3.5 Cultural Resources

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
5.	**CULTURAL RESOURCES—Would the project:**				
a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☒	☐
b)	Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d)	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

3.5.1 Environmental Setting

The following discussions of prehistory, ethnography, and historic setting are summarized from the Paleontological and Cultural Resource Surveys completed by Applied Earthworks in 2012 and 2013 (Applied Earthworks, 2012a, 2012b, and 2013). More detailed information regarding these topics can be found in those reports.

Prehistory

The Project area spans two geographic regions—the Sierra Nevada foothills and the Sacramento Valley. These regions have typically been treated separately by archaeologists and historians studying California; however, they are inextricably linked within the Project alignment, with no clear point of demarcation. This section discusses studies conducted in both regions to provide a better understanding of the history of human occupation in the Project area.

The earliest human presence in the Project area may have been sporadic use by Paleo-Indians (circa 12,000–9000 B.C.). Paleo-Indians were generally mobile or semimobile hunter-gatherers who are identified in the archaeological record primarily by their distinctive fluted projectile points. Their presence in the Project area is extrapolated from a handful of discoveries in the San Joaquin Valley, mostly in lakeside contexts, one possibly fluted point found near Thomas Creek in the Sacramento Valley, and a few in the Sierra Nevada foothills. A set of flaked stone tools found east of Stockton, known as the Farmington Complex, was found in gravels associated with the Modesto Formation, suggesting a possible late-Pleistocene or early-Holocene age (circa 10,000–5000 B.C.). However, the exact age and nature of these tools has been a matter of debate since they were first reported.

Numerous isolated fluted points also have been discovered in western Nevada, and sites in the Lahontan Basin east of Lake Tahoe have produced remains of extinct megafauna associated with early artifact types. Substantial Paleo-Indian deposits have not been found. Discoveries of isolated fluted points near Ebbetts Pass, the Skyrocket Site, and other high Sierran locations support the concept that Paleo-Indian hunters visited the upper slopes of the Sierra Nevada

periodically and might have settled at favored locations in the lower foothills during the late Pleistocene or early Holocene.

Evidence also is scarce that humans occupied the Project area immediately after the Paleo-Indian period. Much of the valley floor is covered in alluvium, effectively burying late-Pleistocene and early-Holocene surfaces, and consequently, archaeological sites. Artifacts dating to circa 7500 B.C. along the Stanislaus River watershed suggest that hunter-gatherers during the Lower Archaic (circa 9000–5550 B.C.) used a more diverse resource base than the more mobile Paleo-Indians, which tied their seasonal movements more closely to local conditions.

By contrast, Middle Archaic (circa 5550–550 B.C.) occupation of the foothills is well represented in the archaeological literature. The number of sites identified from this period indicates a broad-based hunting and gathering economy. Limited but widespread evidence exists of ceremonial/ religious or social/prestige items in the form of ground stone ornaments and an increasingly large dependence on local plant foods. By the latter half of the Middle Archaic, the mortar and pestle were routinely used, indicating an intensification of acorn consumption, although the milling slick and portable milling stone remained important tools for processing seeds well into the historic era. The Middle Archaic is represented by moderately sized to large settlements dating to 3000 B.C. at the mid to upper elevations.

The onset of the Upper Archaic (circa 550 B.C.–A.D. 1100) appears to correspond to shifting environmental conditions, including a cooler, wetter, and somewhat more stable climate. A proliferation in local cultural traditions is reflected in different artifact variations and tool kits increasingly well adapted to local environmental niches. Villages began to appear in the Sacramento-San Joaquin Delta (Delta) on large mounds, and residents of these villages likely visited the foothills seasonally. Despite the increasing local specialization, long-distance trade for obsidian and other non-local resources appears to have been vital to Upper Archaic economies.

After A.D. 500, the settlement pattern shifts, favoring smaller, short-term residential sites, indicating a more mobile population specializing in the pursuit of a smaller range of resources. A return to local longer term occupation and resource diversification occurred during the Emergent Period (circa A.D. 1000 to present). The replacement of the atlatl with the bow occurred circa A.D. 600–800, likely resulting in changes in hunting behaviors and probably affecting the social organization surrounding resource procurement. Burial patterns, along with the presence of new types of beads and other ornaments, indicate increasing social complexity and emerging social inequality. Intensive use of the mortar and pestle was prevalent throughout the Central Valley by 1000 years ago, although their dominance may have begun earlier in some locations in the foothills and Sacramento Valley. The increased use of these tools likely represents a shift in resource procurement to a greater focus on acorns.

