

9 CULTURAL RESOURCES

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This chapter describes the known cultural resources, including historic properties, in the project area and the applicable regulatory setting, evaluates the impact of the Montezuma II Wind Energy Project on these resources, and recommends mitigation to reduce potential significant impacts.

The project area is approximately 2,359 acres of mostly treeless rolling hills. The area of impact, which is much smaller than the project area, is the maximum possible area of direct impact resulting from the proposed Project, including all areas where project components and facilities are planned: the proposed wind turbine locations, access roads, substation, transmission line, underground cables, and staging area. The area of impact for the built environment includes all standing buildings and structures situated on parcels upon which project construction would occur.

The cultural resources impact analysis is based on the cultural resources inventory conducted by ICF International and discussed in their August 2010 report, *Cultural Resources Inventory Report for the Proposed Montezuma II Wind Project, Solano County, California* and their October 2010 *Addendum to the Cultural Resources Inventory Report for the Proposed Montezuma II Wind Project, Solano County, California* (ICF International 2010a and 2010b). The cultural resources inventory included Native American consultation, consultation with historic societies, and a records search and literature review that covered the entire project area. ICF International conducted a pedestrian survey of the majority of the project area, excluding parcels where no project facilities are planned, and a cultural resource study in compliance with Section 5024.1 of the California Public Resources Code (CPRC) to identify archeological or historic resources in the area of potential impact. Basin Research Associates performed a third-party review of the ICF International report and concluded that it provided sufficient information for the California Environmental Quality Act (CEQA) review of the project. The January 2011 revisions to the project did not add any unsurveyed land to the project area and, thus, did not require updating the cultural resources inventory.

Appendices E1 and E2 contain copies of the cultural resource report and the addendum to the cultural resource report. Location information for cultural resources is sensitive and the copies of the reports in Appendices E1 and E2 do not contain location information in order to maintain the confidential nature of resource location. However, the full cultural resources report, which includes resource location information, is on file at the Northwest Information Center (NWIC) of the California Historical Resources Information Center.

9.1 CULTURAL RESOURCES SETTING

The cultural setting of the project area, as understood by archeologists, ethnologists, and historians today, provides a basis on which to identify areas where cultural resources are more likely to be present in the project area. The setting also provides information needed to limit significant impacts from the Project on cultural resources.

9.1.1 Cultural Setting

Prehistoric Setting

The project area is within the boundaries of the Sacramento-San Joaquin River Delta, a region that has experienced rapid alluvial and colluvial deposition and has potential buried archeological

deposits. The earliest archeological resources identified within this region are associated with the Windmill Pattern (Early Horizon) cultural period, dated between 4,500 and 2,500 before present (BP). Archaeologists associate the Windmill Pattern cultural period with groups that used the riparian and wetland environments. Although poorly understood because of the limited number of known archeological sites, data indicates that Windmill groups within this region typically occupied low rises or knolls in the floodplains of creeks or rivers.

Subsistence patterns during the Windmill Pattern cultural period consisted primarily of hunting and fishing, although Windmill Pattern groups also collected plant foods (seeds, nuts, and perhaps roots). Artifacts characteristic of this Pattern include large projectile points (spear or dart tips), baked clay net sinkers, bone fish hooks and spears, ground stone tools such as mortars and milling slabs, and charmstones, quartz crystals, bone awls and needles, and shell beads and ornaments manufactured from abalone (*Haliotis* sp.) and olive snails (*Olivella* sp.). Such artifacts suggest that Windmill Pattern groups had extensive trade networks that furnished both practical goods and ornamental and ceremonial objects. Most known Windmill Pattern sites contain cemeteries, implying some degree of sedentism, characterized by distinctive burial patterns such as bodies typically buried fully extended, face down, and with the head toward the west. Funerary artifacts accompany many burial sites.

The Berkeley Pattern (Middle Horizon) cultural period, which dates from 2,500 to 1,500 BP, follows the Windmill Pattern cultural period. Deep midden deposits characterize the Berkeley Pattern sites, suggesting larger residential group size, greater frequency of site reuse, and/or a greater degree of sedentism than the Windmill Pattern. An increase in the use of mortars and pestles indicates that Berkeley Pattern group subsistence placed greater emphasis on plant resources, including acorns (*Quercus* spp.) and other vegetal food sources.

