

## 3.5 Cultural Resources

This section describes the regulatory and environmental setting for cultural resources in the project area, including archaeological materials and historic architecture, places, and artifacts. It also describes impacts on cultural resources that would result from implementation of the Initial Repower and Full Repower.

### 3.5.1 Existing Conditions

#### Regulatory Setting

##### Federal

Archaeological and architectural resources (buildings and structures) are protected through the National Historic Preservation Act (NHPA) of 1966, as amended (16 United States Code [USC] 470f) and its implementing regulations: Protection of Historic Properties (36 Code of Federal Regulations [CFR] Part 800), the Archaeological and Historic Preservation Act of 1974, and the Archaeological Resources Protection Act of 1979.

Prior to implementing an *undertaking* (e.g., issuing a federal permit), Section 106 of the NHPA requires federal agencies (e.g., U.S. Army Corps of Engineers, National Park Service) to consider the effects of the undertaking on historic properties and to afford the Advisory Council on Historic Preservation (ACHP) and the State Historic Preservation Officer (SHPO) a reasonable opportunity to comment on any undertaking that would adversely affect properties eligible for listing on the National Register of Historic Places (NRHP). NHPA Section 101(d)(6)(A) allows properties of traditional religious and cultural importance to a tribe to be determined eligible for inclusion in the NRHP. Under the NHPA, a find is significant if it meets the NRHP listing criteria under 36 CFR 60.4, as stated below.

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and:

- a) That are associated with events that have made a significant contribution to the broad patterns of our history, or
- b) That are associated with the lives of persons significant in our past, or
- c) That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction, or
- d) That have yielded, or may be likely to yield, information important in prehistory or history.

Federal review of projects is normally referred to as the Section 106 process. The Section 106 process normally involves step-by-step procedures that are described in detail in the implementing regulations (36 CFR Part 800) and summarized here.

- Establish a federal undertaking.
- Delineate the Area of Potential Effects.
- Identify and evaluate historic properties in consultation with the SHPO and interested parties.

- Assess the effects of the undertaking on properties that are eligible for inclusion in the NRHP.
- Consult with the SHPO, other agencies, and interested parties to develop an agreement that addresses the treatment of historic properties and notify the ACHP.
- Proceed with the project according to the conditions of the agreement.

## State

The State of California implements the NHPA through its statewide comprehensive cultural resource preservation programs. The California Office of Historic Preservation (OHP), an office of the California Department of Parks and Recreation (DPR), implements the policies of the NHPA on a statewide level. The OHP also maintains the California Historical Resources Inventory. The SHPO is an appointed official who implements historic preservation programs within the State's jurisdiction.

### California Environmental Quality Act

CEQA, as codified in PRC Sections 21000 et seq. and implemented via the State CEQA Guidelines (14 CCR, Section 15000 et seq.), is the principal statute governing the environmental review of projects in the State. In order to be considered a historic resource, it must be at least 50 years old. The State CEQA Guidelines define a historical resource as: (1) a resource in the California Register of Historic Resources (CRHR); (2) a resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or (3) any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

The CRHR is "an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Section 5024.1[a]). The CRHR criteria are based on NRHP criteria (PRC Section 5024.1[b]). Certain resources are determined by CEQA to be automatically included in the CRHR, including California properties formally eligible for or listed in the National Register. To be eligible for the California Register as a historical resource, a prehistoric or historic-period resource must be significant at the local, state, and/or federal level under one or more of the following criteria:

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 [14 CCR Section 4852(b)].

For a resource to be eligible for the CRHR, it must also retain enough integrity to be recognizable as a historical resource and to convey its significance. A resource that does not retain sufficient integrity to meet the NRHP criteria may still be eligible for listing in the CRHR.

CEQA requires lead agencies to determine if a proposed project would have a significant effect on important historical resources or unique archaeological resources. If a lead agency determines that an archaeological site is a historical resource, the provisions of PRC Section 21084.1 and State CEQA Guidelines Section 15064.5 would apply. If an archaeological site does not meet the State CEQA Guidelines criteria for a historical resource, then the site may meet the threshold of PRC Section 21083.2 regarding unique archaeological resources. A unique archaeological resource is an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria.