The timing of the emergence of ethnohistorically known cultural lineages is uncertain. Moratto (1984) argues that sites associated with the Martis Complex (a material culture identified by artifact types dating to circa 2000 B.C.–A.D. 500, including the latter part of the Middle Archaic) are linked to the ancestral Maidu. Moratto thus suggests that the ancestors of the ethnographic Nisenan were present in the Project vicinity by this point in time. Linguistic evidence suggests

that the ancestors of the Plains Miwok inhabited the Delta region, and likely other parts of the Sacramento Valley, since at least the Middle Horizon (circa 1500 B.C.–A.D. 500), whereas Miwok cultures did not occupy the Sierra Nevada until after A.D. 500 (Levy 1978). It is reasonable to assume that Miwok peoples were present near the Project area prior to A.D. 500, although the archaeological evidence for this is difficult to assess.

Ethnographic Period

According to most sources, the Project area lies in southern Nisenan territory; however, some question exists about the actual location of the territorial boundary between the Nisenan and their southern neighbor, the Miwok. Kroeber ([1925] 1976) placed the northern boundary of Miwok territory at the Cosumnes River, although he noted uncertainty about the precise boundaries of Nisenan territory. Wilson and Towne (1978) suggested that the boundary between Nisenan and Miwok territory lay somewhere between the Cosumnes and American rivers. Likewise, Levy (1978) placed the northern frontier of Miwok territory north of the Cosumnes River.

California's Native Americans never saw themselves as members of larger "cultural groups," as described by anthropologists. Instead, they saw themselves as members of specific villages, perhaps related to others by marriage or kinship ties, but viewing the village as the primary identifier of their origins. While traditional anthropological literature portrayed Native peoples as having a static culture, today it is better understood that many variations of culture and ideology existed within and between villages. While these "static" descriptions of separations between native cultures of California make it an easier task for ethnographers to describe past behaviors, this masks Native adaptability and self-identity. It also masks past mobility, and the affiliation and affinity that many groups can have with a particular area or region.

Nisenan

The Nisenan, also referred to as the Southern Maidu, are the southernmost branch of the Maidu-Konkow ethnolinguistic group (a subgroup of the Californian Penutian linguistic family). They occupied the Yuba, Bear, American, and lower Feather River drainages (Kroeber [1925] 1976; Moratto 1984). At the time of contact, Nisenan territory covered large portions of El Dorado, Sacramento, Amador, Placer, and Nevada counties. Kroeber ([1925] 1976) recognized three Nisenan dialects: two northern dialects (Northern Hill Nisenan and Valley Nisenan) and one southern (Southern Hill Nisenan). It is the Southern Hill Nisenan who likely occupied the Project vicinity.

The Nisenan were year-round hunter-gatherers with access to varied biotic zones distributed across the western slope of the Sierra Nevada. Hunting was done communally, by conducting drives and burning, with the best marksman doing the killing. The Nisenan used many tools, including stone knives, arrow and spear points, scrapers, pestles, and mortars. Weirs, nets, harpoons, traps, and gorgehooks were used to fish from tule balsas and log canoes. Baskets woven from willow and redbud were used for storage, cooking, and processing (Kroeber [1925] 1976; Wilson and Towne 1978). Raw material used to manufacture most tools and ornaments was obtained locally. A network of trails running north and south along the west face of the Sierra Nevada and along the crest of the range allowed the Nisenan to access non-local goods to supplement local resources.

Like most Native Californians, the Nisenan were organized into autonomous groups ranging in size from bands of 15–25 people to tribelets of 500 people (Wilson and Towne 1978). These autonomous groups were separated from each other by a combination of geographic boundaries and linguistic differences (Wilson and Towne 1978). Some fishing holes or territories for deer drives were used by certain family groups; however, individual hunters crossed family and political boundaries with impunity (Kroeber [1925] 1976; Wilson and Towne 1978). Although villages appeared to be central to the community's organization, main villages were occupied only for short periods of time during the year. Family groups commonly lived in seasonal camps away from the main villages during gathering seasons. Other site types include quarries, ceremonial grounds, trading sites, fishing stations, cemeteries, river crossings, and battlegrounds (Wilson and Towne 1978).

Miwok

The Miwok, another division of the Californian Penutian linguistic family, occupied the area south and east of the Nisenan. The Miwok generally have been divided into the Lake Miwok, Coast Miwok, and the Eastern Miwok (or Interior Miwok, after Kroeber [1925] 1976) based on cultural and linguistic differences (Levy 1978). The Eastern Miwok occupied the lower watersheds of the Mokelumne and Cosumnes rivers, the Sacramento River drainage, and portions of the eastern Delta as far west as Rio Vista. Ethnographically, the Plains Miwok, a subgroup of the Eastern Miwok, occupied the vicinity of the Project area (Levy 1978).

Like most Native Californian groups, the Miwok were organized primarily at the level of the tribelet (Levy 1978). Each tribelet was essentially a small independent nation made up of a number of villages and smaller seasonal camps and task areas. The villages, in turn, were based on and inhabited by members of local lineages, with leadership roles delegated to defined officers who held specific powers and responsibilities (Levy 1978).

