# 5.5 Cultural Resources

This section describes the environmental and regulatory setting and discusses impacts associated with the construction and operation of Sanger Substation Expansion Project (proposed project) proposed by Pacific Gas and Electric (PG&E, or the applicant) with respect to cultural resources. These cultural resources may be described as historic resources, archaeological resources (which may be historic or prehistoric, and are a subset of historical resources), Tribal Cultural Resources (TCR), Native American resources, or paleontological resources, as defined below:

- **Historical Resources:** As defined by the California Environmental Quality Act (CEQA), historical resources are those that are listed on, or determined to be eligible for listing on, the California Register of Historical Resources (CRHR) or a local register, or are otherwise determined to be historical pursuant to CEQA or the CEQA Guidelines (Public Resources Code [PRC] section 21084.1 and California Code of Regulations, title 14, section 15064.5, respectively). A historical resource, for example, may be an object, building, structure, site, area, place, record, or manuscript that is historically significant or significant in terms of California's architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural records. Typically, historical resources are more than 50 years old.
- **Archaeological Resources:** Archaeological resources may be considered historical resources or, if not, they may be determined to be "unique" as defined by CEQA (PRC section 21083.2). Unique archaeological resources are artifacts, objects, or sites that can be demonstrated to: (1) contain information needed to answer important scientific research questions and for which it can be shown that there is a demonstrable public interest in that information; (2) have a special and particular quality such as being the oldest of their type or the best available example of their type; or (3) be directly associated with a scientifically recognized important prehistoric or historic event or person. Non-unique archaeological resources are not typically addressed in environmental impact reports.
- **Native American Resources:** Native American cultural resources may include historical or archaeological resources, rock art, or prominent topographical areas, features, habitats, plants, animals, or minerals that contemporary Native Americans value and consider important for the preservation of Native American traditions.
- **Tribal Cultural Resources:** A TCR is a site, feature, place, cultural landscape, sacred place, or object that is considered of cultural value to a California Native American Tribe and is on either the CRHR or a local historic register; eligible for the CRHR or a local historic register; or is determined by the lead agency, at its discretion and with support of substantial evidence, to be treated as a TCR.
- **Paleontological Resources:** For the purposes of this Initial Study/Mitigated Negative Declaration, paleontological resources refer to fossilized plant and animal remains of prehistoric species. They are valued for the information they yield about the history of the earth and its past ecological settings. Paleontological resources represent a limited, non-renewable, and impact-sensitive scientific and educational resource. Fossil remains such as bones, teeth, shells, and leaves are found in geologic deposits (rock formations). Paleontological resources, in general, include fossils as well as the collecting localities and the geologic formations that contain those fossils.

## 5.5.1 Environmental Setting

Information presented in this section was compiled from the Cultural Resources Studies for Sanger Substation Expansion Project, Fresno County, California (Morlet et al. 2012). PG&E's Proponent's Environmental Assessment and subsequent submittals for the proposed project (PG&E 2015), and Paleontological Inventory and Evaluation for the Sanger Substation Project, Fresno County, California (Clifford and DeBusk 2015). The California Public Utilities Commission's (CPUC's) qualified consultant reviewed these reports in preparing this analysis.

The tower at the Fence Meadow Repeater Station does not qualify as an historic resource because it was rebuilt within the past two years (USFS 2014). The installation of the two dishes would not result in any ground disturbing activities or have any impact on cultural resources (archaeological and historic), Native American resources, Tribal Cultural Resources, or paleontological resources. Therefore, the antenna system at the Fence Meadow Repeater Station is not discussed further in this section.

### Cultural Regional Setting

#### *Prehistory*

The prehistory of California's Central Valley spans the entire Holocene and possibly extends to the late Pleistocene times. Fluted Clovis-like projectile points have been found at several inland sites in Tulare Lake and elsewhere in the proposed project vicinity. These signs of early occupation may indicate relatively few small social groupings that utilized simple technology to acquire plants, shellfish, and some larger animals for subsistence. These sites are marked by the absence of ground stone. Very few sites have been identified; this could be due to the small population or to site destruction through erosion and other natural forces.

The prehistory of the San Joaquin Valley is generally divided into three periods. The first period is characterized by big game hunting and is dated from approximately 8,000 years before present (BP) to about 5,000 years BP. The second period is dated from approximately 5,000 BP to anno domini (AD) 1,200 and is characterized by a shift in subsistence strategy from hunting to the collection of plant resources. This shift in economic pursuits is evidenced in typical artifact assemblages from this period, including seed-grinding implements. The third period dates from approximately AD 1,200 to 1,700 and represents habitation of the area by Yokuts.