By 1500 BP, the Berkeley Pattern had developed into the Augustine Pattern, lasting until the contact period. This development represents a diffusion of new traits into the Bay Area rather than population replacement. The Augustine Pattern is identified by the use of the bow and arrow and harpoon and the practice of preinterment grave burning. Indicators of this pattern are *Haliotis* and clamshell disk beads, *Olivella* lipped and spiral lopped beads, tubular steatite pipes, bird bone whistles, and smaller numbers of mortars, pestles, and imperforate charmstones. Significant variation in grave wealth may signify status differentiation. The archaeological record continues to suggest reliance on the littoral and estuarine environment afforded by the Bay Area.

Ethnographic Setting

Several Native American groups likely used the Sacramento-San Joaquin River Delta region in recent prehistory and in the historic period. Ethnologists believe that the Bay Miwok inhabited the Montezuma Hills region, and other groups such as the Southeastern Patwin, and the Plains Miwok may have been periodically visited the region. It is possible that other regional groups, such as the Northern Yokuts and Ohlone/Costanoan, would have also visited the Montezuma Hills periodically.

Bay Miwok territory extended from the southeastern portion of the Montezuma Hills south to Mount Diablo and from what is now the town of Walnut Creek east as far as Plains Miwok territory in the vicinity of Sherman Island. The Bay Miwok distributed themselves into tribelet groups that

consisted of a village or groups of villages, described variously as ranging from 20 to 300 people, that shared linguistic and/or kinship affinities. Settlements were located on permanent watercourses and intermittent streams (in drier areas) and on high ground in areas near the Sacramento-San Joaquin River Delta. One Bay Miwok tribelet, the Ompin, has been documented as having a village in the vicinity of the present project area, and the Bay Miwok likely used the Montezuma Hills up to the historic period.

The Bay Miwok were semi-nomadic, employing a hunting and gathering subsistence pattern. Acorns were their principle dietary component, but fishing in the adjacent San Joaquin and Sacramento rivers with boats built from tule bundles was also important. Miwok technology included bone, stone, antler, wood, and textile tools. The Bay Miwok constructed several types of structures, including conical thatch structures and semi-subterranean earth-covered lodges. Contact between the Bay Miwok and Europeans occurred in the second half of the eighteenth century when Spanish explorers arrived in the area, leading to a period of missionization, Bay Miwok population decline, and hostilities between the Bay Miwok and European groups. During the late nineteenth century and early twentieth century, the Bay Miwok increasingly augmented subsistence hunting and gathering with seasonal wage labor on ranches and farms.

Historic Setting

Spanish explorers, including Pedro Fages and Juan Bautista de Anza, first visited the Sacramento-San Joaquin River Delta region in the 1770s. Early Euroamerican settlement of the area began in 1844 when the Mexican government granted John Bidwell the 17,726-acre Rancho Los Ulpinos, located along the Sacramento River. The rancho took its name from the Julpun, a sub-tribe of Miwok Indians who occupied the western banks of the Sacramento River.

Following the Bidwell grant and establishment of the Rancho Los Ulpinos, individual settlers began to enter the area, including people like Lansford Hastings. Hastings arrived in 1843 with plans for subdivision and development of the area as a Mormon settlement, but left when annexation of California to the United States unraveled his plan. Other early settlers, Lindsay Powell Marshall and his sons, purchased Hastings' land in 1854 and subsequently reoccupied Hastings' land grant. They developed the first agricultural endeavor in the Montezuma Hills and later began selling portions of the large landholding to other pioneers. Settlement along the river increased as swamp reclamation projects created fertile and available farmland.

By 1878, a directory for the Montezuma Hills area listed 23 ranches, and census records indicate that immigrants to the area came from such diverse places as England, Ireland, Chile, and the states of Pennsylvania, Maine, South Carolina, Kentucky, and Massachusetts. Independent farms and ranches began to grow along watercourses and in the low valleys during the first quarter of the twentieth century, linked by a road system in place by the late nineteenth century and still in use today.