The formality of Miwok political life may be represented through the presence of communal and special-purpose structures within villages (Kroeber [1925] 1976; Levy 1978). Although several such villages (including *Lopotsimne, Amuchamne*, and *Shalachmushumne*) are known to have been present along the Cosumnes River south of the Project area, none are thought to be within or near the Project area (Levy 1978). Kroeber ([1925] 1976) notes that much of the ethnohistoric data indicates that the Miwok did not form a strong sense of "nationalistic" identity within or between tribelets.

With the exception of tobacco and dogs, the Eastern Miwok lacked cultivated plants and domesticated animals; they were reliant on hunting and gathering. Evidence exists that groups occupying one ecological zone (the valley floor, the foothills, or the mountains) would travel to other ecological zones, including those in the territory of other groups, to gather plant resources or hunt game (Levy 1978). This implies some degree of social/political articulation between the different Eastern Miwok groups, similar to trade and territory sharing noted among tribes in other parts of California.

Historic Period

Prior to 1848 and the discovery of gold in California, the Sierra Nevada remained largely unpopulated and unexplored by European Americans. The Spanish missions, the first established in 1769, were established along the coast. Spanish incursions into California's interior were limited to the pursuit of runaway Mission Indians and the search for future mission sites. Among the few Europeans to travel to the Project vicinity before the 1830s were the Hudson's Bay Company trappers, who began trapping beaver in the local rivers during the 1820s.

After Mexico gained independence from Spain, California became more valuable as a region of economic value rather than a religious colony. The Mexican government began granting land to ranchers, and in 1839 it granted the region's first large landholdings to John Marsh near Mount Diablo and to John Sutter at the confluence of the American and Sacramento rivers. With Marsh's and Sutter's settlements available as bases, American explorers and traders began to explore the Sierra Nevada. Among these early explorers were Lieutenant Charles Wilkes, the Stevens-Townsend Party, and Charles Fremont. James Marshall's discovery of gold in January 1848 at Sutter's Mill triggered the California Gold Rush. Initially, placer gold could be extracted by individual miners or small groups using simple hand techniques. Within a few short years, the easily mined placer deposits had been depleted and more complex, mechanized methods, such as hydraulic mining, came into use.

Although the Project vicinity lies on the periphery of the Mother Lode, where the Gold Rush was felt most intensively, the outlying areas also experienced the effects of the estimated 90,000 individuals who had made their way to the California gold fields by the end of 1849. The drainages flowing into the Sacramento River from the northern Sierra Nevada attracted hundreds of gold seekers. The presence of two historical mining districts (the Mormon Hill and American River placer mining districts) in the Project area attests to the wide-reaching influence of the Gold Rush. Many of the miners who failed to locate productive claims entered into the developing agriculture, ranching, and logging industries. Agriculture, ranching, and dairy farming had become predominant industries in the Project vicinity by the 1860s. Ranchers maintained large herds of cattle and sheep, and seasonally moved their livestock between the valley floor and the mountains. Severe drought during the 1860s led to the establishment of the first water districts and the development of irrigated agriculture, which permitted the introduction of new crops. The railroad soon facilitated the expansion of agriculture by increasing access to markets at greater distances.

The Pacific Railway Act of 1862 authorized subsidies and land grants to the Union Pacific and Central Pacific railroads with the intention that these two companies would build a railroad stretching from Omaha, Nebraska, to Oakland, California. Ground broke on the railroad in 1863 and by 1869 the Transcontinental Railroad linked California to the east. This created new markets for California's agricultural and ranching products and opened the doors for an influx of new immigrants into California from the Midwest and the East Coast.

Simultaneous with the expansion of the railroads, California's surface road system continued to develop. Beginning as wagon, pack, and foot trails during the 1840s and 1850s (which themselves often were derived from Native American trails), the State of California began to grant "exclusive use" permits to road companies for the construction of toll roads. These roads often were

maintained as toll roads for a set amount of time, as expressed on their permit, after which they became non-toll public roads. The Mormon Hill Road, a segment of site CA-ELD-721H that lies within the Project area, is an example of a historical toll road. This system of toll roads continued through the late 19th century, with some roads being taken over or administered by the state.

In 1896, the California Bureau of Highways recommended constructing a state highway system that would connect Sacramento to all of California's county seats. With bonds passed in 1910, the construction of the state highway system began. U.S. Highway 50, which intersects much of the Project area, was constructed following the routes of older toll roads. The segment through Sacramento and El Dorado counties was completed by 1919, although several changes to the highway's alignment occurred over the next 80 years.

The first half of the 20th century was a time of general expansion throughout California, including the Project area. Immigrants from other parts of the U.S., as well as from overseas, caused populations to swell, and California's urban centers grew at a rapid pace. However, California's economy remained largely agrarian; farming and ranching remained dominant industries. California's population surged again after World War II. The growth of the aerospace industry, later giving way to the growth of the technology industry, resulted in a greater need for skilled and educated workers, particularly in manufacturing plants. The Cold War–era growth of the defense industry in California resulted in the inception of towns and cities near California's numerous military bases. Near the Project area, this general growth spurred expansion in the government and private institutions of Sacramento, resulting in a larger urban population and expansion outward into previously rural environments.