#### *Ethnography and Ethnohistory*

The proposed project area was inhabited by the Wet-chi-Kit Yokuts, an autonomous tribe within the broader Northern Valley Yokuts. Prior to the arrival of Euroamericans in the region, California was inhabited by groups of Native Americans speaking more than 100 different languages and occupying a variety of ecological settings.

#### *History*

The Spanish Period in California lasted from circa 1769 to 1821. A Spanish expedition occurred in the proposed project area in 1806. Missions dominated the social, political, and economic lives of both Spanish and Native Americans across much of California during the Spanish Period.

The Mexican Period in California lasted from 1821 to 1848 as an outgrowth of the Mexican Revolution and had political and social effects on the mission system. In 1833, the missions were secularized and their lands divided as ranchos in the form of land grants.

The American Period, which began in 1848 and is ongoing today, started at the end of the Mexican-American War with the signing of the Treaty of Guadalupe Hidalgo. The onset of this period, however, did not initiate a change in the economic condition of most Native American populations. The rancho system also generally remained intact until around 1862 to 1864, when a drought forced many landowners to sell off or subdivide their holdings.

The Gold Rush was the catalyst for major settlement and development of the region. As miners migrated south from the Columbia-Sonora goldfields, many settled on the valley floor. The population increased steadily as the Central Pacific Railroad established lines in the San Joaquin Valley in 1872. The City of Sanger was established in March 1888 following the filing of the town map with the Fresno County Recorder's Office.

## Cultural Resources Literature and Records Searches

On March 12, 2012, Southern San Joaquin Valley Information Center (SSJVIC) staff conducted a records search of the proposed project site and 0.5 miles around the site to determine whether prior surveys were conducted in the area and whether there are known cultural resources in the area. The following sources were examined:

- Known and recorded archaeological and historical site records;
- Inventory and excavation reports;
- Historic Property Data File (as of August 15, 2011);
- Properties listed or recommended eligible for the CRHR and National Register of Historic Places;
- California State Historical Landmarks;
- California Historical Resources Information System; and
- California Points of Historical Interest.

Historical information was gathered from the Map Room at California State University, Fresno Henry Madden Library and from the PG&E Records Center in Brisbane, California. Literature from Applied EarthWorks' library was also reviewed.

The records search conducted by the SSJVIC revealed that the proposed project area and area within 0.5 miles has not been previously surveyed and that there are no previously recorded cultural resources within the proposed project area or within 0.5 miles of the proposed project area. A 0.5-mile radius was used for the records search to retrieve information on resources that may be in project work areas as well as to understand the types of resources that may occur in the vicinity of the project area. Additional data sources revealed that a canal, three existing building complexes, and one nonextant[1] historical complex dating to the historic period lie within the vicinity of the proposed project area and are directly adjacent to the proposed areas of direct impact for the substation expansion. The canal is located directly outside of the northern boundary of the access road disturbance area and about 80 feet north of the substation expansion area. The existing building complexes (residences and associated structures and a market), are located on the northeast corner of East Jensen Avenue and South McCall Avenue, the southwest corner of East Jensen Avenue and South McCall Avenue, and the northeast corner of East Jensen Avenue and South Thompson Avenue. The nonextant historical complex (three cottages with detached garages)

[1] In this context, *nonextant* indicates that it is known that the complex existed from historical aerial imagery, but the complex visible in the aerial imagery no longer exists at the site.

overlaps with the western portion of the existing substation parcel, where some work on poles (topping and removal) would be done.

## Historical Assessment

An architectural historian conducted archival research to develop a historical context for a control building within the existing Sanger Substation, and the existing Sanger Substation as a whole. The original Sanger Substation was constructed in 1921 and consisted of a tank house, control building, cooling tower, shed, residential cottage, and detached garage. Between 1956 and 1968, components of the original Sanger Substation were replaced with components associated with the existing Sanger Substation, with the exception of the control building (1921 control building). The 1921 control building[2] and the existing Sanger Substation were formally recorded and recommended not eligible for the CRHR because neither meet any of the four criteria defined in section 5024.1 of PRC (Morlet et al. 2012):

- **Sanger Substation:** The Sanger Substation was found not to meet any of the CRHR criteria. Though it is associated with an important electrical system, the Sanger Substation was found not to make a significant contribution to broad patterns of California or local history. The substation also is not associated with important individuals. No evidence was found that the substation demonstrates any new or innovative engineering or technology. There are abundant archival records of the substation, and limited original equipment and infrastructure, meaning that there is no opportunity to obtain additional important information from the substation site.
- **Control Building (individually):** The control building on its own does not meet the criteria for significance related to association with important individuals or important historical events and trends. The control building does not have potential to yield important information given copious documentation of the building and its construction. The building does not have distinctive architecture or artistic value, given that the execution of the Italian Renaissance design is simplistic compared to other buildings in the same style.

