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BEFORE THE STATE OF WASHINGTON  
ENERGY FACILITY SITE EVALUATION COUNCIL

In the Matter of Application No. 2009-01: WHISTLING RIDGE ENERGY LLC; WHISTLING RIDGE ENERGY PROJECT	EXHIBIT NO. 10.00
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**APPLICANT'S PREFILED DIRECT TESTIMONY**

**WITNESS #11: SARAH MCDANIEL**

Q Please state your name and business address.

A My name is Sarah McDaniel, and my business address is 111 SW Columbia, Suite 1500, Portland, Oregon 97201-5850.

Q What is your present occupation and profession, and what are your duties and responsibilities?

A I am a Staff Archaeologist with URS Corporation, an international environmental and engineering consulting firm providing services to organizations such as Whistling Ridge Energy LLC. URS Corporation assists organizations in analyzing

1 environmental impacts and land use compatibility of projects such as the Whistling  
2 Ridge Energy Project. I have ten years of experience in cultural resources  
3 management and archaeological investigations. My duties on this Project were to  
4 conduct a cultural resources inventory and record, test, and evaluate archaeological  
5 resources.

6  
7 Q Please identify what has been marked for identification as Exhibit No. 10.01.

8  
9 A Exhibit No. 10.01 is a résumé of my education background and employment  
10 experience.

11  
12 Q Are you sponsoring any portions of the Application for Site Certification for the  
13 Whistling Ridge Energy Project?

14  
15 A Yes. I am sponsoring the following section:

16 Section 4.2.5 Historic and Cultural Preservation

17  
18 Q Are you sponsoring any appendices or other documents that are part of the Application  
19 for Site Certification?

20  
21 A Yes, I am also sponsoring the June 17, 2010 Cultural Resources Inventory Report  
22 which has been submitted to EFSEC, the Washington Department of Archaeology and  
23 Historic Preservation (DAHP) and to the Bonneville Power Administration (BPA).  
24 Due to the potential risk to cultural resources (*e.g.*, the risk of damage or theft of  
25 artifacts), this report contains confidential information, and under Washington law, it  
26 is not to be publicly released.

1 Q Have you reviewed the identified section of the Application for Site Certification?

2

3 A Yes.

4

5 Q Is the information in that section within your area of authority and/or expertise?

6

7 A Yes.

8

9 Q Are the contents of that section of the Application for Site Certification either based  
10 upon your own knowledge, or upon evidence, such as studies and reports that  
11 reasonably prudent persons in your field are accustomed to rely on in the conduct of  
12 their affairs?

13

14 A Yes.

15

16 Q To the best of your knowledge, are the contents of that section of the Application for  
17 Site Certification true?

18

19 A Yes.

20

21 Q Do you incorporate the facts and contents of that section as part of your testimony?

22

23 A Yes.

24

25 Q Are you able to answer questions under cross examination regarding that section?

26

1 A Yes.

2

3 Q Do you sponsor the admission into evidence of that section of the Application for Site  
4 Certification?

5

6 A Yes.

7

8 Q Are there any modifications or clarifications to be made to that portion of the  
9 Application for Site Certification that you are sponsoring?

10

11 A Yes. The Application, on page 4.2-81, said we would be performing an inventory of  
12 West Pit Road and revisiting previously-recorded resources in the fall of 2009. This  
13 field work was performed as planned, beginning in November 2009, and the results  
14 incorporated into the current version of the Cultural Resources Inventory Report dated  
15 June 17, 2010.

16 The Application, on page 4.2-84, states that no previously recorded cultural  
17 resources were documented in the area of potential effect for the Project or the access  
18 road. This statement should be modified. One historic period archaeological resource,  
19 the Broughton Company Lumber flume, has been previously-recorded within the  
20 western boundary of the proposed Maintenance Yard Alternative Location.

21 The Application, on page 4.2-86, states that no known traditional cultural  
22 properties (TCPs) were identified during the initial inventory conducted by CH2MHill  
23 in 2003, and that none had been identified to date. This section should be modified. It  
24 is URS's understanding that the official position of the Yakama Nation regarding  
25 whether there is or is not a TCP within the Project area is pending nation-to-nation

26 //

1 review; as of the filing of this testimony, URS has not been informed of a final  
2 position taken by the Tribal Council.