Methodology and Known Resources

Several record searches were conducted for the Project between February 2010 and May 2013. Archival review completed at the North Central Information Center (NCIC) of the California Historic Resources Information System indicated that 140 previous cultural resource investigations have been completed within a 0.5-mile radius of the Project alignment, 60 of which have been completed within the Project alignment. These studies resulted in the identification of 30 previously recorded cultural resources within the Project alignment. The majority of the known cultural resources are historic-era sites and features related to ranching and mining; other site types present include prehistoric sites (e.g., bedrock milling stations, flake scatters), and isolates. Two historic districts intersect the Project alignment: the Mormon Hill Historic District (P-09-001670) and the American River Placer Mining District (P-34-000335). Both districts have been evaluated and have been recommended as eligible for listing in the National Register of Historic Places (NRHP). One cultural resource within the Project alignment (P-09-000673/P-09-005368) is listed as a contributing element to the Mormon Hill Historic District's eligibility. One resource (P-34-001769) is listed as a contributing element to the American River Placer Mining District's eligibility, although this resource has since been destroyed by a housing development and no longer exists along the Project alignment.

North Coast Resource Management requested a search of the Native American Heritage Commission's (NAHC) Sacred Lands File database on March 20, 2009. Results of the database search did not indicate the presence of any known sacred Native American sites in the immediate

Project area. In March and September 2009, the individuals and organizations affiliated with the area as identified by the NAHC were contact via letter to solicit their comments and concerns regarding the Project. In 2011, PG&E requested an updated contact list from the NAHC and in February 2012 sent out letters to the individuals and tribes identified. On April 12, 2012, facsimiles or emails were sent to contacts that had not yet responded. To date, PG&E has received responses from three of the 14 individuals contacted: 2012 and 2013 responses from the Shingle Springs Band of Miwok Indians, and a letter from the United Auburn Indian Community of the Auburn Rancheria. None of these responses identified areas of concern for cultural resources. No additional responses have been received.

Applied Earthworks archaeologists conducted intensive pedestrian surveys of the transmission lines and access road corridors (i.e., the survey area for this analysis of cultural resources) in May and July of 2012, and May 2013. The survey covered a 300-foot-wide corridor centered on the Missouri Flat Nos. 1 and 2 and Gold Hill No. 1 power lines; a 100-foot-wide corridor centered on proposed new access roads, as well as existing access roads planned for improvement; a 50-footwide corridor centered on proposed access roads that are well maintained or paved and will not require improvement; and a 150-foot-wide area around all identified Project elements (e.g., pull and tensioning sites, lay-down areas, extra work spaces, etc.) that lie outside the 300-foot-wide power line survey corridor. Ground visibility in the survey area ranged from less than 5 percent in areas covered with dense manzanita, tall grass, or pasture to 25 percent or more in areas of shorter grass. During the pedestrian survey, Applied EarthWorks identified 29 cultural resources within the survey area, in addition to the two historic districts (Mormon Hill Historic District [P-09-001670] and American River Placer Mining District [P-34-000335]). Of the 29 cultural resources identified, 16 were identified previously and 13 were newly identified. These 29 cultural resources include 25 historic-era sites, three pre-historic sites, and one site containing both pre-historic and historic-era features. Of these resources, the two historic districts and one archaeological resource (P-09-00673/P-09-005368) have been determined eligible for listing in the NRHP and California Register of Historical Resources (CRHR) with concurrence by the State Historic Preservation Officer (SHPO). Another resource (CA-ELD-721H, Durock Road Segment) has been determined ineligible for listing in the NRHP/CRHR with concurrence by the SHPO. The remaining 27 resources have not been evaluated for listing in the NRHP or CRHR. Twenty-five of these resources are assumed to be eligible for listing. The other two are recommended ineligible—one resource is an isolate and by definition is not eligible for listing in the NRHP or CRHR, and on closer inspection, the other resource was determined non-cultural and not eligible for listing in the NRHP or CRHR. The Missouri Flat-Gold Hill Line, Gold Hill No. 1 Line, and associated infrastructure (e.g., towers, poles, and substations) are less than 50 years old and therefore do not meet the minimum age threshold to be considered cultural resources.

To determine whether fossil localities have been discovered previously within the Project alignment or a particular rock unit, a museum records search was conducted at the University of California's Museum of Paleontology (UCMP). The museum records search was supplemented by a review of the UCMP's online database, which contains paleontological records for El Dorado and Sacramento counties. Because of the limited paleontologically sensitive geologic units in the Project alignment, a paleontology field survey was not conducted. Based on the results of museum collections data and available literature on the geology and paleontology of the Project area, only one geologic unit

known to underlie the Project alignment is determined to be of high paleontological sensitivity and therefore has the potential to contain unique paleontological resources. This unit, Quaternary alluvium of Holocene and Pleistocene age, is mapped in a very small (0.29-acre) area just west of Empire Ranch Road and the El Dorado-Sacramento County boundary.