The Oakland, Antioch & Eastern Railway established a rail system in the Montezuma Hills between 1913 and 1914 as an extension of the Oakland-to-Sacramento line. In the early 1920s, the railroad and the Rio Vista Transit Company built a joint transfer station at Rio Vista Junction that operated until 1940. Although this transfer station further expanded the opportunities for Montezuma Hills residents and businesses, agricultural and ranching traditions continued to characterize the

Montezuma Hills area through the second half of the twentieth century. By the end of the twentieth century, Birds Landing, to the east of the project area, had been a filming location for various motion pictures seeking rural locations, including Clint Eastwood's *Bird* (1988) and *Honkytonk Man* (1982). However, the construction of at least one housing development and several recent wind energy development projects have introduced changes into the Montezuma Hills.

9.1.2 Paleontological Resources

As discussed in Chapter 10, Geologic Resources, the project area is entirely underlain by the Montezuma Hills Formation. This formation historically has not been a source of fossils; however, there have been a few discoveries. A paleontologist at the University of California Museum of Paleontology conducted a fossil locality search to locate paleontological resources in the project area. The search included vertebrates, invertebrates, plants, and microfossils. The search identified one fossil locality (UCMP V5913) within the project area near the eastern project border and immediately north of Montezuma Hills Road. Paleontologists have collected two specimens from this locality, including the skull of a haplomastadon (UCMP 2010). The locality is not within the project area of impact and no planned project turbines, access roads, or structures would affect it. Two other fossil localities occur within a mile of the project area, both to the south near the town of Collinsville (UCMP 2010).

9.2 CULTURAL RESOURCES REGULATORY SETTING

CEQA requires the assessment of a proposed Project's effects on cultural resources, including historic resources and archeological resources. Section 15064.5 of the Code of California Regulations (CCR), Title 14, Chapter 3 (Guidelines for Implementing CEQA) defines potential historical resources, including archeological resources. Generally, a resource is considered historically significant if it is listed on or meets the criteria for listing on the California Register of Historic Resources (CRHR) (CPRC, Section 5024.1, Title 14 CCR, Section 48852). Section 9.4 discusses these criteria in more detail below.

Section 106 of the National Historic Preservation Act of 1966, as amended (36 Code of Federal Regulations Part 800) defines the characteristics of historic properties. To be determined eligible to be classified as an historic property, a cultural resource must meet National Register of Historic Places (NRHP) criteria found in Part 60.6 of the Code of Federal Regulations (CFR), Title 36, Chapter 1. The NRHP eligibility criteria provide the basis for the CRHR criteria and differ primarily in that the NRHP criteria focus on the national significance of resources, while CRHR criteria focus on resources significant to the state of California or regionally significant resources within the State of California (California Office of Historic Preservation [OHP] 2006). Therefore, while Section 9.4 only discusses the CRHR criteria in detail, an evaluation of effects would also be necessary for any NRHP-listed or NRHP-eligible historic properties.

The fact that a resource is not listed or determined to be eligible for listing in the NRHP or the CRHR, is not included in a local register of historical resources, or is not identified in a historical resources survey does not preclude Solano County from determining that the resource may be a historical resource as defined in CPRC Sections 5020.1(j) or 5024.1. CEQA considers a project to have a significant effect on the environment if a project would result in an effect that may cause a substantial adverse change in the significance of a historical or archeological resource.

Solano County has established policies for conservation of cultural resources in the General Plan (Solano County Planning Services 2008). The County requires cultural resources inventories of all new development projects in areas identified with medium or high potential for archeological or cultural resources. Where a preliminary site survey finds medium to high potential for substantial archaeological remains, the County shall require a mitigation plan to protect the resource before issuance of permits. Mitigation may include:

- Having a qualified archaeologist present during initial grading or trenching (monitoring);
- Redesigning the Project to avoid archaeological resources (this is considered the strongest tool for preserving archaeological resources);
- Capping the site with a layer of fill;
- Excavating and removing the archaeological resources and curating in an appropriate facility under the direction of a qualified archaeologist; and/or
- Alerting applicants for projects within early settlement areas to the potential sensitivity. If significant archaeological resources are discovered during construction or grading activities, such activities shall cease in the immediate area of the find until a qualified archaeologist can determine the significance of the resource and recommend alternative mitigation.

