

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA**

**IN THE MATTER OF THE APPLICATION BY SWEETLAND WIND FARM, LLC
FOR FACILITY PERMITS OF A WIND ENERGY FACILITY AND A 230-KV
TRANSMISSION FACILITY IN HAND COUNTY, SOUTH DAKOTA FOR THE
SWEETLAND WIND FARM PROJECT**

SD PUC DOCKET EL19-____

**PRE-FILED DIRECT TESTIMONY OF DOUGLAS SHAVER
ON BEHALF OF SWEETLAND WIND FARM, LLC**

March 6, 2019

1 **I. INTRODUCTION AND QUALIFICATIONS**

2

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

4 A. My name is Douglas Shaver. I am employed by Burns & McDonnell, 9400 Ward
5 Parkway, Kansas City, Missouri 64114.

6

7 **Q. Briefly describe your educational and professional background and duties.**

8 A. I am a cultural resource specialist at Burns & McDonnell. I have a Bachelor of
9 Liberal Arts in Anthropology and a Master of Science in Environmental and
10 Urban Geosciences. I am certified in Arc GIS and I also have graduate
11 certifications in Native American Studies and Historic Preservation. I am a
12 Registered Professional Archaeologist and have approximately nine years of
13 experience conducting background research, field surveys and testing, data
14 recovery and analysis, geophysical surveys, and authoring cultural resource
15 reports. A copy of my resume is attached as **Exhibit A5-1**.

16

17 **Q. What is your role with respect to the Sweetland Wind Farm and associated
18 transmission line (together, the “Project”)?**

19 A. Burns and McDonnell was engaged by Sweetland Wind Project, LLC
20 (“Sweetland”), to conduct cultural resource investigations for the Project. I am
21 the Burns and McDonnell cultural resources specialist overseeing the completion
22 of those investigations.

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24 **II. PURPOSE OF TESTIMONY**

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

27 A. The purpose of my Direct Testimony is to describe the cultural resource
28 investigations that have been completed for the Project. In addition, I will provide
29 an overview of Sweetland’s coordination with the South Dakota State Historic
30 Preservation Office (“SHPO”) and Tribes with respect to cultural resources and
31 the Project.

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Q. Please identify which sections of the Application you are sponsoring for the record.

- A. I am sponsoring the following sections of the Application:
- Section 20.5: Cultural Resources
 - Section 27.2.2: WAPA and SHPO/THPO (only the portion discussing SHPO/THPO)
 - Appendix O: Cultural Resources Report

III. STATUS OF CULTURAL RESOURCE INVESTIGATIONS

Q. With respect to cultural resources, what steps has Sweetland taken to identify cultural resources within the Project site?

A. A Level I records search of the Study Area (which included the Project Area and a one-mile buffer) was conducted for the Project. In October 2018, Sweetland also conducted a Level III intensive cultural resources survey for all areas that would be physically impacted by the Project, as well as an Historic Architectural Resources Reconnaissance Survey using a three-mile area of potential effect (“APE”). The Level III intensive survey was conducted by an archaeological survey team from Burns & McDonnell and a team of investigators from the Crow Creek Sioux and Yankton Sioux Tribal Historic Preservation Offices (“THPO”), in addition to an independent cultural resource firm contracted by the Crow Creek Sioux tribe THPO. See Appendix O of the Application.

Q. Will additional cultural resource investigations be conducted for the Project?

A. Yes. Based on the results of the October 2018 surveys, Sweetland revised the proposed turbine layout to avoid cultural and tribal resources identified during the survey. Because some of the turbine locations have changed, additional cultural and tribal surveys are required to survey the areas that were not evaluated during the October survey. These additional surveys will be conducted once

63 there is sufficient snow melt to allow for appropriate ground surface visibility, and
64 the future surveys will be coordinated with the tribes who requested participation
65 the field surveys.

66

67 **Q. Please discuss the results of the Level I records search.**

68 A. The Level I records search identified 14 previously recorded archaeological sites
69 within the Study Area, of which one has been determined eligible for listing in the
70 National Register of Historic Places (“NRHP”), with the remaining sites either not
71 eligible for listing or unevaluated. The NRHP eligible site, 39HD0030, is avoided
72 by the Project.

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74 **Q. Please discuss the results of the Level III intensive survey.**

75 A. A total of seven new archaeological sites, one previously recorded site, and three
76 Traditional Cultural Property (“TCP”) sites were identified during the
77 investigations. One of the newly identified archaeological sites is recommended
78 as eligible for inclusion in the NRHP. The six remaining newly recorded
79 archaeological sites remain unevaluated against the NRHP criteria of
80 significance. All seven newly recorded archaeological sites have been avoided
81 by the Project. The NRHP status for the previously recorded site is
82 recommended to remain not eligible for inclusion in the NRHP, and this site will
83 nonetheless be avoided by the Project. In addition, during the course of the joint
84 tribal and intensive cultural resources surveys, three locations were identified as
85 containing prehistoric/unknown aboriginal cultural features. All three locations
86 have been identified as TCPs. The NRHP inclusion eligibility for the three TCP
87 sites is in the process of being determined. As discussed in more detail in
88 Section 20.5 of the Application, a 50-foot setback has been established for each
89 feature, and the Project is not anticipated to impact these features. As such, no
90 further investigations were recommended.

