

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.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

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."

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

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.

23

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. ”

22
23

1 Q. Does this conclude your testimony?

2 A. Yes.

PAIGE HOSKINSON OLSON
Pierre, SD 57501

Education

1998-2001 Master of Arts, Anthropology
University of Montana, Missoula, MT
Major: Cultural Resource Management
Minor: Archaeology

1989-1995 Bachelor of Arts
University of Montana, Missoula, MT
Major: History
Minor: Political Science

1985-1989 Whitehall High School, Whitehall, MT

Professional Experience

January 2007 - Present Archaeological Review and Compliance Coordinator, South Dakota State Historical Society - State Historic Preservation Office (SHPO), 900 Governors Drive, Pierre, SD

- Assess impact of projects on historic properties and ensure those properties are taken into consideration during planning and implementation of project in accordance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended and South Dakota's state preservation law, South Dakota Codified Law 1-19A-11.1.
- Assess the eligibility of properties for listing on the National Register of Historic Places in accordance with the criteria developed by the National Park Service.
- Review archaeological survey reports and documentation submitted by federal, state and contracting archaeologist to determine if proper methodology and standards established by state and federal government are met.
- Negotiate with and assist agencies in developing legal agreements to mitigate effects to historic properties, such as memorandums of agreement.
- Negotiate with and assist agencies in developing legal agreements to provide for alternative review and compliance procedures, such as programmatic agreements.
- Provide technical assistance to government and tribal officials, contactors, and the general public concerning federal and state laws.
- Participate in consultation meetings to discuss project effects on historic properties with federal, state and tribal officials.
- Develop effective public information programs about state and federal preservation laws and archaeology.
- Ensure a database of all projects submitted for review is maintained and accurate for reports and future federal funding requests.
- Monitor changes in the interpretation of federal and state rules and regulations.
- Provide work direction and training for review and compliance program staff to ensure project are reviewed in an accurate, consistent and timely manner.
- Supervise student interns and volunteers in various projects.
- Site Manager for Fort Pierre Chouteau National Historic Landmark.
- Prepare and write comprehensive plans to manage cultural resources in South Dakota and update guidelines to ensure historic properties are identified and protected.
- Manage contracts focused on archaeology.
- Coordinate annual Archaeology Camp for twenty school age children.

- Participate in State Hazard Mitigation Group.
- Participated as a member of the Social Cultural Economic Technical Team for the development of the Missouri River Ecosystem Restoration Plan.

June 2002 –
January 2007

Historic Archaeologist, South Dakota State Historical Society - State Historic Preservation Office, 900 Governors Drive, Pierre, SD

- Assessed impact of projects on historic properties and ensure those properties are taken into consideration during planning and implementation of project in accordance with Section 106 of the National Historic Preservation Act and South Dakota's state preservation law, South Dakota Codified Law 1-19A-11.1.
- Assessed properties eligibility for listing on the National Register of Historic Places in accordance with criteria established by the National Park Service.
- Reviewed archaeological survey reports and documentation submitted by federal, state and contracting archaeologist to determine if proper methodology and standards established by the state and federal government are met.
- Negotiated with and assisted agencies in developing legal agreements to mitigate effects to historic properties, such as memorandums of agreement.
- Negotiated with and assisted agencies in developing legal agreements to provide for alternative review and compliance procedures, such as programmatic agreements.
- Provided technical assistance to government officials, contactors, and the general public concerning federal and state laws and compliance requirements under Section 106 of the National Historic Preservation Act.
- Maintained a database of all projects submitted for review.
- Supervised student interns in various projects.
- Site Manager for two National Historic Landmarks owned by the state.
- Updated state guidelines for cultural resource surveys and survey reports specifically for Section 106 review and compliance.
- Managed contracts focused on archaeology.
- Coordinated Archaeology/ Preservation Month.

April 2001-
June 2002

Historic Preservation Specialist, South Dakota State Historical Society - State Historic Preservation Office
900 Governors Drive, Pierre, SD

- Functioned as West River Coordinator for National and State Register of Historic Places Programs, Certified Local Government program and historic preservation grant program.
- Apply National Register Criteria to make preliminary determinations of eligibility for listing properties on the National Register of Historic Places.
- Prepared and edited in house National and State Register Nominations.
- Surveyed commercial and residential districts to update existing National Register nominations.
- Furnished technical advice and grant management services to local historic preservation organizations and the general public.
- Acted as contact for GIS Technical Advisory Group.
- Used GoeExplorer III for data collection and ArcView/Mapit to create accurate maps.
- Consulted on review and compliance issues under state preservation law.

January 2000 –
April 2001

Archival Technician, National Park Service, Grant-Kohrs Ranch National Historic Site, PO Box 790, Deer Lodge, MT

- Functioned as field archaeologist observing ground disturbing activities and making

- onsite assessments for work associated with Natural Resource Damage Assessment.
- Acted as liaison between NPS personnel and University of Montana field research crews.
- Worked closely with Natural Resource Management Division to protect cultural and natural resources.
- Oversaw groundwater, soil, vegetation and range management research occurring at the Grant-Kohrs Ranch.
- Provided relevant information to University of Montana field crews to comply with state and federal laws.
- Drafted necessary documents involving Section 106 compliance for the Montana State Historic Preservation Office.
- Attended and represented the Grant-Kohrs Ranch at Natural Resource Damage Assessment meetings.
- Gathered financial information for Natural Resource Damage Assessment cost recovery.
- Maintained Administrative Record for Grant-Kohrs Ranch damage assessment.
- Worked with confidential and sensitive legal material.
- Completed a two-month detail in Atlanta, Georgia working directly with NPS Natural Resource Damage Assessment staff.