9.3 METHODS AND RESULTS OF THE CULTURAL RESOURCES INVENTORY

The cultural resources inventory conducted for the Montezuma II Wind Energy Project consisted of a literature review, Native American consultation, consultation with historic societies, and a pedestrian survey, as discussed below. Due to the confidential nature of the location of cultural resources, this document discusses the location of sites identified during the field survey generally and does not include site maps.

9.3.1 Literature Review

At the request of the Applicant, the Northwest Information Center (NWIC) conducted a records search of the California Historical Resources Inventory System (CHRIS), an adjunct of the OHP. The NWIC consulted records of previously conducted cultural resource investigations and previously recorded cultural resources for the project area plus a 1-mile radius around the project area. The records search also included a review of the NRHP and the Directory of Properties in the Historic Property Data File for Solano County. The review also consulted historic topographic maps and survey plats.

9.3.2 Native American Consultation

The Applicant requested a search of the sacred lands files from the Native American Heritage Commission (NAHC) in Sacramento, California as well as a list of Native Americans with knowledge of and interest in cultural resources in the project area. The NAHC provided a list of Native American contacts for Solano County. ICF International mailed project notification letters with maps to Katherine Erolinda Perez of Bay Miwok, Ohlone/Costanoan, and Northern Valley Yokuts descent, Marshall McKay of the Rumsey Indian Rancheria of Wintun, Elaine Patterson of the Cortina Band of Indians, the Wintun Environmental Protection Agency, Bill Combs of the Cortina Band of Indians, and Kesner Flores of the Cortina Indian Rancheria of Wintu Indians (see Appendix E1 for correspondence). ICF International made follow-up phone calls and sent project update letters to each of these individuals.

9.3.3 Historical Society Correspondence

ICF International contacted the Solano County Historical Association, the Solano County Genealogical Society, and the Vacaville Museum to inquire if they had information pertinent to the project area and/or concerns regarding the proposed actions (see Appendix E1 for correspondence). ICF International made follow-up phone calls to each of these organizations.

9.3.4 Field Survey

ICF International conducted pedestrian surveys of the project area over the course of three partial-week field sessions in September 2008. In 2010, the Applicant expanded the project area an additional 1,500 acres to include parcels adjacent to the original project area. ICF International surveyed these parcels in June 2010. Subsequent project revisions reduced the project area and modified the proposed turbine, access road, and collection line locations. A review of the revised project plans and cultural resource survey information determined that no additional field surveys were necessary to accommodate this change (ICF International 2010b). Figure 3 and Figure 4 in Appendix E1 depict the areas covered by the survey. The turbine layout would be subject to micro-siting during final design.

Based on ethnographic and environmental data and the results of the previous studies, the project area is divisible according to sensitivity (high versus low) for the presence of prehistoric cultural resources. The survey defined high-sensitivity areas as seasonal and year-round watercourses, wetlands, flat areas surrounding streams and wetlands, and ridges that afforded easy access to sources of water and defined low-sensitivity areas as the majority of ridges and steep slopes.

High-sensitivity areas were surveyed intensively using transects spaced 49 to 98-feet apart. Low-sensitivity areas were surveyed at a cursory level using transects spaced 98-feet apart. The majority of the project footprint is located in low-sensitivity areas along on cultivated ridges and hills. The cultivated areas comprise a mixture of plowed soil (permitting 100% visibility of the ground surface), standing wheat crops (permitting 0% to 20% ground visibility), cut wheat and hay fields (permitting 0% to 20% ground visibility), and dry pasture (permitting ground visibility from 0% to 70%).

Architectural historians conducted the architectural field survey of the area of impact for the built environment in September 2008. ICF International conducted an additional field survey of four parcels in May 2010. The architectural inventory identified historic resources that the proposed Project would possibly affect. As part of the field process, architectural historians inspected, photographed, and documented all buildings, structures, and linear features 45 years old or older.

