

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 HYDE COUNTY, SOUTH DAKOTA, FOR
MERIDIAN WIND PROJECT

SD PUC DOCKET EL _____

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

April 23, 2020

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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 Meridian 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 18 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 Meridian Wind Project.

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

15 A. I have been employed in renewable energy development for the past 13 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, but I have provided it for the
22 Triple H Wind Project.

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

24 A. Provide clarification and confirmation of information related to the permit application and
25 the overall development of the Meridian Wind Project.

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

27 A. I am currently the lead developer on the Meridian Wind Project.

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

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

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

31 A. The Project is located entirely within Hyde County in the Townships of Van Order, Eagle,
32 Chapelle, Highmore, and Holabird, approximately 3 miles southeast of Highmore. The Project is
33 directly to the east of the Triple H Wind Project. Highway 47 separates the two projects. The
34 Project will be located on mostly privately held land within a 15,403-acre Project Area.

35 **Q. What is covered by the application submitted for the Meridian Wind Project?**

36 A. Meridian Wind Project, LLC respectfully requests the approval of an Energy Facility
37 Permit to construct and operate the Meridian Wind Project from the South Dakota Public
38 Utilities Commission. The total installed capacity of the Project is proposed to be 175
39 megawatts (MW). The application includes the requested approval of 74 locations, of which 64
40 will be constructed. A single wind turbine model produced by General Electric is proposed. The
41 extra locations are needed at this time to account for the loss of some locations that may be
42 deemed non-constructible due to further geotechnical evaluations/limitations,
43 engineering/design, wind optimization and title encumbrances that be identified through final
44 development of the project prior to construction.

45 Project components will include up to 64 GE 2.72 MW-116 wind turbine generators, an
46 approximately 9 mile 345 kV transmission line, temporary/permanent accessing roads, 34.5
47 kilovolt (kV) underground electrical collector lines, project substation, and a permanent met
48 tower. The O&M facility built for the Triple H Wind Project will be utilized to service the
49 Meridian Wind Project. 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 the Chappelle Creek Station switchyard, which is owned by Basin
52 Electric and under construction in conjunction with the Triple H Wind Project.

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 Meridian. 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 source 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 \$220 million-dollar investment
64 associated with the Meridian Wind Project would provide funding to the State of South Dakota,
65 Hyde County, local school district and to a revenue source to landowners participating in the
66 project. Rural landowners and farmers on whose land the Project is listed will receive annual

67 lease payments for each turbine sited or operational payments for land that does not receive a
68 turbine on their properties. It is estimated that the Project will generate a total of approximately
69 \$21 million dollars in property taxes over the 25-year life of the Project. Of this total, the Project
70 would generate approximately \$2.1 million dollars to the Highmore-Harrold School District in
71 the first nine years of operation as confirmed based on consultations with the South Dakota
72 Revenue Department and almost \$300,000 annually to Hyde County. The Project will provide
73 numerous local and regional indirect economic benefits such as increased use of services,
74 suppliers and generation of additional sales taxes as well.

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

78 The Project is expected to employ approximately 400 temporary construction workers,
79 with an average of 130 people working on-site at any one point to support Project construction. It
80 is likely that general skilled labor is available in the surrounding counties or the state to serve the
81 basic infrastructure and site development needs of the Project. During operation the project
82 would employ approximately 6-8 employees full time as there will be some shared operation and
83 maintenance support from the O&M facility constructed in conjunction with the Triple H Wind
84 Project.

85 **Q. Please provide a description of the proposed decommissioning plan for Meridian?**

86 The anticipated Project life is approximately 25 years beyond the date of initiating
87 commercial operation. At the end of commercial operation, Meridian will be responsible for
88 removing wind facilities and the turbine foundations to a depth of four feet below grade. In this

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

91 Meridian will be responsible for all costs to decommission the Project and associated
92 facilities. The cost to decommission will depend upon the prevailing rates for salvage value of
93 the equipment and labor costs. Because of the uncertainties surrounding future decommissioning
94 costs and salvage values, Meridian will review and update the cost estimate of decommissioning
95 and restoration for the Project every five years after Project commissioning pursuant to State
96 Law Requirements.