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person [PRC Section 21083.2 (g)].

The State CEQA Guidelines note that if a resource is neither a unique archaeological resource nor a historical resource, the effects of the project on that resource shall not be considered a significant effect on the environment (State CEQA Guidelines Section 15064[c][4]).

## Local

### Alameda County General Plan—East County Area Plan

The Alameda County General Plan consists of several documents that discuss specific geographic areas in detail in various parts of the county including the ECAP, as well as general plan elements for housing, safety, conservation, open space, noise, and recreation.

The ECAP includes the following policies to protect cultural resources.

**Policy 136:** Identify and preserve significant archaeological and historical resources that contribute to the heritage of the East County area.

**Policy 137:** Require development to be designed to avoid cultural resources, or offset impacts with appropriate mitigation measures if avoidance is determined to be infeasible.

### Alameda County Historic Preservation Ordinance

In 2012, the Alameda County Board of Supervisors adopted a historic preservation ordinance that codified the definition and maintenance of the Alameda County Register of Historic Resources, how properties can be added or removed from the county register, and what activities may be subject to review. The ordinance also provided incentives for the preservation of historic resources.

## Environmental Setting

### Prehistoric Setting

The Bay Area was a region of intense human occupation long before the European explorers settled in the region in the eighteenth century. In the early twentieth century, the prehistory of the region was virtually unknown, aside from a small amount of ethnographic information (Kroeber 1925) and the discovery of a few prehistoric sites at the southern end of the San Francisco Bay (Nelson 1909).

Milliken et al. (2007) present the idea that a series of culture changes in the San Francisco Bay Area took place during the 11500–8000 cal B.C. time frame, suggesting that Clovis big-game hunters, then initial Holocene gatherers, lived in the area. Presumably, however, evidence to support this has been washed away by stream action, buried under more recent alluvium, or submerged on the continental shelf (Rosenthal and Meyer 2004:1). There is evidence, however, for an in-place forager economic pattern, beginning around 8000 cal B.C., followed by a series of five cycles of change that began at approximately 3500 cal B.C., as described below.

#### **The Early Holocene (Lower Archaic), cal 8000 to 3500 B.C.**

Between cal 8000 and 3500 B.C., the Bay Area appears to have been occupied by a widespread but sparse population of hunter-gatherers. The millingslab and handstone, as well as a variety of large, wide-stemmed and leaf-shaped projectile points, all emerged during this period (Milliken et al. 2007:114).

#### **The Early Period (Middle Archaic), cal 3500 to 500 B.C.**

Several technological and social developments characterize this period in the Bay Area. Rectangular *Haliotis* and *Olivella* shell beads, the markers of the Early Period bead horizon (the time when these bead types started being used), continued in use until at least 2,800 years ago (Ingram 1998; Wallace and Lathrop 1975:19). The mortar and pestle were first documented in the Bay Area shortly after 4000 B.C., and by 1500 cal B.C., cobble mortars and pestles, and not millingslabs and handstones, were used at sites throughout the Bay Area, including ALA-307 (West Berkeley) and ALA-483 (Livermore Valley) (Wiberg 1996:373).

#### **Lower Middle Period (Initial Upper Archaic), 500 cal B.C. to cal A.D. 430**

Although it is unclear when the “major disruption in symbolic integration systems” originated, it is clear in the record around 500 B.C. and may have begun several hundred years earlier (Milliken et al. 2007:115). A new suite of decorative and presumed religious objects appeared during the Early Period–Middle Period Transition (EMT) (Elsasser 1978), which corresponds to the beginning of this period. Bead Horizon M1 of the Middle Period (Upper Archaic, 200 cal B.C. to cal A.D. 430), which developed out of the EMT, marked the first of a series of bead horizons of central California bead trade until cal A.D. 1000 (Groza 2002).