9.3.5 Results

Literature Review

The literature review resulted in the identification of seven cultural resources investigations conducted previously in portions of the project area plus a 1-mile radius around the project area. One previous investigation recorded three historic-period sites. One historical site consists of a burned-down ranching or farming related property located at the western boundary of the project area outside the area of impact (identified as Site 1, M-1H below). The other two historical properties consist of farmsteads and both are within the construction buffer zone, with a 305-meter

(1,000-foot) setback from the project's area of impact (ICF International 2010a and Jones & Stokes 2001, cited in Shiloh III EIR).

Native American Consultation

The NAHC sacred lands file search did not identify Native American cultural resources in the proposed project area. To date ICF International has not received any responses to the project notification efforts. Copies of the correspondence are in Appendix E1.

Historical Society Correspondence

To date, ICF International has received no responses to the prior notices, as provided in Appendix E1, from the Solano County Historical Association, the Solano County Genealogical Society, or the Vacaville Museum.

Field Survey

During the pedestrian surveys, archaeologists observed one previously recorded archeological resource and recorded six new resources. Of these resources, four are historical archeological sites, one is a prehistoric isolate consisting of a prehistoric stone net weight, and two are historic isolates consisting of fragments of historic glass.

The cultural resources inventory identified 30 architectural resources 45 years old or older, 19 of which are within the proposed project area. The ICF International report in Appendix E1 provides descriptions of these buildings and structures. Table 9.3-1 describes the archeological and architectural resources in the project area.

**Table 9.3-1
ARCHEOLOGICAL AND ARCHITECTURAL RESOURCES IN THE PROJECT AREA**

Site	Description	Within Project Area of Impact
Archeological Resources		
M-1H	Remnants of a historic-period farmstead including the foundation of a water pump house, a eucalyptus tree windbreak, fencing, a water tank, a trough, and household and farming debris.	No
M-2H	Surface-trash scatter composed of modern and historic refuse	Yes
SF-1H	Historic windmill and associated trough	No
P-48-518	Historic-period archaeological site consisting of the remnants of two ranching or farming related buildings, a concrete footing, eucalyptus tree windbreak, and a water tank platform	Yes

Site	Description	Within Project Area of Impact
ISO-1	Isolated prehistoric stone net weight made from local sedimentary material	No
ISO-2H	Isolated fragment of a historic glass bottleneck	No
ISO-3H	Isolated fragment of a historic glass bottle base	Yes
Architectural Resources		
Parcel 0090-090-070	Residence, three barns, and five sheds	No
P-48-519	Residence and three sheds	No
P-48-523	Residence, two barns, and three sheds	No

9.4 SIGNIFICANCE CRITERIA FOR CULTURAL RESOURCES

The evaluation of potential impacts on cultural resources related to construction and operation of the Project considered the criteria listed below. CEQA would consider the Project to have an impact on cultural resources if it would:

- Cause a substantial adverse change in the significance of a historical resource, as defined in Section 15064.5;
- Cause a substantial adverse change in the significance of an archeological resource pursuant to Section 15064.5;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; and/or
- Disturb any human remains, including those interred outside of formal cemeteries.

According to Section 15064.5 of the CEQA Guidelines, a resource is generally found to be historically significant if it meets the CRHR criteria for eligibility, is listed in a local historic register, or is deemed significant in a historical resource survey. A resource may be considered potentially eligible for listing in the CRHR per CPRC Section 5024.1 if it:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

Furthermore, under CPRC Section 4852(c), a cultural resource must retain integrity to be eligible for the CRHR. Specifically, it must retain sufficient character or appearance to be recognizable as a historical resource and convey reasons of significance. Integrity is evaluated with regard to retention of such factors as location, design, setting, materials, workmanship, feeling, and association. If an archeological resource is neither a unique archeological resource nor a historical resource for the purposes of CEQA, it is adequate to note the resource and the effect on it but no further consideration for the CEQA process is required (Title 14 CCR, Section 15064.5).

ICF International evaluated all of the discussed archaeological sites for significance as a historical resource under CEQA. A summary of the technical report follows. Appendix E1 provides the complete report with full descriptions and significance statements. For the purposes of the evaluation, the project area of impact is the maximum possible area of direct impact resulting from the proposed Project, including all areas where project components and facilities are planned.

