bend Wind Project.

25 **Q. Please give us an overview of your involvement in the proposed project?**

26 A. I am currently the lead developer on the North Bend Wind Project.

27 **Q. Which sections of the application are you sponsoring with your testimony?**

28 A. I'm responsible for all or portions of Sections 1-5, 15, 17-19, and 21-22.

29 **Q. Please Provide an overview of the location of the project?**

30 A. The Project will be located within Hyde and Hughes counties in the townships of Butte,
31 Chapelle, Harrold, Holabird, Pleasant Valley, Pratt, and Webster approximately 2-3 miles south
32 of Harrold. The Project is directly to the west of the Triple H Wind Project. The Project will be
33 located on mostly privately held land on roughly 45,000 acres.

34 **Q. What is covered by the application submitted for the North Bend Wind Project?**

35 A. North Bend Wind Project, LLC respectfully requests the approval of an Energy Facility
36 Permit to construct and operate the North Bend Wind Project from the South Dakota Public
37 Utilities Commission. The total installed capacity of the Project is proposed to be 200.22
38 megawatts (MW). The application includes the requested approval of 78 locations, of which 71
39 will be constructed. A single wind turbine model produced by General Electric is proposed. The
40 extra locations are needed at this time to account for the loss of some locations that may be
41 deemed non-constructible due to further geotechnical evaluations/limitations,
42 engineering/design, wind optimization and title encumbrances that be identified through final
43 development of the project prior to construction.

44 Project components will include up to 71 GE 2.82 MW-127 wind turbine generator,
45 temporary/permanent accessing roads, 34.5 kilovolt (kV) underground electrical collector lines,

46 project substation, and a permanent met tower. The O&M facility built for the Triple H Wind
47 Project will likely be utilized to service the North Bend Wind Project. It's possible that an
48 additional O&M location would be used to support the construction of North Bend, but that has
49 yet to be determined. Additional temporary construction areas, including crane paths, public
50 road improvements, laydown yard/staging area and concrete batch plant(s) (as needed). The
51 Project will interconnect into a new switchyard that would be constructed on Western Area
52 Power Authority's existing Fort Thompson to Oahe 230 kV line.

53 **Q. What is the purpose of the facility and why is it needed?**

54 A. The purpose of the Project is to generate electricity via wind power to supply the needs
55 required for contracts with North Bend. The Project does not currently have a signed power
56 purchase agreement, though we are actively engaged in discussions with various entities about a
57 PPA(s) at this time. Recent analysis has consistently shown that wind energy is one of the most
58 cost-effective electricity sources for customers, making it a desirable investment. New wind
59 energy facilities are less expensive to construct than new conventional energy sources, even
60 without the existing production tax credit program. This is demonstrated by the PPAs that have
61 been executed in South Dakota in the past few years.

62 **Q. What are the beneficial attributes of the project?**

63 A. From a purely economic standpoint, the approximately \$265-285 million-dollar
64 investment associated with the North Bend Wind Project would provide funding to the State of
65 South Dakota, Hughes and Hyde Counties, local school district and to a revenue source to
66 landowners participating in the project. Rural landowners and farmers on whose land the Project
67 is listed will receive annual lease payments for each turbine sited or operational payments for

68 land that does not receive a turbine on their properties. It is estimated that the Project will
69 generate a total of approximately \$29 million dollars in property taxes over the 30-year life of the
70 Project. Of this total, the Project would generate approximately \$2.3 million dollars to the
71 Highmore-Harrold School District in the first nine years of operation as confirmed based on
72 consultations with the South Dakota Revenue Department and an average of \$336,000 annually
73 split between Hughes and Hyde Counties. The Project will provide numerous local and regional
74 indirect economic benefits such as increased use of services, suppliers and generation of
75 additional sales taxes as well.

76 The project area is principally used for agricultural operations and cattle ranching. Given
77 the fairly small footprint required for the Project that would be proposed within the properties
78 under lease, the Project would be compatible with ongoing farming operations.

79 The Project is expected to employ approximately 400 temporary construction workers,
80 with an average of 130 people working onsite at any one point to support Project construction. It
81 is likely that general skilled labor is available in the surrounding counties or the state to serve the
82 basic infrastructure and site development needs of the Project. During operation the project
83 would employ approximately 8-10 employees full time as there will be some shared operation
84 and maintenance support from the O&M facility constructed in conjunction with the Triple H
85 Wind Project.

86 **Q. Please provide a description of the proposed decommissioning plan for North Bend?**

87 The anticipated Project life is approximately 30 years beyond the date of initiating
88 commercial operation. At the end of commercial operation, North Bend will be responsible for
89 removing wind facilities and the turbine foundations to a depth of four feet below grade. In this

90 case, a decision may be made on whether to continue operation with existing equipment or to
91 retrofit the turbines and power system with upgrades based on newer technologies.

92 North Bend will be responsible for all costs to decommission the Project and associated
93 facilities. The cost to decommission will depend upon the prevailing rates for salvage value of
94 the equipment and labor costs. Because of the uncertainties surrounding future decommissioning
95 costs and salvage values, North Bend will review and update the cost estimate of
96 decommissioning and restoration for the Project every five years after Project commissioning, or
97 as required by permits or applicable law in effect.