3.5.2 Regulatory Setting

Federal

A portion of the Project alignment crosses land administered by the U.S. Bureau of Land Management (BLM). The Project would not require federal funding but would require a special use permit from BLM to conduct Project-related activities within the Pine Hill Preserve. Although special use permits may trigger the need for compliance with the National Environmental Policy Act of 1969 (NEPA), BLM has determined that the Project is exempt from NEPA because PG&E is conducting construction activities on an existing power line within an existing easement for the Missouri Flat-Gold Hill Line within the Pine Hill Preserve, providing PG&E with prior and existing rights to complete the Project. Cultural resources on public lands administered by BLM are managed to comply with other federal laws and regulations, including:

- **Section 106 of the National Historic Preservation Act (16 USC 470),** which addresses potential impacts to historic properties (resources that are eligible for listing on the National Register of Historic Places [NRHP]) through consultation with affected Tribes;
- **Archaeological Resource Protection Act (ARPA) (16 USC 470aa-mm),** which regulates the excavation of archaeological sites on federal and Indian lands in the United States, and the removal and disposition of archaeological resources;
- **Native American Graves Protection and Repatriation Act (NAGPRA) (25 USC 3001-3013)**, which requires federal agencies to consult with the appropriate Native American Tribes before the intentional excavation of human remains and funerary objects on federal and tribal lands (The act requires development of a Plan of Action); and
- **Paleontological Resource Preservation Act (123 Stat. 1172; 16 U.S.C. 470aaa)**, which establishes requirements to manage and protect paleontological resources on federal lands.

State

California Environmental Quality Act and California Register of Historical Resources

Under Section 21083.2 of CEQA, an important archaeological or historical resource is an object, artifact, structure, or site that is listed on, or eligible for listing on, the California Register of Historical Resources (CRHR). Eligible resources are those that can be clearly shown to meet any of the following criteria:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage
- Is associated with the lives of persons important in our past

- 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 value

- Has yielded, or may be likely to yield, information important in prehistory or history

Automatic listings include properties that are listed on the NRHP. In addition, Points of Historical Interest nominated from January 1998 onward are to be jointly listed as Points of Historical Interest and in the CRHR.

Resources listed in a local historic register or deemed significant in a historical resources survey, as provided under California Public Resources Code Section 5024.1(g), are presumed to be historically or culturally significant unless the preponderance of evidence demonstrates that they are not. A resource that is not listed on or determined to be ineligible for listing on the CRHR, not included in a local register of historical resources, or not deemed significant in a historical resources survey may nonetheless be historically significant as determined by the lead agency (Pub. Res. Code §§ 21084.1, 21098.1).

California Health and Safety Code and Public Resources Code

Broad provisions for the protection of Native American cultural resources are contained in the California Health and Safety Code, Division 7, Part 2, Chapter 5 (§§8010 through 8030). Several provisions of the Public Resources Code also govern archaeological finds of human remains and associated objects. Procedures are detailed under Public Resources Code Sections 5097.98 through 5097.996 for actions to be taken whenever Native American remains are discovered. Furthermore, Section 7050.5 of the California Health and Safety Code states that any person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor, except as provided in Public Resources Code Section 5097.99. Any person removing human remains without authority of the law or written permission of the person or persons having the right to control the remains under Public Resources Code Section 7100 has committed a public offense that is punishable by imprisonment.

Public Resources Code Chapter 1.7 (§§5097 through 5097.7), entitled Archaeological, Paleontological, and Historical Sites, defines any unauthorized disturbance or removal of a fossil site or remains on public land as a misdemeanor and specifies that state agencies may undertake surveys, excavations, or other operations as necessary on state lands to preserve or record paleontological resources (Pub. Res. Code §5097.5).

Local

The Project is not subject to local discretionary land-use regulations because the CPUC has exclusive jurisdiction over the siting, design, and construction of the project. However, consistent with its obligations under CPUC GO 131-D and as described in the Land Use and Planning section, *Section 3.10.2, Regulatory Setting*, PG&E has consulted with El Dorado and Sacramento counties and with the City of Folsom regarding land use matters.

El Dorado County

Neither El Dorado County's guidelines for cultural resource studies (El Dorado County, 1999) nor the El Dorado County General Plan (El Dorado County 2004) contain any specific policies that pertain to the designation of local historical resources. The County's objectives toward the preservation of cultural and paleontological resources are outlined in Policies 7.5.1.1 through 7.5.1.6 of the El Dorado County General Plan's Conservation and Open Space Element.