## Cultural Field Surveys

A reconnaissance level pedestrian survey of proposed disturbance areas was conducted on March 30, April 2, and April 27, 2012, with a supplemental intensive survey occurring on June 28, 2012. No evidence has been found since the surveys in 2012 to indicate that site conditions have changed with regards to presence of archaeological or historic resources. The area surveyed encompassed 142.4 acres, which included the expanded substation site area, the area around the relocated power line alignments and tubular steel poles, existing power lines and pole removal locations, access road locations, and tensioning sites. The existing Sanger Substation site was not surveyed due to extensive ground surface modification. Archaeologists walked the survey area in parallel and meandering transects 10 to 15 meters apart. Where feasible, surveyors examined subsurface exposures for evidence of cultural material constituents.

Some isolated ceramic fragments and glass shards were found in the study area. These items were found near the southwestern corner of the existing Sanger Substation, close to the location of the nonextant historical complex. The items may be a potential surface indicator of the previous structures, due to their proximity to the complex location. However, the items could not be conclusively attributed to the time of the nonextant historical complex and, therefore, were not recorded as historical artifacts (Morlet et al. 2012).

The field survey also confirmed the locations of the historic period structures and canal discussed under the Cultural Resources Literature and Records Searches heading. No project-related activities would

[2] The control building was evaluated for CRHR eligibility as part of the existing Sanger Substation and as a standalone property.

impact any of these resources because they are outside of the proposed project area; therefore, they were not formally recorded and are not further discussed in this section.

### Buried Site Sensitivity Assessment

Applied Earthworks conducted a buried site sensitivity assessment that considered the potential for the presence of buried cultural deposits by taking into account the proposed project area and the underlying geomorphology and by reviewing available records search data from the SSJVIC. The proposed project area is underlain by soils from the Riverbank Formation, which is Middle Pleistocene in age. Alluvium from the Riverbank Formation is not associated with buried archaeological deposits. The proposed project area is not within the vicinity of any known ethnographic villages and is not located within 500 feet of a perennial freshwater source or any lithic material sources. The potential of encountering buried archaeological deposits within the proposed project area is low (PG&E 2015).

### Paleontological Resources Records Search and Survey

Information on paleontological resources was obtained from the University of California Museum of Paleontology during a records search conducted on June 3, 2012. An intensive pedestrian survey was conducted at the proposed Sanger Substation and expansion area and surrounding pole reconfiguration area on March 19, 2015.

The paleontological resources survey indicated that the Riverbank Formation deposits were obscured completely by alluvial soil development and agricultural activity and that average depth of soil development within this region/project vicinity is approximately 5 feet below ground surface. The Riverbank Formation, which underlies the proposed project area, has a high potential for intact paleontological resources 13 to 30 feet below the surface. This is corroborated by the results of a records search conducted for the proposed project, which indicated the presence of three paleontological resources identified outside of the current project area but that were within the Riverbank Formation (Clifford and DeBusk 2015).

### Native American Consultation

In November 2011 and September 2015, PG&E contacted the California Native American Heritage Commission (NAHC) to request a search for sacred lands and a list of Native American contacts for the proposed project area. Neither NAHC Sacred Lands File search indicated the presence of known Native American cultural resources in the proposed project area. PG&E sent emails on March 7, 2012, and letters on September 16, 2015, to contacts included on the November 2011 and September 2015 NAHC lists, respectively. These email messages and letters explained the location and provided a brief description of the proposed project, and asked if the Tribe or individual would like to share any information or concerns regarding sacred or other sites of cultural importance in the proposed project area. Additional follow-up calls and email messages were sent to contacts on November 4, 2015.

Table 5.5-1 summarizes the responses PG&E received to its consultation letters. Consultation documentation is provided in Appendix D.

