

BEFORE THE SOUTH DAKOTA PUBLIC UTILITIES COMMISSION

DOCKET NO. EL18-053

**IN THE MATTER OF THE APPLICATION BY DEUEL HARVEST WIND
ENERGY LLC FOR A PERMIT OF A WIND ENERGY FACILITY AND A 345-KV
TRANSMISSION LINE IN DEUEL COUNTY, SOUTH DAKOTA**

**DIRECT TESTIMONY OF PAIGE OLSON
ON BEHALF OF THE COMMISSION STAFF
March 14, 2019**

1 **Q. State your name.**

2 A. Paige Olson.

3

4 **Q. By who are you employed?**

5 A. State of South Dakota.

6

7 **Q. For what department or program do you work and what is your job title?**

8 A. South Dakota State Historical Society, State Historic Preservation Office (SHPO),
9 Review and Compliance Coordinator.

10

11 **Q. Please explain the program goals and your role and duties within SHPO.**

12 A. The National Historic Preservation Act of 1966 is the foundation for the
13 preservation work of the South Dakota State Historical Society (SDSHS). The
14 State Historic Preservation Office (SHPO), a program under the SDSHS, is
15 responsible to survey historic properties and maintain an inventory; identify and
16 nominate properties to the National Register of Historic Places; advise and assist
17 federal, state, and local government agencies in fulfilling their preservation
18 responsibilities; provide education and technical assistance in historic
19 preservation; develop local historic preservation programs; consult with federal
20 and state agencies on projects affecting historic properties; and advise and assist
21 with rehabilitation projects involving federal assistance. My specific role is to
22 monitor state permitted and federally funded, licensed or permitted projects to

1 ensure historic properties are taken into consideration. I provide technical
2 analyses, reviews and assistance to government agencies to ensure compliance
3 with state and federal guidelines. I serve as the lead over the review and
4 compliance function of SHPO.

5
6 **Q. On whose behalf was this testimony prepared?**

7 A. This testimony was prepared on behalf of the Staff of the South Dakota Public
8 Utilities Commission.

9
10 **Q. State and explain the South Dakota laws that protect archaeological and
11 historic resources in this state.**

12 A. South Dakota Codified Law 1-19A-11.1 - Preservation of historic property –
13 Procedures. The state or any political subdivision of the state may not undertake
14 any project which will encroach upon, damage or destroy any property included in
15 the State Register of Historic Places or National Register of Historic Places.

16
17 **Q. Have you reviewed the Application and Deuel Harvest's testimony?**

18 A. I have reviewed portions of the Application containing the project description and
19 all portions of the Application specific to cultural resources, namely Sections 2.0
20 Project Development Summary, 8.0 General Site and Project Component
21 Description (ARSD 20:10:22:11, 20:10:22:33:02), 20.5 Cultural Resources, and
22 27.2.2 SHPO. I also reviewed pages 14 and 15 of Mr. Michael Svedeman's pre-
23 filed testimony.

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I also reviewed the documents entitled *Deuel Harvest North Wind Farm Interconnection Area Siting Study* and *A Level III Intensive Cultural Resources Survey for the Deuel Harvest North Wind Farm, Deuel County, South Dakota*. Kate Nelson, Restoration Specialist with SHPO, reviewed the report entitled *Historic-Age Resource Reconnaissance Survey for the Deuel Harvest North Wind Farm, Deuel County, South Dakota, Volumes I and II*.

Q. Has SHPO provided any recommendations to Deuel Harvest regarding places of historical significance and cultural resources?

A. Yes.

Q. Please describe what those recommendations were.

A. During a telephone call on August 10, 2018 with Mr. Douglas Shaver, Archaeologist and Principal Investigator with Burns and McDonnell, I recommended the archaeological survey of all areas to be disturbed by construction activities. My recommendations were based on the document entitled "South Dakota State Plan for Archaeological Resources, 2018 Update," which indicates that a lack of data is a problem in this archaeological region (Northeast Lowland, page 699, Section 6.25.7 Management Considerations). The State Plan states, "Until archaeologists have the opportunity to conduct research on landscape history and site distribution, it will be difficult to identify places with high potential for archaeological sites."

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Q. Did Deuel Harvest adequately address those recommendations? If not, please explain.

A. No. According to the Level III archaeological report, Burns and McDonnell's cultural resource staff developed a survey strategy based on various factors, which resulted in the actual archaeological survey of approximately 15 percent of all areas to be impacted by construction, so approximately 404 acres were surveyed. This strategy is not consistent with the recommendation I made on August 10, 2018, to survey all areas to be disturbed by construction activities.

In addition, the survey strategy defined in the Level III archaeological report is inconsistent with the Application, Section 20.5, Cultural Resources (page 20-12) and Section 27.2.2 SHPO (page 27-4) and Mr. Svedeman's testimony on page 14, which indicates that a Level III survey was completed for all areas to be physically impacted. The number of approximate acres surveyed was 404 compared to 2,758 acres to be impacted by construction activities.

Q. Do you agree with Deuel Harvest's conclusions made in the Application and testimony regarding impacts to cultural resources and places of historical significance? If not, please explain.

A. I agree with Deuel Harvest's conclusion that the project will not encroach upon, damage or destroy any property listed in the State or National Register of Historic Places pursuant to SDCL 1-19A-11.1.

1 However, I don't agree with all the conclusions. As indicated above, the lack of
2 data in this archaeological region makes it difficult to identify places with high
3 potential for archaeological sites. Therefore, their conclusion that no further
4 archaeological investigations are needed is not supported by the data.