3 The Application, on pages 4.2-85 and 4.2-86, Field Survey Results, should be  
4 modified. This section describes two cultural resources that were recorded as cultural  
5 resource isolates by CH2MHill in 2003. One “isolate” observed by CH2MHill, a  
6 small, disturbed artifact scatter, could not be relocated in 2009. The other “isolate”  
7 noted by CH2MHill was a rock wall that URS relocated in 2009 and recorded as part  
8 of the Haran farmstead, an historic period archaeological site. These resources are  
9 addressed in the Cultural Resources Inventory Report dated June 17, 2010.

10  
11 Q Would you please summarize the cultural resource survey work that was performed  
12 for the Project?

13  
14 A In 2003, CH2MHill conducted a cultural resources survey at the proposed location for  
15 the Whistling Ridge Energy Project. In 2009, URS resurveyed and expanded the 2003  
16 CH2MHill study area to include revised turbine corridors, staging areas, maintenance  
17 yard and substation areas, and the new road access (West Pit Road). A file search of  
18 this expanded area was conducted at DAHP in July 2009. An inventory of the  
19 expanded areas, including the new access road and previously recorded resources, was  
20 completed in the fall of 2009 by URS archeologists.

21 The surveys were designed to identify, evaluate, and record prehistoric and  
22 historic cultural resources in accordance with the federal Advisory Council on Historic  
23 Preservation’s regulations under the National Historic Preservation Act (NHPA),  
24 which are found at Chapter 36 C.F.R. § 800. The survey objectives include  
25 identification of archaeological resources and historic properties that might be  
26 considered eligible for nomination to the National Register of Historic Places located

1 within the area of potential effect (APE) for the development. The APE for direct  
2 effects is shown on Figure 4.2-28 of the Application, includes a cumulative total of  
3 approximately 384 acres. The DAHP has confirmed the APE in the letter marked for  
4 marked for identification as Exhibit No. 10.02.

5  
6 Q Did the DAHP records identify any previously recorded resources in the vicinity of the  
7 Project site?

8  
9 A Yes, there was one previously recorded historic period cultural resource, the  
10 Broughton Lumber Company flume. The flume formerly paralleled Willard Road at  
11 the proposed maintenance yard alternative location. The Broughton Lumber Company  
12 flume was originally documented on the Washington State Inventory of Historic  
13 Places in 1974 by Washington State University, when it was still an operational  
14 structure. In 1988, as part of an inventory by Stan McDonald of the Gifford Pinchot  
15 National Forest related to a land transfer project, the flume was recorded as an  
16 archaeological resource, because by that time it had been mostly abandoned and  
17 partially dismantled; only one short 150-foot long section near the mill at Willard was  
18 functional and carrying water.

19 Within a one-mile radius of the Project area are two additional sites. One is  
20 located at the Willard Hatchery along the Little White Salmon River, about 0.5 mile  
21 west of the Maintenance Yard at Willard. The second is an early-twentieth century  
22 debris scatter and feature associated with an old homesite, found about one mile to the  
23 north of the site within lands managed by the Washington State Department of Natural  
24 Resources (DNR).

25  
26 Q Did your study identify any traditional cultural properties within the Project area?

1 A At the time of preparing the Application, URS was not aware of any previously-  
2 documented TCPs within the Project area based upon the records review. URS cannot  
3 identify TCPs; tribal consultation for NHPA Section 106 purposes is required to  
4 address their potential presence.

5  
6 Q Do you know if the Section 106 tribal consultation has occurred?  
7

8 A No. As the Applicant's consultant, I do not know the status of formal tribal  
9 consultation. As the lead federal agency, BPA will conduct government-to-  
10 government tribal consultation for this Project pursuant to Section 106 of the NHPA.  
11 However, to incorporate tribal involvement at an early stage in the process, the  
12 Applicant has directly initiated contact with the Confederated Tribes and Bands of the  
13 Yakama Nation. The Applicant has invited the participation of and has actively  
14 consulted with the Yakama Nation Cultural Resources Program, the Cultural  
15 Resources Committee, ancestral chiefs of the Yakama Nation, as well as two local  
16 elders of the Yakama Nation, to assist with the identification of potential sensitive,  
17 traditional, and/or sacred resources.  
18

19 Q You testified earlier that surveys were performed in 2009. Would you please  
20 summarize how those surveys are performed?  
21

22 A An intensive pedestrian survey of the APE was conducted for this Project on  
23 November 9-11, 2009, and covered a cumulative total of approximately 540 acres.  
24 The pedestrian survey was accomplished by two URS archaeologists meeting the  
25 Secretary of Interior's Professional Qualification Standards (as outlined in 36 C.F.R.  
26 Part 61), assisted by three field technicians.