Sites Outside the Project Area of Impact

Sites located outside of the project area of impact include M-1H, SF-1H, ISO-1, ISO-2H, Parcel 0090-090-070, P-48-519, and P-48-523. The Project would not cause significant impacts to these site's potential cultural resources because they will not be exposed to project activity.

Site 2, M-2H

Site M-2H is located within the project area of impact. However, to date there are no plans for wind-turbine construction, associated wind-turbine project features, or access roads at the location. Furthermore, the site is evaluated as not eligible for listing in the CRHR and is thus not considered a potentially significant historical resource under CEQA.

P-48-518

Site P-48-518 is within the project area of impact. An existing access road bisects the site. The Project would expand and improve this existing gravel PG&E access road. P-48-518 has previously been evaluated as not eligible for listing in the CRHR (Environmental Science Associates 2002, cited in High Winds EIR).

Isolates

ISO-1, ISO-2H, and ISO-3H are isolated finds that are not associated with an archaeological site and are not eligible for listing in the CRHR. They are not considered significant resources for the purpose of CEQA.

Architectural Resources

The cultural resources inventory also identified 30 architectural resources 45 years old or older, 19 of which are within the project area. ICF International evaluated all of these 30 buildings or structures for significance as a historical resource under CEQA, both as individual resources and as a collective district. None of the 30 architectural resources surveyed are individually or collectively considered a

historical resource under CEQA (ICF International 2010a). The architectural resources within the project area all include residences and are within setbacks, outside the project areas of impact.

9.5 CULTURAL RESOURCES IMPACTS ANALYSIS AND MITIGATION

The following are potential impacts on cultural resources related to construction and operation of the proposed Project.

Impact CUL-1: Impacts on Known Cultural Resources

The analysis of impacts on known cultural resources assesses impacts on resources identified within the area covered by the cultural resources field surveys as well as any resources identified during previous surveys of the area. To identify previously recorded resources in the area, the Applicant conducted a records search that covered the entire area within a 1-mile radius around the Project and consulted with the Native American Heritage Commission, local Native American representatives, the Solano County Historical Association, the Solano County Genealogical Society, and the Vacaville Museum. The cultural resources field surveys conducted for the Project covered the majority of the area where ground-disturbance would occur. Unsurveyed areas consist of wetlands or seasonal drainages. The perimeters of unsurveyed areas were subject to intensive survey by archaeologists. The Applicant would use horizontal directional drilling (HDD) methods to install any collection lines crossing these wetlands or seasonal drainages and hence would not disturb the ground surface in these areas. This drilling, however, has the potential to encounter buried cultural or paleontological resources, as discussed in Impact CUL-2, Impacts on Unknown Cultural Resources, Paleontological Resources, and Human Remains.

Ground surface visibility within the project area ranged from 0% to 100%. Therefore, there may be unknown archeological resources which the Applicant could discover during construction of the Project. Impact CUL-2 addresses potential impacts on cultural resources not identified during the field survey due to low ground surface visibility.

As described above, the construction and operation of the Montezuma II Wind Project would not directly impact a known significant cultural resource as it is currently designed.

Level of Significance: Less than Significant

Impact CUL-2: Impacts on Unknown Cultural Resources, Paleontological Resources, and Human Remains

Unknown cultural or paleontological resources may be present in a buried context or in areas that the field study did not cover but that could be disturbed under the revised project layout. The Applicant prepared a cultural resources inventory for the original project layout, which included a records search and literature review, consultation with Native American tribes, consultation with historic societies, and a cultural field survey. The literature review and consultations covered the broader project area that encompasses the project layout.

If the Applicant makes any further changes to the siting of project components or access roads that would require ground-disturbing activities in locations that the field survey did not cover, the Project

could affect unknown cultural resources directly or indirectly. Mitigation Measure CUL-2a addresses this significant impact.

In the areas that were covered by the field survey, there is still potential to impact unknown cultural and paleontological resources. Because ground surface visibility was less than 100% for some of the areas that ICF International surveyed, there is the potential that unknown cultural resources may exist in areas where ground-disturbance would occur. Additionally, there is a potential to encounter previously unknown subsurface cultural and paleontological resources during ground-disturbing activities. Mitigation Measure CUL-2b addresses this significant impact.