Table 5.5-1 Summary of Native American Consultation

| Date of Response | Name | Tribe | Method of Response – Comment |
|---|---|---|---|
| April 12, 2012 | Lorrie Planas | Choinumni Tribe | Email – No issues or comments about the proposed project. |
| March 28, 2012 | Bob Pennell | Table Mountain Rancheria | Mail – Declined participation at the time, but expressed the desire to be contacted in the unlikely event that cultural resources are identified. |
| April 13, 2012 | Lalo Franco | Santa Rosa Rancheria Tachi Yokut Tribe | Email – No immediate concerns. Recommended that construction be monitored by an archaeologist and that all parties be made aware of the prescribed actions to be taken in the event of an unanticipated discovery of any cultural resources. |
| November 4, 2015 | Stan Alec | Kings River Choinumni Farm Tribe | Phone – No comments on the proposed project. |
| November 4, 2015 | Jerry Brown | Chowhilla Tribe of Yokuts | Phone – The proposed project is outside of his Tribe's territory. |
| November 4, 2015 | Ron Goode | North Fork Mono Tribe | Phone – No comments on the proposed project. |

### Tribal Cultural Resources Consultation

Formal consultation under Assembly Bill 52 (AB 52) was not undertaken for the proposed project as no California Native American Tribes requested consultation, as further described in Section 5.5.2, "Regulatory Setting."

## 5.5.2 Regulatory Setting

### Federal

No federal regulations related to cultural or paleontological resources are applicable to the proposed project because no federal lands, monies, or decisions are required for the proposed project.

### State

#### *California Register of Historical Resources*

The CRHR is an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historic resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change (PRC § 5024.1(a)). The criteria for eligibility for the CRHR are whether the resource:

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

It is possible, however, that resources are still eligible for listing on the CRHR even if they do not retain sufficient integrity to meet listing criteria. The statute deems that certain resources are automatically included in the CRHR, including California properties that were formally determined eligible or are listed in the National Register of Historic Places.

### *California Environmental Quality Act and Guidelines*

Section 21084.1 of the PRC establishes that a substantial adverse effect on an historical resource may have a significant effect on the environment. Under CEQA Guidelines section 15064.5, an historical resource includes: (1) a resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the CRHR; (2) a resource included in a local register of historical resources; and (3) any object, building, structure site, area, place, record, or manuscript which 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 by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of the whole record. An archaeological resource may be considered an historical resource. CEQA Guidelines section 15126.4(b) establishes mitigation guidelines for effects on historical resources and historical resources of an archaeological nature.

Archaeological resources may also be historical resources. Under CEQA Guidelines section 15064.5(c), if an archaeological resource does not meet the criteria for a historical resource, then the resource may be treated in accordance with the provisions of PRC section 21083.2 if it is a "unique" archaeological resource. PRC section 21083.2 provides for the protection of "unique archaeological resources" as defined in section 21083.2(g). If it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to preserve in place or avoid the resources. This section also establishes mitigation requirements for the excavation (data recovery) of unique archaeological resources.

If an archaeological resource is neither a unique archaeological nor historical resource, effects of a proposed project on the resource would not be considered a significant effect.

### *Assembly Bill 52*

AB 52 amended CEQA to create a mechanism for formal consultation with California Native American tribes and to add tribal cultural resources (TCRs) as a resource to be considered under CEQA. A tribe must first request to be on the lead agency's list for notification regarding projects proposed in an area within which the tribe is traditionally and culturally affiliated. For tribes that have requested notification, the lead agency must notify the tribes in writing of a proposed project located in the area within which the tribes are traditionally and culturally affiliated. The tribes then can request consultation, at which time the lead agency would commence formal consultation regarding TCRs in the project area, potential impacts to TCRs, and mitigation for those impacts. The CPUC has not received a request for notification from any Native American Tribes with traditional or cultural affiliation to the project area. Thus, CPUC has no obligation to follow the notification or consultation procedures under AB 52. Accordingly, notification or formal consultation were not undertaken for the proposed project.

### *Additional State Laws Regarding Archaeological and Native American Cultural Resources*

California law extends additional protections to Native American cultural resources:

- PRC sections 5097.91 through 5097.991 pertain to the establishment and authorities of the NAHC. These sections also prohibit the acquisition or possession of Native American artifacts or human remains taken from a Native American grave or cairn, except in accordance with an agreement reached with the NAHC, and provide for Native American remains and associated grave artifacts to be repatriated. Subsections 5097.98(b) and (e) require a landowner on whose property Native American human remains are found to limit further development activity in the vicinity until conferring with the most likely descendants (as identified by the NAHC) to consider

treatment options. Because of the importance of human remains to the Native American community, Health and Safety Code sections 7050 through 7054 make the disturbance and removal of human remains felony offenses. Provision is made in PRC section 65092 for the notification of California Native American tribes who are on the contact list maintained by the NAHC about construction projects.