1           Transects were spaced no greater than 100 feet (30 meters); most were at 65-  
2           foot (20-meter) intervals or less. Survey methods were dependent upon the Project  
3           component being surveyed and the steepness of the slopes as well as the presence of  
4           any hazards like slash pile burning. Slopes greater than 30 percent were not  
5           inventoried. In several areas, survey coverage extended beyond the APE; depending  
6           on the topography, it was sometimes more efficient to connect the Project components  
7           rather than to separate them as multiple, noncontiguous units. Consequently, the  
8           cumulative total acreage surveyed was approximately 540 acres, in excess of the  
9           proposed 384-acre APE.

10           At present, eight turbine strings are being considered, ranging from 2 to 21  
11           turbines each. The 650-foot (200-meter) wide proposed turbine corridors were  
12           inventoried with 6 to 8 transects. The roads located outside of the turbine strings were  
13           inventoried with two transects, one on either side of the alignment approximately 50 to  
14           65 feet (15 to 20 meters) apart, except where the roadway edge traversed a steep slope.

15  
16   Q       Did the survey identify any resources or sites that warranted additional survey efforts?

17  
18   A       Yes, additional work was performed at what was called the Haran farmstead. This site  
19           is characterized by several rock features related to an abandoned early-twentieth  
20           century fruit orchard and residence associated with James A. Haran. We performed  
21           limited subsurface probing to address the potential for buried archaeological deposits  
22           and to aid refinement of the site boundary. A total of 52 shovel probes were placed  
23           across the site. The probes measured 30-cm (12-in) in diameter and were generally  
24           excavated to depths of 30 to 50 cm (12 to 20 in).

25           As recorded by URS, the Haran farmstead site boundary incorporates  
26           approximately 6 acres and is defined primarily by the presence of basalt rock features,

1 including structural foundations and probable orchard field boundary walls. Most of  
2 the total acreage included within the site boundary consists of former orchard lands,  
3 no longer present, that are included only because there are remnants of rock walls on  
4 the periphery of the fields; no artifacts were observed in the former fields during the  
5 field inventory or via metal detection. Sensitivity for significant, buried remains  
6 would be expected to be variable throughout the site given its expansive area, with the  
7 main residential area considered more likely to have potentially significant, buried  
8 deposits than the former orchard acreage. URS's strategy of subsurface probing  
9 reflects this expected variable sensitivity.

10 The subsurface probing investigation employed close-interval systematic, as  
11 well as intuitive, sampling methods to determine the presence or absence of  
12 significant, buried deposits. URS used a combination of spacing variables to focus on  
13 those areas most likely to contain buried deposits based on the presence of rock  
14 features, surface artifacts, and topographic features.

15  
16 Q Did your report include an assessment of potential National Register of Historic Places  
17 (NRHP) eligibility for the Haran farmstead? And if so, what was your conclusion?  
18

19 A Yes, we evaluated the site against the four NRHP criteria: properties associated with  
20 important historical events or trends; properties associated with important people;  
21 properties having important characteristics of style, type, period, or method of  
22 construction, or artistic value; and a property that has yielded or may be likely to yield  
23 information important to pre-history or history. URS recommends that the site be  
24 considered ineligible under each of the four criteria.  
25

26 Q Did you perform any probing beyond the Haran farmstead?

1 A No. The majority of the potentially higher sensitivity landforms such as the ridgelines  
2 and promontories either had excellent ground surface visibility due to recent timber  
3 harvesting activities, and/or were characterized by exposed basalt rock with little  
4 potential for subsurface soils. Much of the Project area is characterized by steep  
5 topography where exploratory subsurface testing is neither warranted nor practicable.  
6 Although Little Buck Creek crosses the Project area within a proposed overhead  
7 transmission line corridor, this area was found to be a small stream crossing  
8 surrounded by steep terrain with no areas likely to contain potential archaeological  
9 deposits.

10  
11 Q Would you please summarize the findings of your report?

12  
13 A The entire Project area has been subjected to historic logging activities at multiple  
14 times over the past century, with several areas having been clear-cut recently.  
15 Considerable duff and slash deposits cover the ground surface, though ground  
16 visibility was excellent in areas most recently harvested. Overall sensitivity for  
17 cultural resources appears low throughout much of the Project area based on: archival  
18 research results, which do not indicate historic residential occupation beyond the  
19 inventoried Haran farmstead; the upland setting characterized by steep topography and  
20 the general absence of permanent water sources, which limits the types of sites that  
21 could be found in most of the Project area; the general negative results of two separate  
22 field inventories; and the absence of old-growth vegetation along with the extensive  
23 disturbances introduced by periodic timber harvesting practices.