#### **Upper Middle Period (Late Upper Archaic), cal A.D. 430 to 1050**

During the Upper Middle Period (Late Upper Archaic) (cal AD 430 to 1050), the *Olivella* saucer bead trade network of the Lower Middle Period collapsed. More than half of the known M1 sites were abandoned. In the remaining sites, the number of sea otter bones greatly increased (Bennyhoff 1994a, 1994c).

#### **Initial Late Period (Lower Emergent), cal A.D. 1050 to 1550**

During this period, burial objects became much more elaborate, and initial markers of the Augustine Pattern appeared in the form of multi-perforated and bar-scored *Haliotis* ornaments and new *Olivella* bead types in sites such as SCL-690 (Hylkema 2007). Classic Augustine Pattern markers, which appeared in bead horizon L1 (after cal AD 1250), include the arrow, flanged pipe, *Olivella* callus cup bead, and the banjo effigy ornament (Bennyhoff 1994b).

Evidence for increased social stratification throughout the Bay Area after AD 1250 can be found in mortuary evidence, such as higher-quality burial items in high-status burials and cremations (Fredrickson 1994:62). This may have reflected a new regional ceremonial system that was the precursor of the ethnographic Kuksu cult, a ceremonial system that unified the many language groups around the Bay Area during bead horizon L1 (Milliken et al. 2007:117).

### **Terminal Late Period: Protohistoric Ambiguities**

An upward cycle of regional integration was likely commencing around the time of Spanish settlement in the Bay Area. Such regional integration was a continuing characteristic of the Augustine Pattern, most likely brought to the Bay Area by Patwin speakers from Oregon, who introduced new tools (such as the bow) and traits (such as pre-interment grave-pit burning) into central California. Perhaps the Augustine Pattern, with its inferred shared regional religious and ceremonial organization, was developed as a means of overcoming insularity, not in the core area of one language group, but in an area where many neighboring language groups were in contact (Milliken et al. 2007:118).

### **Ethnographic Setting**

The project area is located within the ancestral territory of the Ohlone. Historically, the Ohlone were called the Costanoan Indians. *Costanoan* is derived from the Spanish word *costaños*, meaning *people of the coast* (Levy 1978:494). The term Ohlone or Costanoan denotes a larger group with many other tribelets throughout the Bay Area (Levy 1978:485). The term *Ohlone* is preferred by the present-day members of the group.

The Ohlone are believed to have inhabited the area since AD 500 or earlier. Their territory extended along the coast from San Francisco Bay in the north to just beyond Carmel in the south, and as much as 60 miles inland.

The Ohlone are a linguistically defined group. Eight different but related languages were spoken by the Ohlone, which together with Miwok, comprise the Utian language family of the Penutian stock (Levy 1978:485–486).

The Ohlone were hunter-gatherers and relied on acorns and seafood; however, they also exploited many other foods, including various seeds (growth was promoted by controlled burning), berries, roots, land and sea mammals, reptiles, and insects (Levy 1978:491–493).

Aboriginally, the Ohlone were politically organized by tribelet, each having a designated territory. A tribelet comprised one or more villages and camps within a territory often designated by geographic features. Tribelets generally had 100 to 250 members (Kroeber 1925). The office of tribelet chief was inherited patrilineally and could be occupied by a man or woman. Duties of the chief included directing ceremonial activities and serving the leader of a council of elders, which functioned primarily in an advisory capacity to the community (Levy 1978:487).

Seven Spanish missions were founded in Ohlone territory between 1777 and 1797. Mission life, for the most part, was devastating to the Ohlone population. As a result of introduced diseases and a declining birth rate, the Ohlone population fell from 10,000 or more in 1770 to less than 2,000 in 1832 (Cook 1943a, 1943b; Levy 1978:486). After the missions were secularized by the Mexican government (around 1830), many Native Americans, including Ohlones, left the missions in an attempt to reestablish their previous lives. Many Ohlone found work as wage laborers on the ranchos and mines or in domestic positions. There was a partial return to aboriginal religious

practices and subsistence strategies, but for the most part, the Ohlone culture was greatly diminished (Levy 1978:486–487). Today, descendants of the Ohlone still live in the area, and many are active in maintaining their traditions and advocating Native American issues.