City of Folsom

The City of Folsom maintains a local cultural resources inventory to encourage public recognition and protection of resources of architectural, historical, archaeological, and cultural significance. None of the cultural resources listed in the City of Folsom Cultural Resources Inventory are located within the Project alignment.

3.5.3 Applicant Proposed Measures

APMs provided in this section include existing regulations and/or requirements or standard practices that would further minimize, avoid, or reduce potential less-than-significant impacts on cultural and paleontological resources.

APM CUL-1: Develop and Implement Worker Environmental Awareness Program Prior to Construction

PG&E will design and implement a worker environmental awareness program that will be provided to all project personnel involved in earth-moving activities. No construction worker will be involved in field operations without having participated in the worker environmental awareness program.

The worker environmental awareness program will include a kick-off tailgate session to present site avoidance requirements and procedures to be followed if unanticipated cultural or paleontological resources are discovered during project implementation, and a discussion of actions that could be taken against persons violating historic preservation laws and PG&E policies. Key project workers involved with ground-disturbing activities will receive a pamphlet listing how to identify a cultural resource or fossil and what to do if an unanticipated discovery is made during construction. The worker environmental awareness training may be conducted in concert with other environmental or safety awareness and education training programs for the project, and may be recorded for use in subsequent training sessions.

APM CUL-2: Manage Unanticipated Cultural Resources Discoveries Properly

In the unlikely event that previously unidentified cultural resources are uncovered during project implementation, all work within 100 feet of the discovery will be halted and redirected to another location. The find will be secured, and a CPUC-approved, qualified cultural resources specialist/archaeologist will be contacted immediately. The specialist will inspect the discovery and determine whether further investigation is required. If the discovery can be avoided and no further impacts will occur, the resource shall be documented on California State Department of Parks and Recreation cultural resource record forms and no further effort shall be required.

If additional disturbance to the resource cannot be avoided, a CPUC-approved, qualified cultural resources specialist/archaeologist will evaluate the resource's significance and CRHR eligibility and determine whether it is (1) eligible for the CRHR (and thus a historical resource for purposes of CEQA); or (2) a unique archaeological resource as defined by CEQA. If the resource is determined to be neither a unique archaeological nor an historical resource, work may commence in the area. If the resource meets the criteria for either an historical or unique archaeological resource, or both, work shall remain halted, and the cultural resources specialist/archaeologist shall consult with CPUC staff regarding methods to ensure that no substantial adverse change would occur to the significance of the resource pursuant to CEQA Guidelines Section 15064.5(b). Preservation in place, i.e. avoidance, is the preferred method of mitigation for impacts to cultural resources. Other methods to be considered shall include evaluation, collection, recordation, and analysis of any significant cultural materials in accordance with a Cultural Resources Management Plan prepared by the CPUC approved qualified cultural resource specialist/archaeologist. The methods and results of evaluation or data recovery work at an archaeological find will be documented in a professional-level technical report to be filed with the NCIC.

If previously unidentified cultural resources are uncovered during project implementation on BLM land, procedures will be similar to those described above. If additional disturbance to a cultural resource cannot be avoided, PG&E will evaluate the significance and NRHP eligibility per Section 106 of the NHPA in consultation with BLM. Any cultural resource or paleontological work conducted on BLM lands will be conducted under a valid cultural resource and paleontological use permit issued by the BLM California State Office, and may require a fieldwork authorization by the local field office. Cultural materials and paleontological resources collected under a BLM-use permit will be curated in an accredited museum repository.

APM CUL-3: Follow Statutory Requirements for Treatment of Human Remains

In the unlikely event that human remains or suspected human remains are uncovered during pre-construction testing or during construction, all work within 100 feet of the discovery will be halted and redirected to another location. The find will be secured, and a CPUC-approved, qualified cultural resources specialist will be contacted immediately to inspect the find and determine whether the remains are human. If the remains are not human, the cultural resources specialist will determine whether the find is an archaeological deposit and whether APM CUL-2 applies. If the remains are human, the cultural resources specialist will immediately implement the provisions in PRC Sections 5097.9 through 5097.996, beginning with the immediate notification to the affected county coroner. The coroner has 2 working days to examine human remains after being notified. If the coroner determines that the remains are Native American, California Health and Safety Code 7050.5 and PRC Section 5097.98 require that the cultural resources specialist contact the NAHC within 24 hours. The NAHC, as required by PRC Section 5097.98, determines and notifies the Most Likely Descendant.

If potential human remains are discovered during any project activity on lands administered by BLM, the procedures identified in NAGPRA will be closely adhered to and the following steps will be taken:

1. All activities that may further disturb the potential human remains will cease immediately in the vicinity of the discovery.

2. PG&E will take appropriate steps to secure and protect human remains and any funerary objects from further disturbance.

3. PG&E's cultural resources specialist will notify BLM's archaeologist by telephone within 24 hours of discovery, followed within 3 days by written confirmation. Human remains or associated funerary objects will not be excavated or otherwise removed unless a permit is issued under ARPA and after consultation between the appropriate Native American representative(s), BLM, and PG&E.