97 The net decommissioning cost (in 2018 US dollars) is estimated to be approximately \$5.5
98 million dollars assuming salvage and no resale of Project components. This cost includes a
99 partial offset from the salvage value of the towers, turbine components and electrical equipment.
100 Meridian proposes to cover the cost of the consistent with the conditions that were placed on the
101 approval of the Triple H Wind Project.

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

107 The Engie Group is a whole is a multinational company that is invested in various forms
108 of energy development, operation and various retail in over 70 countries worldwide. The Engie
109 Group employs approximately 240,000 employees worldwide and completely \$73 billion dollars
110 in sales in 2018. Given the size and scale of Engie, utilizing a parent guarantee or letter of credit

111 would be sufficient to guarantee decommissioning costs over the life of the Meridian Wind
112 Project.

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

115 A. Our agreements detail at 17.3 the creation of a Restoration Fund for decommissioning.
116 Unless the Commission orders differently, Meridian is contractually committed to the creation of
117 that fund. The language is attached hereto as Exhibit A.

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

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

126 **Did you work with the County Agencies in coordinate with the CUP process and what**
127 **efforts were made to address questions or concerns?**

128 A. Yes. Hyde County had an existing wind energy development ordinance within the
129 existing zoning ordinance that was a bit dated. County officials elected to update this ordinance
130 in order to improve it and started the process in early 2018. I worked closely with the County to
131 provide information and participate through the public process while the zoning ordinance
132 update was being prepared. The County approved their zoning ordinance in October 2018.

133 We have many points of contact with the public to convey information about the Project,
134 in particular during the public meetings to update the Hyde County Zoning Ordinance and
135 several general meetings about the Triple H Wind Project in 2018 and 2019. There was an open
136 house meeting held specifically for to convey information about the Meridian Wind Project in
137 February 2020.

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

140 A. The Project is scheduled to be operational by late fall of 2021. We are hopeful to receive
141 favorable determinations on the SDPUC facility permits by the end of 2020. Current activities
142 through the spring and summer of 2020 will include completion of an ALTA survey,
143 supplemental environmental studies (as needed), geotechnical studies, and final engineering and
144 design. Our target is to break ground in the early 2021 to complete civil work through the
145 spring. Turbine deliveries are targeted to commence in the summer of 2021 followed shortly by
146 the lifting and installation. The project substation would be energized by September to October
147 2021, with a commercial operation date toward late fall 2021.

148 A delay in the Project would result in several consequences. First, there is substantial
149 demand for wind projects in the near term in South Dakota (2020-2021). Delaying the project
150 results in greater uncertainty given the difficulty in predicting future market conditions. Second,
151 while Engie does not have locked in contracts for the construction or turbine procurement, we
152 have tentative agreements. If a delay would result in the inability to execute those agreements,
153 resulting in a loss of turbine supply for the site and lack of a construction contractor given the
154 substantial demand that is presently found in the near term market.

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

156 A. Engie will be installing a ADLS system at the Triple H Wind Project. The manufacturer
157 of the ADLS system that was used at Triple H (Terma) has conducted a preliminary coverage
158 analysis and believes that the system will also be able to cover the Meridian Wind Project as
159 well. A formal coverage analysis will be conducted to determine this. Either way, Meridian is
160 committed to utilizing this existing ADLS system and connecting into it or if it's determined that
161 additional coverage is needed, an additional system will be added.

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

164 A. Yes, given that the projects are both located in the same County and have similar
165 circumstances, it seems reasonable that the same permit conditions would apply. Meridian has
166 reviewed and will accept all conditions that were previously placed on the Triple H Wind
167 Project.

168

169 Dated this 23rd day of April, 2020.

170



171 Casey Willis