- PRC sections 5097.993 through 5097.994 make it a misdemeanor crime to perform unlawful and malicious excavation, removal, or destruction of Native American archaeological or historical sites on public or private lands.
- Penal Code section 622 establishes as a misdemeanor the willful injury, disfiguration, defacement, or destruction of any object or thing of archaeological or historical interest or value, whether situated on private or public lands.
- PRC section 6254(r) protects Native American graves, cemeteries, and sacred places maintained by the NAHC by protecting records of such resources from public disclosure under the California Public Records Act.

### Local

Goal OS-J of the Fresno County General Plan (Fresno County 2000) is "[t]o identify, protect, and enhance Fresno County's important historical, archaeological, paleontological, geological, and cultural sites and their contributing environment."

## 5.5.3 Environmental Impacts and Assessment

### Applicant Proposed Measures

The applicant has incorporated applicant proposed measures (APMs) into the proposed project to specifically minimize or avoid impacts on cultural and paleontological resources. APM CUL-2 was rescinded by PG&E and is therefore not included here. A list of all project APMs is included in Table 4-5.

**APM CUL-1: Development and implementation of a worker environmental awareness program.** PG&E will design and implement a Worker Education Program that will be provided to all project personnel who may encounter and/or alter historical resources or unique archaeological properties, including construction supervisors and field personnel. No construction worker will be involved in field operations without having participated in the Worker Education Program. The Worker Education Program will include, at a minimum:

- A review of archaeology, history, prehistory and Native American cultures associated with historical resources in the project vicinity;
- A review of applicable local, state, and federal ordinances, laws and regulations pertaining to historic preservation;
- A discussion of procedures to be followed in the event that unanticipated cultural resources are discovered during implementation of the project;
- A discussion of disciplinary and other actions that could be taken against persons violating historic preservation laws and PG&E policies; and
- A statement by the construction company or applicable employer agreeing to abide by the Worker Education Program, PG&E policies, and other applicable laws and regulations.

The Worker Education Program may be conducted in concert with other environmental or safety awareness and education programs for the project, provided that the program elements pertaining to cultural resources are provided by a qualified instructor meeting applicable professional qualifications standards.

**APM CUL-3: Unanticipated discovery of potentially significant prehistoric and historic resources.** In the unlikely event that previously unidentified cultural resources are uncovered during implementation of the project, all work within 100 feet (30 meters) of the discovery will be halted and redirected to another location. PG&E's cultural resources specialist or his/her designated representative 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 will be documented on State of California Department of Parks and Recreation cultural resource records, and no further effort will be required.

**APM CUL-4: Unanticipated discovery of human remains management.** If human remains are discovered, work in the immediate vicinity will stop immediately and a PG&E Cultural Resources Specialist will be contacted. The location of the discovery will be secured to prevent further impacts and the location will be kept confidential. The Cultural Resources Specialist will evaluate the discovery and will contact the Fresno County Coroner upon verifying that the remains are human. If the coroner determines the remains are Native American, the Native American Heritage Commission will be contacted and the remains will be left in situ and protected until a decision is made on their final disposition.

**APM PAL-1: Worker's environmental resources training.** All construction crew members must receive a paleontologically focused worker's environmental awareness training module prior to ground disturbance activities for the project. The module will be developed by the lead Paleontologist for the project and can be presented in person, through a safety tailboard, or in some other format, such as a brochure or videotape. The training module will cover the following topics: fossil/paleontological resource identification, discovery guidance, and the contact information of both the paleontological field monitor and the project paleontological resource specialist.

**APM PAL-2: Unanticipated discovery plan.** In the event that paleontological resources are discovered during construction activities, several procedures must be adhered to. All work must stop within 100 feet of the discovery and the appropriate PG&E Cultural Resources Specialist (CRS) must be contacted at the time of discovery. Avoid any impacts to the site, which includes looting, or any other damage to the resource. Work cannot continue within 100 feet of the resource without approval from the PG&E CRS. The PG&E CRS will coordinate with the lead project Paleontologist in order to protect the resource and evaluate its significance. If the resource is determined significant, the PG&E CRS and Paleontologist will develop a plan to evaluate the resource. The plan may include protection and preservation of the resource, additional documentation, and/or subsurface testing.