## **Historic Setting**

### **Spanish Period**

Spain claimed Alta California from 1542 when Cabrillo made his voyage of exploration. In the mid-1700s, the Spanish established defensive settlements along coastal Alta California to deter encroachment from Russian and British interests. An army garrison and Indian mission were established in San Diego in 1769 and another in Monterey in 1770. In 1772, Lieutenant Pedro Fages – the Commander of the Monterey Mission – was ordered to travel north from Monterey to San Francisco Bay to find a location for a new mission and presidio.

In March 1776, Lieutenant Colonel Juan Bautista de Anza led an expedition north from Monterey (Bolton 1931a, 1931b). Anza, with Lieutenant Gabriel Moraga and eleven soldiers, journeyed north from Monterey up the San Francisco peninsula to the Golden Gate. From the Golden Gate, they returned down the San Francisco peninsula, turned north again and traveled along the flanks of the Berkeley Hills to the Carquinez Strait, and then headed east up the Sacramento-San Joaquin River estuary. Upon encountering impassable Tulare marshes of the Sacramento-San Joaquin Delta, Anza forfeited mapping the course of the river to the east, and turned south again heading for Monterey through the Coast Ranges in the Altamont-Paterson Pass area. In the project vicinity there are sign markers for the Juan Bautista de Anza National Historic Trail at the corner of Grant Line Road and Midway Road, and at the corner of Patterson Pass Road and Midway Road.

### **Mexican Period**

Mexico declared independence from Spain in 1822, and assumed sovereignty over California. In 1833, the decree of secularization overthrew the authority of the ecclesiastical government and partition of mission lands, livestock, and dispersion of Native Americans. While some resident Native Americans received land allotments, none retained their lands for more than a few years (Bean 1994). Most served as laborers on the ranchos spreading throughout Mexican California. Between 1834 and 1846, more than 800 land patents, comprising more than 12 million acres, were issued to individuals by the Mexican government. Any citizen of good character could get a grant for a grazing tract. The grantee was required to submit a *diseno* (description and map) of the area he desired. By 1845, most of the land holdings were in the form of large ranchos. In 1839, Salvio Pacheco received a grant for approximately 9,000 acres that included the present-day city of Livermore (Wood 1883:459). Grant Line Road roughly follows the original rancho's southern boundary.

### **American Period**

The Mexican War of 1847 brought California into the United States under the Treaty of Guadalupe Hidalgo in 1848. That same year, the discovery of gold along the American River northeast of Sacramento escalated California's Central Valley population growth. In 1849, Thomas Goodale put up a blue denim tent along Grant Line Road near Midway Road, which served as a tavern and stagecoach stop for McLead's Stage line to Stockton (Wood 1883:462). About 4 years later, Simon Zimmerman purchased Goodale's tavern and changed the name to Mountain House (Thompson and West 1878:25). Roads to and from Mountain House proceeded north to Martinez and beyond and to

the south through the Altamont Pass into Livermore Valley. The original route of the transcontinental Lincoln Highway followed Grant Line Road out of Tracy to Altamont Pass. Alameda County was established in 1853 and was carved from parts of Santa Clara and Contra Costa Counties.

By 1856, Frank Haera moved to the area of Midway and built the Zinc House (Wood 1883:447). Other settlers also began moving to the Midway area. In 1869, Irish immigrant Michael Mulqueeny purchased land near Midway to begin a ranch. In 1853, Lieutenant R.S. Williamson of the Corps of Topographical Engineers surveyed a railroad route through the Livermore Valley and Altamont Pass. By 1869, the Western Pacific Railroad/Central Pacific Railroad/Transcontinental Railroad was constructed. An abandoned segment of this railroad grade is near the project area, adjacent to Midway Road.