5
6 I also disagree with the determination of eligibility made in the Level III survey
7 report for newly recorded property 39DE0128, which is located in the physical
8 footprint of the project. The Level III survey report recommends the property as not
9 eligible for listing in the National Register of Historic Places. However, according
10 to the Level III survey report, surface and subsurface deposits appear to be intact
11 and at least three other foundations potentially associated with the property were
12 not recorded. Archaeological properties that contain intact surface and subsurface
13 deposits have the potential to yield additional information, and in this case,
14 information about the development of agriculture in South Dakota. The context
15 document entitled "The History of Agriculture in South Dakota: Components for a
16 Fully Developed Historic Context" provides specific guidance for evaluating
17 agricultural properties for listing in the National Register. It's unclear if this
18 document was used to evaluate the property for the National Register. Since
19 property 39DE0128 was determined to be not eligible by Burns and McDonnell,
20 the properties is not being considered for avoidance.

1 **Q. Is SHPO waiting for any additional studies to review? If so, please explain**
2 **what those studies are and what SHPO will ultimately do with those studies.**

3 A. No.

4
5 **Q. In your opinion, does the Application and Deuel Harvest’s pre-filed testimony**
6 **as presented to the Commission contain enough information to properly**
7 **understand any potential adverse impacts to places of historical significance**
8 **and cultural resources? If not, please explain.**

9 A. The Application and Mr. Svedeman’s pre-filed testimony contain enough
10 information to determine that the project will not encroach upon, damage or destroy
11 any property that is listed in the State or National Register of Historic Places
12 pursuant to SDCL 1-19A-11.1.

13
14 However, archaeology in South Dakota is driven by federal projects that require
15 the identification and consideration of historic properties, i.e. cultural resources that
16 are determined to be eligible for listing in the National Register of Historic Places.
17 Because of this, South Dakota has large areas of private property that have never
18 been surveyed for cultural resources. In fact, for various reasons, areas that have
19 been surveyed often contain numerous cultural resources that have not been
20 assessed or officially listed in the National Register of Historic Places. The Level
21 III survey covered 15% of the project area proposed for construction activities. The
22 archaeological survey strategy leaves uncertainty about the impacts to
23 archaeological resources.

1 **Q. Based on your experience reviewing other wind farm projects, was the**
2 **archeological survey completed for Deuel Harvest consistent with what**
3 **SHPO has reviewed for other projects? Please explain.**

4 **A.** No. Other Applicants have provided more comprehensive information about the
5 potential adverse impacts to places of historic significance and cultural resources.
6 For Example:

7
8 The Crocker Wind Farm and Transmission Line Project conducted Level III
9 archaeological surveys of all areas to be disturbed by construction activities
10 including the completion of numerous shovel tests to identify potential subsurface
11 deposits of cultural remains. Crocker Wind Farm coordinated with the US Fish and
12 Wildlife Service to engage various Tribal governments. At least three tribes
13 participated in the identification of traditional cultural properties.

14
15 The Dakota Range I and II Wind Farm conducted Level III archaeological surveys
16 of all areas to be disturbed by construction activities and coordinated with the
17 Sisseton Wahpeton Oyate Tribal Historic Preservation Office (SWO THPO) to
18 identify, record and evaluate traditional cultural properties in the project footprint.

19
20 The Dakota Range III Wind Farm and its consultant partnered with the SWO THPO
21 to conduct the Level III archaeological survey of 1,779 acres of the 2,229 acres to
22 be disturbed by construction activities.

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1 The Crowned Ridge Transmission Line conducted a Level III archaeological
2 survey and Traditional Cultural Property survey of the proposed 34-mile-long
3 construction easement. The SWO THPO and representatives from the Yankton
4 Sioux Tribe and Spirit Lake Nation participated in the surveys.

5
6 **Q. Given your concern about the archeological survey, do you have any**
7 **recommendation for the Commission to address that concern?**

8 A. I recommend Deuel Harvest conduct a Level III archaeological survey of all areas
9 to be disturbed by construction activities and continue efforts to consult Tribal
10 governments in the identification and assessment of the project's impacts to
11 cultural resources including Traditional Cultural Properties.

12
13 **Q. If Deuel Harvest changed any turbine locations from those presented in the**
14 **preliminary layout could that change any of the conclusions Deuel Harvest**
15 **made regarding potential impacts to places of historical significance and**
16 **cultural resources? Please explain.**

17 A. It's unlikely that a change in the preliminary layout would impact any properties
18 that are listed in the State or National Register of Historic Places. However, as
19 mentioned above, the effects of the project to archaeological resources is
20 uncertain.

1 **Q. Do you have a recommendation for a permit condition, or conditions, the**
2 **Commission should consider?**

3 A. 1. Not only are cultural resource sites non-renewable, but no two sites are same.
4 Once a resource is damaged or destroyed, the information the resource may
5 contain about the history of South Dakota is gone. Therefore, I recommend the
6 following condition:

7 “The Applicant agrees to avoid direct impacts to cultural resources
8 that are unevaluated, eligible for or listed in the National Register of
9 Historic Places (NRHP). When a NRHP unevaluated, eligible or
10 listed site cannot be avoided, Applicant shall notify the State Historic
11 Preservation Office (SHPO) and the Commission of the reasons that
12 complete avoidance cannot be achieved in order to coordinate
13 minimization and/or treatment measures.”

14
15 2. Develop an unanticipated discovery plan to provide step-by-step guidance
16 when human remains, and/or cultural resources are discovered during
17 construction activities. On site employees, contractors or subcontractors, who may
18 not be trained in cultural resources, may be the individuals who initiate the plan.
19 Therefore, I recommend the following condition:

20 “Prior to construction activities, the Applicant agrees to develop an
21 unanticipated discovery plan in consultation with the SHPO. ”

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23

1 Q. Does this conclude your testimony?

2 A. Yes.