4. The activity that resulted in the inadvertent discovery will not resume until clearance is provided by BLM.

APM CUL-4: Flag and Avoid Cultural Resources

The boundaries of all known cultural resources that lie within 100 feet of a designated work area will be marked with flagging tape, safety fencing, and/or a sign designating it as an "environmentally sensitive area" to ensure that PG&E construction crews and heavy equipment will not intrude on these resources during construction. For those eligible or potentially eligible sites that contain an existing access road within their site boundary, the road will be used as-is (i.e., no grading, widening, or other substantial improvements), and signs or safety fencing will be established on either side of the road within the site's boundary to avoid impacts caused by construction vehicles. If it is infeasible or impractical to use an access road as-is, and grading, widening or other substantial improvement is necessary, PG&E will implement mitigation or treatment measures specific to the resource potentially affected by the work. Examples of such measures would include preservation in place, and evaluation, collection, recordation, and analysis of any significant cultural materials.

APM CUL-5: Avoid Paleontologically Sensitive Locations

No direct impacts on fossil-bearing deposits (ground disturbance) will occur within the approximately 0.29-acre project area containing Quaternary alluvium just west of Empire Ranch Road and the El Dorado-Sacramento County boundary. Should project development result in the disturbance of this geologic unit at a depth of 10 feet or greater, a qualified paleontologist will be retained as needed to ensure that impacts on any potential paleontological resources are avoided.

If fossil remains are uncovered during project implementation, all work within 50 feet of the discovery will be halted and the construction crew immediately will notify PG&E. A paleontologist will be retained by PG&E and approved by the CPUC to evaluate the resource. If the discovery can be avoided and no further impacts will occur, no further effort shall be required. If the resource cannot be avoided and may be subject to further impact, the CPUC-approved paleontologist shall evaluate the resource and determine whether it is "unique" under CEQA, Appendix G, part V. If the resource is determined to not be unique, work may commence in the area. If the resource is determined to be a unique paleontological resource, work shall remain halted, and the paleontologist shall consult with CPUC staff regarding methods to ensure that no substantial adverse change would occur to the significance of the resource pursuant to CEQA. Preservation in place, i.e. avoidance, is the preferred method of mitigation for impacts to paleontological resources. Other methods include ensuring that the fossils are recovered, prepared, identified, catalogued, and analyzed according to current professional standards under the direction of a qualified paleontologist. All recovered fossils shall be curated at an accredited and permanent scientific institution according to Society of Vertebrate Paleontology standard guidelines (SVP [2010]) standards; typically the Natural History

Museum of Los Angeles County and UC Berkeley accept paleontological collections at no cost to the donor. Work may commence upon completion of treatment, as approved by the CPUC. Components of the treatment plan related to "unique" fossil specimens that are encountered during construction may include a field survey, additional construction monitoring, specific sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings.

3.5.4 Environmental Impacts and Mitigation Measures

a) Whether the Project would cause a substantial adverse change in the significance of a historical resource as defined in §15064.5: *LESS THAN SIGNIFICANT*.

A significant impact would occur if the Project would cause a substantial adverse change to a historical resource, herein referring to historic-era architectural resources or the built environment, including buildings, structures, and objects. A substantial adverse change includes the physical demolition, destruction, relocation, or alteration of the resource.

Cultural resources surveys and records searches identified two historic districts and 29 other cultural resources along the Project alignment. Of these, the two districts and one archaeological site (P-09-000673/P-09-005368) have been determined to be eligible for listing in the NRHP/CRHR. Three other previously recorded sites are not eligible for listing in the NRHP/CRHR. These are an isolated concrete footing (AE-2328-14H), which is not eligible for listing in either register; a bedrock mortar feature (P-09-000010), which was determined to be non-cultural; and the Durock Road Segment of CA-ELD-721H, which was determined ineligible for listing in the NRHP/CRHR with concurrence by the SHPO. The unevaluated sites are assumed to be historical resources and would be treated accordingly for management purposes.

Implementation of APM CUL-4 would avoid the historical resources and unevaluated cultural resources within the Project alignment, as well as all potentially contributing sites or features associated with the Mormon Hill Historic District (P-09-001670) and American River Placer Mining District (P-34-000335). Therefore, no impacts on the NRHP/CRHR-eligible historical districts, historical resource P-09-000673/P-09-005368, or the known unevaluated cultural resources would occur. In the unlikely event that additional historical resources are discovered during construction activities, implementation of APMs CUL-1 through CUL-4 would reduce the potential damage or destruction to historical resources from the inadvertent discovery to undiscovered resources to a less-than-significant level because PG&E would conduct pre-construction worker awareness training, manage undiscovered resources, properly treat human remains if discovered, and establish work exclusion zones around unevaluated cultural resources if discovered. Therefore, impacts would be less than significant. No additional mitigation is required.

b) Whether the Project would cause a substantial adverse change in the significance of a unique archaeological resource pursuant to §15064.5: *LESS THAN SIGNIFICANT*.