## 3.5.2 Environmental Impacts

### Methods for Analysis

#### Records Search

On March 8, 2013, a literature and records search was conducted of the cultural resource site and project file collection at the Northwest Information Center (NWIC) of the California Historical Resources Information System, at the Sonoma State University, in Rohnert Park (NWIC file number 12-0957). As part of this record search, the California Points of Historical Interest, California State Historical Landmarks, the CRHR, the NRHR, California Inventory of Historic Resources, Caltrans Bridge Inventory, the Alameda County Register, and historic maps were reviewed. The search focused specifically on the project area and a 1-mile buffer around the project area.

The records search revealed a total of 20 previously recorded historic archaeological sites and four previously recorded isolates are located within 1 mile of the project area. One previously recorded site, the Vaca Dixon-Tesla 500 kV transmission line (P-01-010499), crosses the project area. Twenty historic period archaeological sites and structures (foundations, roads, transmission lines, refuse, and railroad) have been recorded within 1-mile of the project area.

#### Native American Consultation

The California Native American Heritage Commission (NAHC) was contacted by e-mail on February 28, 2013, to request a sacred lands file search and a list of Native American contacts with interest in the Sand Hill Wind Project. The NAHC responded on March 19, 2013, that no previously identified Native American resources are within the project area (Appendix G). A list of nine Native American contacts was also provided. On March 21, 2013, Tetra Tech provided each individual on this list a certified letter and e-mail containing information regarding the Initial Repower and Full Repower, a map of the project parcels, and a request for any comments and/or information regarding cultural resources in the project area. As of this publication, three replies were received requesting additional information regarding the project.

## Fieldwork

A pedestrian survey was conducted for the project area to determine the presence or absence of cultural resources. The direct Area of Potential Effect (APE) differs in size by project feature, as described below (archaeological survey areas included a buffer around the direct APE).

- 40 turbine locations (including assembly and crane pad, turbine base), approximately a total of 10 acres (0.25 acre area for each location): surveyed 0.25 acre at each location with a 50-foot buffer.
- 4 laydown areas at approximately 5 acres each: surveyed 5 acres at each location with a 50-foot buffer.
- Approximately 7.2 miles of access road upgrades and/or new roads (widened from 10 feet to 12 feet [up to 16 feet]): surveyed 100 feet width (50 feet on either side of centerline).
- 1.6 miles of underground collection system (16-foot width): surveyed 50-foot width (25 feet on either side of centerline).
- 16 transformers, 37 feet x 37 feet (1,369 square feet): surveyed each location with a 50-foot buffer.

A cultural resources survey was conducted on March 11, 12, and 13, 2013. A total of 118.8 acres were surveyed. The survey was conducted in transects spaced no greater than 7–10 meters apart, depending on terrain and ground surface visibility. In areas of poor ground surface visibility, the field crew stopped periodically along transects and cleared ground cover with a trowel. The field crew also inspected all rock outcrops, exposed ground surfaces (e.g., dirt roads, cleared pads around existing wind farm components), and animal burrow back dirt or mounds. The exposed areas were inspected for evidence of cultural activities, cultural materials, and changes in soil color and texture. When cultural resources were discovered, a temporary number was assigned to the resource, mapped using a Trimble Global Positioning System unit and recorded on appropriate DPR site records (Form 523). No artifacts were collected during the survey.

## Findings

The pedestrian survey identified two previously unidentified cultural resources—one historic road, and one historic transmission line. One previously recorded site, P-01-010499, which crosses the western edge of the survey area, was updated.