Similarly, although there are no known sites of human remains in the project area, there is the potential that previously unidentified burial sites containing human remains, including unmarked burials, may be unearthed during construction (ICF International 2010a). Mitigation Measure CUL-2b addresses this significant impact.

Level of Significance: Potentially Significant

To reduce the possibility of impacts on unknown cultural resources, paleontological resources, and human remains, the Applicant will be required to perform the surveying and monitoring procedures described in Mitigation Measure CUL-2a and Mitigation Measure CUL-2b.

Mitigation Measure CUL-2a: Supplemental Evaluation and Cultural Surveys. To address potential impacts on cultural, archeological, and paleontological resources, in areas that the cultural resources inventory did not previously cover and where ground disturbance will occur, the Applicant shall achieve avoidance by implementing the following measures:

- a. Prior to construction, the Applicant shall identify all areas, if any, where project components are proposed that were not covered during the pedestrian surveys conducted for the *Cultural Resources Inventory Report for the Proposed Montezuma II Wind Project*, Solano County, California (ICF International 2010a) or other supplemental evaluation. In areas where ground-disturbance will occur for project construction, the Applicant shall provide documentation to the County confirming where surveys were previously completed versus not completed.
- b. In areas where ground-disturbance will occur, the Applicant shall consult and contract with a qualified archaeologist to conduct a supplemental evaluation of known cultural resources occurring within the locations not covered during the pedestrian surveys conducted for the *Cultural Resources Inventory Report for the Proposed Montezuma II Wind Project*, Solano County, California (ICF International 2010a), including any areas not covered due to subsequent project revisions. These areas include, but are not limited to, access roads, collection system routes, transmission line route, turbine locations, and any other areas where ground disturbance would occur that the pedestrian surveys did not cover.
- c. As determined by the Applicant's qualified archaeologist, supplemental evaluation of prehistoric and historic archeological sites could include, but is not limited to archival research to establish the site's place in local history and events; intensive surveys, of the

- revised area of impact to locate artifacts and features; and subsurface testing consisting of shovel-excavated test units in areas with less than 100% ground surface visibility.
- d. Prior to commencement of ground disturbance in the area requiring supplemental evaluation, the Applicant shall submit a report of findings to Solano County for the supplemental evaluation, which shall include recommendations of significance to the SHRC for the site(s). Commencement of ground disturbance shall not occur unless authorized by the County.
 - e. Except in areas where the Applicant conducts additional surveys and obtains Solano County approval, the Applicant shall not conduct ground-disturbing activities in areas not previously surveyed for cultural resources, as evaluated in the pedestrian surveys conducted for the *Cultural Resources Inventory Report for the Proposed Montezuma II Wind Project*, Solano County, California (ICF International 2010a). In any area where the Applicant conducts a subsequent survey, the Applicant shall submit it to Solano County for review and approval and shall not commence ground-disturbing activities there until Solano County has given authorization to do so.
 - f. Identify the locations of known cultural resources on construction plans and drawings (which the Applicant shall not distribute beyond project personnel for the reasons described below), place a protective barrier around known cultural deposits, and educate construction personnel on avoidance measures. Cultural resources are easily disturbed, damaged, or destroyed and are a non-renewable resource. Additionally, some cultural resources may be at risk of looting. Therefore, information pertaining to the exact location of a known cultural resource must remain confidential, as recognized by the California Public Records Act. The Applicant shall make the location of these resources available only on a need-to-know basis to avoid disturbance, damage, or destruction.

Mitigation Measure CUL-2b: Cultural and Paleontological Monitoring and Unanticipated Discovery Procedure. The Applicant shall minimize impacts on cultural and paleontological resources in project areas that had less than 100% ground surface visibility during the pedestrian surveys for the *Cultural Resources Inventory Report for the Proposed Montezuma II Wind Project*, Solano County, California (ICF International 2010a) and any subsequent surveys performed in compliance with Mitigation Measure CUL-2a by implementing the following measures:

- a. An archaeologist, who is also qualified to recognize paleontological resources, shall conduct full-time monitoring of all areas of the Project where ground-disturbing activities would occur. The monitor shall have the following qualifications:
 - Working knowledge of the project area;
 - Ability to identify the range of cultural resources known to exist in the vicinity of the Project;
 - Ability to recognize paleontological resources; and
 - Approval of Solano County at least 30 days prior to commencement of construction activities.