**APM PAL-3: Paleontological monitoring.** A qualified professional paleontologist must prepare a Paleontological Resources Monitoring and Mitigation Plan for the project before the onset of ground disturbance activities for the project. Monitoring will consist of spot-checking all ground disturbance activity in undisturbed soils 10 feet below the surface until such time that a paleontological resource is discovered. Monitoring will not be required for soils at a depth of less than 10 feet. Monitoring can be reduced or discontinued in areas of high sensitivity only if 50% of the ground disturbing work within the Riverbank Formation has been completed and no resources have been identified. Ground disturbing work to be monitored if it occurs 10 feet below the surface includes all excavation and grading for the substation, retention basin, and road, as well as any augering that utilizes an auger greater than 5 feet in diameter. The extent and duration of spot-checking will be determined by the PG&E CRS and the lead paleontologist for the project. If a paleontological resource is identified during ground disturbance activities, monitoring will transition from spot-checking to full-time

monitoring. In the event of a discovery, the monitor can direct the construction crew so that the resource is avoided and can be properly assessed.

## Impacts on Cultural Resources

Table 5.5-2 includes the significance criteria from Appendix G of the CEQA Guidelines' cultural resources section to evaluate the environmental impacts of the proposed project.

Table 5.5-2 Cultural Resources Checklist

| Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| 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 an 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? | ☐ | ☒ | ☐ | ☐ |
| e. Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 20174? | ☐ | ☒ | ☐ | ☐ |

***a, b. Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?***

### Construction

*LESS THAN SIGNIFICANT WITH MITIGATION*

The proposed project would result in removal of several components of the existing Sanger Substation, including the 1921 control building. The existing Sanger Substation site and the 1921 control building were both recommended as not eligible for the CRHR. The existing Sanger Substation and 1921 control building do not meet the criteria to be considered a historical resource as defined in California Code of Regulations section 15064.5. The proposed project would not impact the canal or three existing building complexes because they are outside of the project area. No other known historical or unique archaeological resources are located in the project area. The proposed project would have no impact on known historical or unique archaeological resources.

Previously undiscovered historical or unique archaeological resources could be located in the proposed project area and could be significantly impacted during construction of the proposed project if uncovered. For example, there are no surface structures known at the site from the nonextant historical complex ((three cottages with detached garages). However, ground disturbance from the proposed project may uncover subsurface components of the nonextant historical complex given that some isolated ceramic fragments were found during the cultural resources survey in the area. APM CUL-1 would require a worker education and awareness program so that construction workers would be trained on procedures to

follow if a resource is discovered. APM CUL-3 outlines procedures to follow in the event of an unanticipated discovery. APMs CUL-1 and CUL 3 would reduce impacts, but not to less than significant. APM CUL-1 does not require training in types of resources that may be uncovered. APM CUL-3 lacks sufficient detail about the procedure to follow in the event that a resource is discovered. MM CUL-1 supersedes APM CUL-3 by providing further details and outlines procedures that the applicant would follow in the event of an unanticipated discovery. MM CUL-2 supersedes APM CUL-1 by requiring workers be given an overview of the potential types of resources that may be uncovered during construction, including resources associated with the nonextant historical complex. Impacts would be less than significant after implementation of MM CUL-1 and MM CUL-2.

**MM CUL-1: Cultural Resources Monitoring and Treatment (supersedes APM CUL-3).** A CPUC-approved archaeologist that meets the Secretary of Interior's Professional Qualifications Standards for archaeology shall implement the following procedures if an unanticipated cultural resource is discovered during construction.

Work shall be halted and excluded from within 100 feet of the resource. Protective barriers shall be installed with signage identifying the area as an "environmentally sensitive area." The CPUC shall be notified of the find. The CPUC will notify parties who have requested notification of the find to the extent allowed, in consideration of confidentiality requirements. Total avoidance of the resource is preferred, and no additional mitigation is necessary if it is avoided. The resource shall be recorded on California Department of Parks and Recreation 523 forms and filed at the South San Joaquin Valley Information Center.

If the resource cannot be avoided, the CPUC-approved archaeologist shall determine in consultation with the CPUC if there is a potential for the resource to be historical (CEQA Guidelines section 15064.5(a)) or a unique archaeological resource (Public Resources Code 21083.2(g)). The CPUC must provide a response to the CPUC-approved archaeologist within seven days regarding a resource that the CPUC-approved archaeologist has found not to be potentially historical or a unique archaeological resource. If the resource is not potentially a historical or unique archaeological resource, work can resume after the CPUC's concurrence. If the resource is potentially a historical or unique archaeological resource, the CPUC-approved archaeologist shall prepare an Evaluation Plan that details the procedures to be used to determine whether the resource is a historical or unique archaeological resource. The Evaluation Plan shall be submitted to the CPUC for review. The CPUC will approve or request changes to the Evaluation Plan within 7 days of submittal by PG&E. Once approved, the Evaluation Plan shall be implemented, and a report shall be prepared that indicates whether the resource is a historical resource or unique archaeological resource. If the discovery is not historical or a unique archaeological resource and the CPUC concurs with that determination, work may proceed in the area of the discovery. If the discovery is historical or a unique archaeological resource, PG&E shall prepare a Data Recovery Plan that would reduce impacts to less than significant.