24 In spite of these prior disturbances, however, one archaeological resource, the  
25 Haran farmstead, was documented as a result of the inventory, and is an early-  
26 twentieth century former orchard located in a forested setting at turbine string D.

1 Additional historic farmsteads or standing structures within the Project area are not  
2 indicated by the results of archival research, which included review of historic maps  
3 and aerial photos. Field survey confirms that no above-ground, historic resources,  
4 such as buildings, railroads, or flumes, are found in the Project area.

5 The Broughton Lumber Company flume archaeological resource was  
6 previously recorded at the west boundary of the project’s proposed Maintenance Yard  
7 Alternative Location along Willard Road. This segment of the flume was reportedly  
8 dismantled around 1987, and the field survey confirms that remnants of former flume  
9 alignment are no longer present in this area.

10 URS did not observe any pre-contact/Native American site types, such as lithic  
11 scatters, petroglyphs, or peeled cedars during the inventory. Promontories associated  
12 with the proposed turbine string, especially “Chemawa Hill,” were closely inspected  
13 for potential rock cairns, rings, walls, or other alignments that could indicate  
14 sensitivity. No such features, dispersed or intact, were observed; it appears that even  
15 if such resources had been present, the historic and modern logging practices would  
16 have obscured or obliterated this potential resource type.

17 Although the Project area is known to have been logged at least 100 years ago,  
18 URS did not observe any features such as camps, historic roads, railroad features, or  
19 other evidence clearly related to the historic use of the area. Large old-growth stumps  
20 are occasionally encountered, but most are in an advanced state of decay and  
21 springboard notches were not observed. No evidence for historic road alignments was  
22 observed during the inventory; existing roadways are mechanically-graded, usually  
23 rocked and graveled modern use alignments that lack historic distinction. As no old-  
24 growth forest remains in this area, potential sensitivity for scarified, peeled trees is not  
25 indicated.

26 //

1 Q Would you anticipate impacts to archeological or historic resources to occur as a result  
2 of construction of the Project?

3  
4 A The previously-recorded Broughton Lumber Company flume was dismantled in 1987  
5 in this area, archaeological remains are no longer present, and construction of the  
6 Project would therefore not affect this resource. The newly recorded Haran farmstead  
7 historic period archaeological resource is recommended as ineligible for the NRHP;  
8 pending DAHP concurrence with this finding, Project impacts would not need to be  
9 considered for this resource.

10  
11 Q Is it possible that construction activities may reveal some archeological sites?

12  
13 A It is possible, although unlikely, that there are archaeological sites in the Project area  
14 that were not detected during the archaeological inventory and fieldwork for this  
15 project. Such sites may be encountered during construction, installation, maintenance,  
16 and/or repair of the Project. In the event of such an inadvertent discovery, work would  
17 be stopped in the area of the discovery and a qualified archaeologist be summoned to  
18 the area to identify and document the find and determine its significance.

19  
20 Q In your opinion would impacts occur to TCPs?

21  
22 A I cannot opine on the potential impacts. TCPs are defined by the Tribe(s) and may  
23 require formal evaluation for NRHP-eligibility before specific impacts could be  
24 addressed.

25 ////

26 ////

1 Q What would happen if human remains are found during construction?

2

3 A In the unlikely event of a human remains discovery, federal law requires that all work  
4 in the area of the discovery be stopped immediately and the area secured. The  
5 Skamania County Medical Examiner would be contacted, and the State Historic  
6 Preservation Officer would be notified. If the Medical Examiner determines that the  
7 area is not a crime scene, and if the remains are determined to be Native American, the  
8 State Historic Preservation Officer and the tribes would consult to arrive at an  
9 appropriate treatment plan for the respectful re-internment of the remains.

10

11 Q In your opinion, would operation activities result in any impacts to cultural resources?

12

13 A Operation of the proposed facility would not result in impacts to known archaeological  
14 resources. However, indirect impacts may result from maintenance activities. For  
15 example, maintenance activities for the proposed Project facilities may require ground  
16 disturbances that could result in inadvertent discovery of cultural resources. If cultural  
17 resources are discovered during ground disturbing maintenance activities, assessment  
18 of the find would be necessary and appropriate mitigation measures implemented.

19

20 Q What is your understanding of the status of tribal consultation with the Yakama  
21 Nation?

22

23 A The Yakama Nation is conducting its own investigation for this Project to identify any  
24 potentially sacred or sensitive resources including TCPs in the Project area. Potential  
25 pending tribal concerns should be addressed during the formal Section 106  
26 government-to-government consultative process.