91

92 **Q. Please discuss the results of the architectural survey.**

93 A. The survey recorded 247 historic-age non-archaeological resources on 78
94 properties in the APE. Three previously recorded properties were not accessible
95 at the time of survey due to road conditions; one resource was listed on the
96 NRHP in 1993, and the remaining two inaccessible resources were
97 recommended not eligible by prior surveys. None of the inaccessible resources
98 would be subject to direct or otherwise adverse effects from the Project. Of the
99 accessible resources, none are currently listed on the NRHP, but four appear to
100 meet NRHP eligibility criteria. The latter include a previously recorded 1940
101 culvert constructed by the Work Projects Administration (“WPA”) (Bridge 03-000-
102 169); a circa 1900 abandoned schoolhouse (Rowen School); and two early
103 twentieth-century general purpose barns. The remaining resources lack historical
104 associations and architectural integrity and are not recommended for NRHP
105 inclusion. None of the NRHP-listed or eligible resources would be adversely
106 affected by the Project because their setting does not contribute to their
107 significance and the Project will not result in direct impacts. A report
108 summarizing the architectural survey is being prepared and will be submitted in
109 this docket when it is complete.

110

111 **Q. What steps will Sweetland Wind take to avoid, minimize, and/or mitigate**
112 **impacts to cultural and tribal resources?**

113 A. For archaeological sites identified during the intensive cultural resource surveys,
114 a recommendation regarding their NRHP-eligibility and effect were made. A 50-
115 foot setback has been established for each archaeological site identified. The
116 Project has been designed so that no wind turbines, access roads, laydown yard,
117 Project substation, O&M building, switchyard, or meteorological towers would
118 directly impact identified archaeological sites. Sweetland will physically avoid
119 NRHP-eligible and unevaluated archaeological sites, as well as individual
120 features within NRHP-eligible and unevaluated TCP sites. As a result, no
121 significant impacts to archaeological sites or TCP features are anticipated for the

122 Project. In addition, I understand that Sweetland has committed to the following
123 standard best management practices (“BMPs”) for the Project:

- 124 • Unevaluated archaeological sites are being treated as eligible for the
125 purpose of this Project during Project construction and operation activities.
- 126 • An Unanticipated Discovery Plan has been prepared outlining the
127 procedures that should be followed if previously unknown archaeological
128 sites or possible human remains are discovered during construction or
129 operation activities.
- 130 • If human remains are identified during Project construction, all work
131 activity within the vicinity of the remains will cease upon discovery, and the
132 County Sheriff will be contacted immediately. The remains will be carefully
133 covered and secured for protection. If the remains are determined not to
134 be part of an active crime scene or investigation, the South Dakota Chief
135 State Archaeologist will be contacted, and the discovery will be protected
136 until the South Dakota State Historic Society and the State Archaeological
137 Research Center are consulted, in addition to any Native American tribes
138 that have expressed an interest in the Project.
- 139 • Sweetland has agreed to the presence of tribal monitors during Project
140 construction and to coordinate Project construction activities with
141 participating THPOs.
- 142 • TCP sites that are in the process of having NRHP eligibility status
143 determined or are Unevaluated will be treated as eligible during Project
144 construction and operation activities.

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146 **IV. PROJECT COORDINATION**

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148 **Q. Has SHPO been consulted regarding the Project?**

149 A. Yes. Sweetland is coordinating with Western Area Power Administration
150 (“WAPA”) on the cultural resource surveys for the Project, and WAPA is
151 consulting with SHPO and interested tribes as part of the Section 106
152 compliance process. In a letter from SHPO to WAPA, SHPO concurred with

153 WAPA's recommendations for defining the APE for direct and indirect effects for
154 the Project.

155

156 **Q. Please discuss Sweetland's coordination regarding potential tribal**
157 **resources within the Project Area.**

158 A. As part of the NEPA process for approval of the WAPA interconnection,
159 Sweetland is coordinating with WAPA on the cultural resources surveys for the
160 Project. In turn, WAPA is consulting with interested tribes, as well as SHPO, as
161 part of the Section 106 compliance process. As discussed in more detail in
162 Section 20.5 of the Application, WAPA sent letters on August 3, 2018, to certain
163 tribes concerning the Project. Two THPOs participated in joint tribal surveys
164 during the intensive cultural resource surveys. As I noted earlier, Sweetland has
165 committed to having tribal monitors from the Crow Creek Sioux and Yankton
166 Sioux tribes present during Project construction.

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168 **V. CONCLUSION**

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170 **Q. Does this conclude your direct testimony?**

171 A. Yes.

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173 Dated this 6th day of March, 2019.

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178 Douglas Shaver

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