The Data Recovery Plan shall be prepared in accordance with CEQA Guidelines section 15126.4(b)(3)(C) and PRC section 21083.2 and shall describe methods that will yield relevant information. The Data Recovery Plan shall be submitted to the CPUC for review and approval. The CPUC will approve or request changes to the Data Recovery Plan within 7 days of submittal by PG&E. Once approved, the applicant shall implement the plan. When the field work is completed, a Data Recovery Field Memo shall be prepared that briefly describes the data and materials recovery. The Data Recovery Field Memo shall be submitted to the CPUC for review and approval. The CPUC will approve or request changes to the Data Recovery Field Memo within 7 days of submittal by PG&E. Once the Data Recovery Field Memo has been approved, construction may proceed in the area of the discovery. A more detailed Data Recovery Report shall be prepared within 90 days of the Data Recovery Field Memo. The Data Recovery Report shall present thorough results of the data recovery efforts, conclusions drawn from the work, and where materials will be curated and shall also

contain completed California Department of Parks and Recreation 523 forms. The Data Recovery Report shall be submitted to the CPUC for review and approval. Once approved, the Data Recovery Report and 523 forms shall be filed with the South San Joaquin Valley Information Center.

**MM CUL-2: Worker Education Program (supersedes APM CUL-1, supplements APM CUL-4).** PG&E shall design and implement a Worker Education Program that shall be provided to all project personnel who may encounter and/or alter historical resources or unique archaeological resources, including construction supervisors and field personnel. No construction worker will be involved in field operations without having participated in the Worker Education Program. The Worker Education Program shall include, at a minimum:

- A review of archaeology, history, prehistory and Native American cultures associated with historical resources in the project vicinity;
- A review of the types of resources that could be uncovered in the area, including historical artifacts associated with the nonextant historical complex at the Sanger Substation site;
- A review of applicable local, state, and federal ordinances, laws, and regulations pertaining to historic preservation and Native American resources;
- A discussion of procedures to be followed in the event that unanticipated cultural resources or human remains are discovered during implementation of the project;
- A discussion of disciplinary and other actions that could be taken against persons violating historic preservation laws and PG&E policies; and
- A statement by the construction company or applicable employer agreeing to abide by the Worker Education Program, PG&E policies and procedures, and other applicable laws and regulations.

### Operation and Maintenance

*NO IMPACT*

Operation and maintenance activities would all occur within areas already disturbed during construction of the proposed project. No ground-disturbing activities in previously undisturbed areas would occur during operation and maintenance. There would be no potential for the proposed project to affect historical or archaeological resources during operation and maintenance. As a result, there would be no impact on these resources.

***c. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?***

### Construction

*LESS THAN SIGNIFICANT WITH MITIGATION*

There is a high potential for discovering paleontological resources (buried fossils) within the proposed project area because it is underlain by Riverbank Formation deposits. In the proposed project area, soils within 5 feet of the surface have previously been disturbed. General grading in the substation expansion area would not extend below this depth, meaning there is a much lower potential for discovery of an intact unique paleontological resource in the undisturbed soil, and impacts would be less than significant.

Installation of other components would require excavation or boring deeper than 5 feet into undisturbed soils. Such components include tubular steel pole foundations, the stormwater retention basin, clearance structures, and underground conduit. Removal of lattice steel towers would also require excavation to

greater than 5 feet below the ground surface. These activities could unearth a unique paleontological resource, which could be a significant impact. The applicant has included APM PAL-1 as a part of their project, which would require that the worker training include information about the paleontological resources of the area and guidance for resource discovery. APM PAL-2 would require following certain protocols should paleontological resources be discovered during construction. APM PAL-3 would require monitoring of ground disturbing activities at certain depths and would allow monitoring to end if 50 percent of work has been completed without discovery of a paleontological resource. Impacts would be reduced but ~~would~~ could still be significant after implementation of these APMs as the procedures outlined in APM PAL-2 are not specific enough to guide implementation during construction and a resource can be discovered at shallower depths than those outlined in APM PAL-3 or after no resources are discovered after 50 percent of the work is done if it is not a representative sample. MM CUL-3 would supersede APM PAL-2 by providing further details and outlining procedures that the applicant would follow in the event of an unanticipated discovery. MM CUL-4 would supersede APM PAL-3 and requires the applicant to prepare and implement a Paleontological Resources Monitoring and Mitigation Plan to further reduce the potential to damage a paleontological resource during construction. Implementation of APM PAL-1, MM CUL-3 and MM CUL-4 would reduce impacts to less than significant.