## Previously Recorded Cultural Resources

One previously recorded cultural resource crosses the project area and was updated during the current survey. P-01-010499 was originally recorded in 2002 and is described as the Vaca Dixon-Tesla 500 kV and Table Mountain-Tesla 500 kV Transmission Line segments. Construction of the transmission lines was the result of the Pacific Northwest-Southwest Intertie authorization in 1964 by the 88th Congress for the Northwest Power Transactions and Canadian Entitlements Power. The transmission lines were built in the late 1960s and described as “the most exciting transmission project of this century.” The two segments are connected to the Tesla Substation (just southwest of project area C-03). The Vaca Dixon-Tesla segment extends for 57 miles and the Table Mountain-Tesla Segments extend for 134 miles. Both segments contain self-supporting 106- to 116- foot-tall galvanized steel lattice towers with two-bundle 2300 MCM, AAC conductors. This resource remains unevaluated; however, the site form noted that it may be eligible for the CRHR and eligibility criteria would include advances in technology and materials (Reeve and Farrell 2002). The Initial Repower and Full Repower would not affect this resource.

### **Newly Recorded Cultural Resources**

Two newly discovered historic era sites were recorded during the pedestrian survey. These sites were assigned temporary field numbers SH-JF-01 and SH-JF-02. These resources are described below.

#### ***SH-JF-01: Historic Road***

SH-JF-01 is an unnamed dirt and graveled road segment that crosses the project area from the northwest to southeast. This road segment begins at Midway Road and terminates at the intersection of a northeast-southwest trending unnamed dirt road at Patterson Run Creek. Based on the review of historic maps, the Thompson and West map of Alameda County (1878) illustrates Midway Road as trending northwest to southwest along a low ridge top in Section 29. By 1905, the Midway Road alignment was rerouted along its present alignment between Section 30 and 29 of the United States Geological Survey (USGS) 7.5' Midway quadrangle. The 1953 map does not illustrate any change from the 1905 mapped road alignment. The road is within an existing wind farm and varies from a two-track dirt road to a graded gravel road. No artifacts were observed along the road, which is currently used as an access road for the wind farm and for ranching operations by the landowner.

Additional research and an evaluation for significance under CEQA was conducted for SH-JF-01 on October 24, 2013. Research included literature and historic map research at the California State Library and a field visit. The additional research indicated that SH-JF-01 is not the old Midway Road alignment and is likely an access road for local ranchers that does not appear on any historic maps. The resource has been recommended as not significant under CEQA criteria and therefore is not a historic resource. As a result, project plans to widen this road would not affect a historical resource as defined under CEQA.

#### ***SH-JF-02: Tracy-Tesla 230kV Transmission line***

SH-JF-02 is a segment of the PG&E Tracy-Tesla 230 kV transmission line. Based on the review of historic maps conducted for the Sand Hill Wind Project, the line was built between 1949 and 1953. The survey only recorded the portion of the line that runs through the project area. The overall power line begins at the Tesla Substation located at Patterson Road and North Midway Road in eastern Alameda County. The transmission line extends 6 miles north-northwest across agricultural lands to the Tracy Switchyard, located at the intersection of Mountain House Road and Kelso Road in Alameda County. The overhead high-voltage transmission line is strung between several galvanized steel-lattice towers, approximately 80 to 110 feet tall. The base of the towers extends outward and the footings are anchored to concrete pads. The towers have three arms on each side with insulators that support the lines. The Initial Repower does not include any plans to alter or remove any part of this resource. This resource would not be affected by the Initial Repower.

## **Determination of Significance**

Based on Appendix G of the State CEQA Guidelines, the Initial Repower and Full Repower would be considered to have a significant effect if they would result in any of the conditions listed below.

- 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 archaeological resource pursuant to Section 15064.5.
- Disturb any human remains, including those interred outside of formal cemeteries.

## Impacts and Mitigation Measures

### Initial Repower

This section describes impacts expected to occur with implementation of the Initial Repower, and provides mitigation measures, where applicable.

#### **Impact CUL-1: Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 (no impact)**

Although P-01-10499 and SH-JF-02 are within the project area, they would not be affected by the Initial Repower. SH-JF-01 was determined to be not significant under CEQA guidelines and therefore is not a historic resource. As a result, no historical resource would be affected by the Sand Hill Wind Project.