A significant impact would occur if the Project would cause a substantial adverse change to a unique archaeological resource through physical demolition, destruction, relocation, or alteration of the resource.

Surface surveys and records searches identified two NRHP/CRHR historical districts, one historical resource (P-09-000673/P-09-005368), and 27 other cultural resources along the Project alignment that have not yet been formally evaluated for listing in the NRHP or CRHR. Of these 27 resources, two have been recommended not eligible for listing in the NRHP/CRHR (one is an isolate and the other has been determined to be non-cultural). The historical resource and all of the unevaluated sites, which are assumed to be historical resources for management purposes, would be avoided by Project construction. As described in APM CUL-4, the boundaries of these sites would be clearly marked where necessary using flagging, safety fencing, or signs specifying an "environmentally sensitive area" before construction to ensure that they are avoided. Implementation of APM CUL-4 would reduce potential impacts to a less-than-significant level.

Although much of the Project alignment has been previously affected by residential and light-industrial development, the potential for buried archaeological sites still exists. The presence of both Native American and historic-era cultural resources in the Project area indicates that the area has been used over the last several thousand years. Although all of the areas of construction and access roads have been subject to the archaeological survey, the potential remains for previously unidentified archaeological remains to be discovered below the visible ground surface. Project construction would create subsurface disturbances that could result in damage to or destruction of previously undiscovered subsurface cultural resource deposits. In the event that archaeological resources are discovered during construction, APM CUL-1 through APM CUL-4 would reduce potential impacts to a less-than-significant level. No additional mitigation measures are required to reduce impacts to archaeological resources because impacts would be less than significant.

c) Whether the Project would directly or indirectly destroy a unique paleontological resource or site or unique geologic feature: *LESS THAN SIGNIFICANT*.

Based on the results of museum collections data and available literature on the geology and paleontology of the Project area, only one geologic unit known to underlie the Project alignment has been determined to be of high paleontological sensitivity and therefore has the potential to contain unique paleontological resources. This unit, Quaternary alluvium of Holocene and Pleistocene age, is mapped in a very small (0.29-acre) area just west of Empire Ranch Road and the El Dorado-Sacramento County boundary. No earth-moving activities are planned within the area of the Quaternary alluvium; therefore, potential impacts on paleontological or unique geological features would be avoided. If unforeseen circumstances arise that would require disturbance of this geologic unit at this location at a depth of 10 feet or greater, the probability of an impact would be less than significant because of the very limited occurrence of this geological unit within the Project alignment. Implementation of APM CUL-1 and APM CUL-5 would further reduce potential less-than-significant impacts. No additional mitigation measures are required to reduce impacts to paleontological resources or unique geological features, and impacts would be less than significant.

d) Whether the Project would disturb any human remains, including those interred outside of formal cemeteries: *LESS THAN SIGNIFICANT*.

Based on the records search and contact with Native Americans, no human remains are known to exist within the Project area; however the possibility of discovering human remains during

ground-disturbing activity cannot entirely be discounted. In the unlikely event that human remains are uncovered during construction, PG&E would implement APM CUL-3, which would reduce potential impacts to a less-than-significant level. No additional mitigation is required for reducing impacts to human remains, and impacts would be less than significant.

References

Applied EarthWorks, Inc. 2012. *Paleontological Inventory for the Missouri Flat-Gold Hill 115 kV Reconductoring Project El Dorado and Sacramento Counties, California.* Prepared For Pacific Gas and Electric Company. September 2012.

Applied EarthWorks, Inc. 2013a. *Cultural Resources Survey for the Missouri Flat-Gold Hill 115 kV Reconductoring Project El Dorado and Sacramento Counties, California.* Prepared For Pacific Gas and Electric Company. January 2013.

Applied EarthWorks, Inc. 2013b. *Supplemental Cultural Resources Survey for the Missouri Flat-Gold Hill 115 kV Reconductoring Project El Dorado and Sacramento Counties, California.* Prepared For Pacific Gas and Electric Company. July 2013.

Kroeber, A. L. [1925] 1976. Handbook of the Indians of California. Reprint. New York: Dover Publications.

Levy, R. 1978. "Eastern Miwok." In California, ed. R. F. Heizer, 398–413. Handbook of North American Indians, Vol. 8, gen. ed. W. C. Sturtevant. Washington, DC: Smithsonian Institution.

Moratto, M. J. 1984. California Archaeology. Orlando, FL, and London: Academic Press.

Wilson, N. L., and A. H. Towne. 1978. "Nisenan." In California, ed. R. F. Heizer, 387–397. Handbook of North American Indians, Vol. 8, gen. ed. W. C. Sturtevant. Washington, DC: Smithsonian Institution.

This page intentionally left blank