The monitor shall have the authority to temporarily stop construction activities to inspect areas where ground-disturbance has revealed potential cultural resources. The Applicant shall suspend construction activities until the archaeologist has inspected the discovery and determined required or recommended treatment for the resource(s), including but not limited to the following:

- i. **Evaluation and Avoidance (Cultural Resources).** The evaluation of unanticipated discovery of potentially significant cultural resources may require a subsurface testing and evaluation program for cultural resources. Resources determined to be significant or potentially significant shall be flagged and avoided. If necessary, the Project shall be redesigned to avoid impacts on cultural resources.
- ii. **Recovery and Documentation (Cultural Resources).** If the Applicant cannot implement site avoidance through project redesign, the Applicant shall implement a data recovery program to mitigate impacts. Appropriate treatment of significant or potentially significant cultural resource(s) includes excavation and removal of the resource(s) and curation in an appropriate facility under the direction of a qualified archaeologist.
- iii. **Evaluation and Avoidance (Paleontological Resources).** If potential paleontological resources are encountered during construction, the qualified monitor shall suspend all construction activities in the vicinity of the potential resource to examine the resource and determine the proper method to avoid adverse effects on the resource. If necessary, a qualified paleontological monitor shall be consulted to assist the cultural monitor through all phases of evaluation, avoidance, recovery, and documentation, as necessary. At the monitor's discretion, the area in the vicinity of the potential resource may be flagged for avoidance. If necessary, the Project shall be redesigned to avoid impacts on paleontological resources.
- iv. **Recovery and Documentation (Paleontological Resources).** If site avoidance cannot be implemented through project redesign, the Applicant shall implement a data recovery program to mitigate impacts. Appropriate recovery of the potential resource may include removal from the site by plaster jacketing, taking a sample of the potentially fossiliferous formation, or, if necessary, excavation. Recovered specimens that are determined to be important paleontological resources shall be prepared to the point of curation, including the washing of sediments to recover small invertebrates or vertebrates, and stabilized to mitigate impacts. In the event that recovered specimens are determined to be important paleontological resources, the Applicant shall prepare and execute a written repository agreement with an established, accredited museum repository, and all important paleontological specimens shall be curated.
- v. **Unanticipated Human Remains Discovery.** If human remains are discovered, work in the vicinity must stop until the County coroner can determine whether the remains are those of a Native American. If they are those of a Native American, the coroner must contact the NAHC. The NAHC will identify the person(s) it believes to be the "Most Likely Descendant" of the deceased Native American. The Most Likely Descendant would be responsible for recommending the disposition and

treatment of the remains. The Most Likely Descendant may make recommendations to the Applicant and the County for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.

- b. For each of the unanticipated discovery scenarios described above, the Applicant shall immediately notify the Solano County Resource Management Department. Solano County will work with the qualified archaeologist, who shall work at the expense of the Applicant. The County shall determine whether the discovered resource can be avoided and, if impacts have not occurred, whether work can continue. If it is determined that the resource has been impacted and an assessment of its significance is required, work shall not resume until permission is received from Solano County.

Level of Significance with Mitigation: Less than Significant

9.6 REFERENCES

- California Office of Historic Preservation. 2006. Technical Assistance Series # 6, California Register and National Register: A Comparison. Available online at http://www.parks.ca.gov/pages/1069/files/06calreg&natreg_090606.pdf.
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- University of California Museum of Paleontology. (UCMP), 2010, Fossil Locality Website Database, Localities, Solano County, California. Available online at http://ucmpdb.berkeley.edu/cgi/ucmp_query2?stat=BROWSE&query_src=ucmp_BrowseUSstates&table=ucmp_loc2&where-state_prov_std=California&where-county_std=Solano+County&orderby=county_std. Accessed on March 11, 2010.