#### **Impact CUL-2: Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 (less than significant with mitigation)**

No archaeological resources were identified as a result of this study, but it is still possible that significant buried archaeological materials are present within the project area. Disturbance or destruction of these resources may result from ground-disturbing activities associated with construction of the Initial Repower. This impact would be significant; implementation of Mitigation Measure CUL-2 would reduce this impact to a less-than-significant level.

#### **Mitigation Measure CUL-2: Stop work in case of accidental discovery of buried archeological resources**

If buried cultural resources, such as chipped or ground stone, historic debris, building foundations, or human bone, are inadvertently discovered during ground disturbing activities, work will stop in that area and within 100 feet of the find until a qualified archaeologist can assess the significance of the find and, if avoidance is not possible, develop appropriate treatment measures such as recordation and excavation, in consultation with the County. If the find is Native American in origin, consultation with the NAHC and local Native American representatives will be initiated.

#### **Impact CUL-3: Disturb any human remains, including those interred outside of formal cemeteries (less than significant with mitigation)**

No known human remains are present within the project area. It is possible that buried human remains would not be located as a result of this study due to a lack of surficial evidence. However, it is possible that human remains, particularly those outside a designated cemetery, may be encountered during ground-disturbing activities associated with Initial Repower construction. This impact would be significant. Implementation of Mitigation Measure CUL-3 would reduce this impact to a less-than-significant level.

#### **Mitigation Measure CUL-3: Stop work in case of accidental discovery of buried human remains**

If human remains of Native American origin are discovered during project construction, it is necessary to comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the NAHC (PRC Section 5097). If any human remains are

discovered or recognized in any location other than a dedicated cemetery, there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

- the Alameda County coroner has been informed and has determined that no investigation of the cause of death is required; and
- if the remains are of Native American origin,
- the descendants of the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC 5097.98, or
- the NAHC was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being notified by the commission.

According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). Section 7050.5 requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the NAHC.

## Full Repower

According to results of the archaeological inventory, no areas of the project parcels appear to be more sensitive for cultural resources than others. Construction and decommissioning activities associated with repowering of the remaining 320–330 existing old technology wind turbines are expected to be the same as those for the Initial Repower, although, with 7.5 times the number of shrouded turbines as the Initial Repower, on a substantially larger scale. Refer to Sections 2.4.1 and 2.4.2 for a detailed description of construction and decommissioning activities.

### **Impact CUL-1[F]: Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 (no impact)**

Although P-01-10499 and SH-JF-02 are within the project area, they would not be affected by the Full Repower. SH-JF-01 was determined to be not significant under CEQA guidelines and therefore is not a historic resource. As a result, no mitigation is required.

### **Impact CUL-2[F]: Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 (less than significant with mitigation)**

No archaeological resources were identified as a result of this study, but it is still possible that significant buried archaeological materials are present within the project area. Disturbance or destruction of these resources may result from ground-disturbing activities associated with construction of the Full Repower. This impact would be less than significant with mitigation. Implementation of Mitigation Measure CUL-2 identified under the Initial Repower discussion would reduce this impact to a less-than-significant level.

**Mitigation Measure CUL-1: Stop work in case of accidental discovery of buried archeological resources**

Please refer to the discussion of Mitigation Measure CUL-2 under *Initial Repower*, Impact CUL-2.

**Impact CUL-3[F]: Disturb any human remains, including those interred outside of formal cemeteries (less than significant with mitigation)**

No known human remains are present within the project area. It is possible that buried human remains would not be located as a result of this study due to a lack of surficial evidence. However, it is possible that human remains, particularly those outside a designated cemetery, may be encountered during ground-disturbing activities associated with Full Repower construction. This impact would be less than significant with mitigation. Implementation of Mitigation Measure CUL-3 identified under the Initial Repower discussion would reduce this impact to a less-than-significant level.

**Mitigation Measure CUL-3: Stop work in case of accidental discovery of buried human remains**

Please refer to the discussion of Mitigation Measure CUL-3 under *Initial Repower*, Impact CUL-3.

### 3.5.3 References Cited

#### Printed References

Alameda County, *East County Area Plan*, 1994, as amended in 2000 and 2002.

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