98 In North America, Engie manages a range of energy business in the United States and
99 Canada including retail energy sales and energy services to commercial industrial and residential
100 customers, natural gas and liquefied natural gas distribution and sales, and electrical generation.
101 The North America renewable portfolio of ENGIE consists of wind, solar, and biomass/bio gas
102 assets. Engie North America is a subsidiary of the Engie Group.

103 The Engie Group is a whole is a multinational company that is invested in various forms
104 of energy development, operation and various retail in over 70 countries worldwide. The Engie
105 Group employs approximately 240,000 employees worldwide and completely \$73 billion dollars
106 in sales in 2018. Given the size and scale of Engie, utilizing a parent guarantee or letter of credit
107 would be sufficient to guarantee decommissioning costs over the life of the North Bend Wind
108 Project.

109 **Q. Do your agreements with landowners speak to decommissioning? If so, what do they**
110 **say?**

111 A. Our agreements detail at 17.3 the creation of a Restoration Fund for decommissioning.

112 Unless the Commission orders differently, North Bend is contractually committed to the creation
113 of that fund.

114 **Q. Why was the Project location selected and what other alternative areas were**
115 **considered?**

116 A. Generally, a wind project location, or early prospect, is identified through a combination
117 of identifying a high wind resource area based on publicly available data and access to
118 transmission. From there, the land use considerations are factored in such as the environmental
119 combability of a given area, current land uses, and land owner support. All of these factors were
120 determined to be favorable based on the North Bend area and thus the Project was pursued for
121 further development.

122 **Q. Did you work with the County Agencies in coordinate with the CUP process and**
123 **what efforts were made to address questions or concerns?**

124 A. Yes. Hyde County had an existing wind energy development ordinance within the
125 existing zoning ordinance that was a bit dated. County officials elected to update this ordinance
126 in order to improve it and started the process in early 2018. I worked closely with the County to
127 provide information and participate through the public process while the zoning ordinance
128 update was being prepared. The County approved their zoning ordinance in October 2018.
129 Hughes County also updated their zoning ordinance back in 2017 and again in 2020. A
130 colleague participated in the effort in 2017 and I participated in the effort in 2020.

131 We have many points of contact with the public to convey information about the Project,
132 in particular during the public meetings to update the Hyde County Zoning Ordinance and
133 several general meetings about the Triple H Wind Project in 2018 and 2019. A scoping meeting

134 was specifically held by Western Area Power Authority for the North Bend Project January of
135 2021.

136 **Q. What is the proposed time schedule for the Project and what are the implications of**
137 **a delay?**

138 A. The Project is targeted to be commercially operational by the end of 2022. We are
139 hopeful to receive favorable determinations on the SDPUC facility permits by the end of 2021 to
140 early 2022. Current activities through the summer and fall of 2021 will include completion of an
141 ALTA survey, supplemental environmental studies (as needed), geotechnical studies, and final
142 engineering and design. Our target is to break ground in the early 2022 to complete civil work
143 through the spring. Turbine deliveries are targeted to commence in the summer of 2022
144 followed shortly by the lifting and installation. The project substation would be energized by the
145 early part of the fall in 2022, with a commercial operation date toward late fall 2022.

146 A delay in the Project would result in several consequences. First, there is substantial
147 demand for wind projects in the near term in South Dakota. Delaying the project results in
148 greater uncertainty given the difficulty in predicting future market conditions. Second, while
149 Engie does not have locked in contracts for the construction or turbine procurement, we have
150 tentative agreements. If a delay would result in the inability to execute those agreements,
151 resulting in a loss of turbine supply for the site and lack of a construction contractor given the
152 substantial demand that is presently found in the near term market.

153 **Q. Are you proposing to install an aircraft detection lighting system (ADLS)?**

154 A. Engie installed an ADLS system at the Triple H Wind Project to the east of North Bend.
155 The coverage of the tower installed to support Triple H doesn't provide sufficient coverage for

156 all of North Bend, subsequently an additional ADLS system will need to be installed. The
157 manufacturer of the ADLS system that was used at Triple H (Terma) has conducted a
158 preliminary coverage analysis for North Bend and identified a number of locations for the system
159 that will provide sufficient coverage that are currently being evaluated. North Bend is
160 committed to utilizing an ADLS system for the Project.

161 **Q. Would Engie agree to the same Facility Permit Conditions that were conditioned on**
162 **the Triple H Wind Project for the North Bend Wind Project?**

163 A. Yes, given that the projects are both located in close proximity and have similar
164 circumstances, it seems reasonable that the same permit conditions would apply. North Bend has
165 reviewed and will accept all conditions that were previously placed on the Triple H Wind
166 Project. This includes the escrow account method of funding security in conjunction with the
167 decommissioning of the Project as specified for the Triple H Wind Project.

168
169 Dated this _13____ day of June 2021.

170 _____


171 Casey Willis