January 2000 –
May 2001

Thesis Project, Bureau of Land Management, Fort Missoula Road, Missoula, MT

- Updated Cultural Resource Inventory for abandoned mining town of Coloma.
- Surveyed and recorded approximately 149 structures and features related to mining activities.
- Used GeoExplorer II for data collection to map structures and features.
- Documented current condition of structures and features using appropriate Bureau of Land Management forms and photographs.
- Completed literature search and develop comprehensive history of Coloma.
- Researched and compiled annotated bibliography.
- Supervised documentation of archaeology sites by volunteers.

February 2000 –
May 2000

Intern, Montana State Historic Preservation Office, Helena, MT

- Performed record searches and entered archaeology site data using Oracle databases: Cultural Resource Information System, Cultural Resource Annotated Bibliography System, and Project, Eligibility and Effect Reports System.
- Compiled information to complete narrative and physical descriptions for nomination of historic district.
- Completed National Register of Historic Places nomination for Slayton Mercantile, Lavina, Montana.
- Surveyed and evaluated historic structures located within historic district for nomination as National Historic Landmark.
- Reviewed and prepared site files to be assigned Smithsonian Numbers.

Field Schools and Volunteer Experience

April 2014

Natural Resource Conservation Service, Pierre Field Office, Pierre, SD

- Assisted NRCS Archaeologist in three archaeological inventories for the placement of pipelines and tanks.
- Inventory included walking transects to identify historic and prehistoric resources.

October 1999 –

Bureau of Land Management, Fort Missoula Road, Missoula, MT

November 1999

- Assisted BLM Archaeologist in archaeological inventory for timber sale and land exchange.
- Walked 30 meter transects to identify historic and prehistoric artifacts and features.
- Identified and recorded prehistoric and historic sites

July 1998

University of Montana Field School, Prehistoric Campsite
Department of Anthropology, Missoula, MT

- Laid out, excavated, and screened soil from excavation units.
- Conducted block style excavations.
- Mapped vertical and horizontal stratigraphy.
- Point plotted artifacts and established vertical provenience.
- Maintained detailed excavation notes.

August 1998 -
December 1998

University of Montana Field School, Historic Structure at Fort Missoula
Department of Anthropology, Missoula, MT

- Laid out, excavated, and screened soil from excavation units.
- Conducted block style excavations.
- Mapped vertical and horizontal stratigraphy.
- Point plotted artifacts and established vertical provenience.
- Maintained detailed excavation notes.

Training

July 2015

The Section 106 Advanced Seminar
Advisory Council on Historic Preservation
Pierre, SD

July 2015

Section 106 Essentials
Advisory Council on Historic Preservation
Pierre, SD

June 2014

Working in Indian Country
Larry D. Keown
Rapid City, SD

May 2014

Current Archaeological Prospection Advances for Non-Destructive Investigations in the 21st Century
National Park Service, Midwest Archeological Center
Aztalan State Park., Aztalan, WI

September 2012

Archaeological Damage Investigation and Assessment; Archaeological Violation Investigation Class
Martin E. McAllister
Pierre, SD

August 2010

National Register/ National Historic Landmark Workshop
National Park Service
Virginia City, NV

June 2008

Section 106 Essentials
Advisory Council on Historic Preservation, Pierre, SD

April 2008 Native American Sensitivity Training
Curley Youpee, Russell Eagle Bear and Ben Rhodd
Pierre, SD

May 2007 *Identification and Management of Traditional Cultural Places*
National Preservation Institute, Claudia Nissley
Seattle, WA

February 2006 National Environmental Policy Act (NEPA) Training
Federal Highway Administration
Pierre, SD

November 2005 - Native American Awareness Training
December 2005 Albert White Hat, Dorothy LeBeau, Wayne Evans, and Craig Howe
Pierre, SD

August 2005 *Shenandoah-Dives Mill HAER Documentation and Historic Structure Assessment
Workshop*
San Juan Historical Society
Silverton, CO

September 2004 *Section 106: How to Negotiate and Write Agreements*
National Preservation Institute, Claudia Nissley
Honolulu, HI

September 2004 *Integrating Cultural Resources in NEPA Compliance*
National Preservation Institute, Claudia Nissley
Honolulu, HI

July 2003 *Archaeological Law Enforcement Class*
Archaeological Resource Investigations, Martin McAllister, Wayne Dance and John Fryar
Pierre, SD

September 2002 *Section 106 for Practitioners*
National Preservation Institute, Tom King
Seattle, WA

July 2001 *Introduction to ArcView GIS Version 3.1*
Kadmas, Lee and Jackson
Pierre, SD

Publications

A Cultural Site Evaluation Coloma, Montana, 2000. Missoula: University of Montana Press, 2001.

“Creations in Stone: Petroforms in East River SD”, South Dakota History. Vol. 35, No. 4 (Winter 2005): 347-362.