**MM CUL-3 (supersedes APM PAL-2): Unanticipated paleontological resource discovery protocol.** If a previously unidentified paleontological resource is discovered during construction, PG&E shall immediately require that work be halted within 100 feet of the resource; measures be put in place to prevent further impacts to the resources, such as protective barriers and/or signs, and/or coverings; that PG&E's CPUC-approved Cultural Resources Specialist (CRS) and paleontological resource specialist be notified; and that the CRS notify the CPUC. PG&E's CPUC-approved paleontological resource specialist shall examine the find and determine whether it is unique under Part V of CEQA Guidelines Appendix G. The CPUC-approved paleontologist may develop significance criteria for the fossils likely to be yielded by the Riverbank Formation, subject to CPUC-approval (such criteria will be documented in the PRMMP discussed in MM CUL-4). In the absence of other agreed-upon criteria, a paleontological resource shall be considered unique if it meets the definition of a significant paleontological resource under the 2010 Society of Vertebrate Paleontology *Standard Procedures for the Assessment of Adverse Impacts to Paleontological Resources* definition:

> Significant paleontological resources are fossils and fossiliferous deposits, here defined as consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are considered to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years).

The results of the evaluation will be submitted to the CPUC, and the CPUC must determine whether or not the resource is unique. The CPUC must respond in writing within seven days stating whether the resource is unique and provide reasoning if it disagrees with the conclusion. If the resource is determined not to be unique, work may commence in the area. If the resource is significant and can be avoided and thus not impacted, PG&E shall document the resource in accordance with professional standards, continue to flag the area for avoidance during construction, and take no further action. Preservation in place, i.e., avoidance, is the preferred method of mitigation for impacts to unique paleontological resources. However, if the resource is unique and cannot feasibly be avoided, PG&E shall consult with the CPUC to determine appropriate mitigation measures. Mitigation methods may include ensuring that fossils are recovered, prepared, identified, catalogued, and analyzed according to current professional standards under the direction of a qualified paleontologist. Methods of recovery, testing, and evaluation shall adhere to current professional standards for recovery, preparation, identification, analysis, and curation, such as the 2010 Society of Vertebrate Paleontology *Standard Procedures for the Assessment of Adverse Impacts to*

*Paleontological Resources*. Work may commence after data recovery (if undertaken) and upon approval by the CPUC.

**MM CUL-4 (supersedes APM PAL-3): Paleontological Resources Monitoring and Mitigation Plan.** A qualified professional paleontologist shall prepare a Paleontological Resources Monitoring and Mitigation Plan (PRMMP) for the project before the onset of ground disturbing activities. The PRMMP shall be submitted to the CPUC for review and approval at least 30 days prior to the start of any excavation to 5 feet below ground surface. PG&E's CPUC-approved paleontological resource specialist shall direct implementation of the PRMMP.

The PRMMP shall include full-time monitoring of excavations extending more than 5 feet deep and auguring/boring extending to more than 5 feet deep and more than 3 feet in diameter, or in lieu of full-time monitoring, the PRMMP shall include the following requirements:

Initial Monitoring:

1. Prior to the start of construction, PG&E's CPUC-approved paleontological resource specialist shall identify a minimum number and array of excavation types (i.e. TSP foundation drilling, grading, retention pond) extending more than 5 feet deep and auguring/boring extending to more than 5 feet deep and more than 3 feet in diameter sufficient to obtain data to determine whether the project area is likely to yield significant paleontological resources. The placement of the locations requiring monitor will be developed by the paleontologist in consultation with PG&E's construction team, and will focus on volume of soil to be disturbed to produce a representative sample. The PRMMP shall identify the methods used (e.g., microscopic examination of matrix samples, visual examination of excavated material) to make the determination.
2. At all sites identified by PG&E's CPUC-approved paleontological resource specialist, a CPUC-approved paleontological field monitor shall monitor the excavation and auguring during the initial stages of construction (i.e., from the beginning of construction until a determination is made after initial monitoring as described in this item) to determine whether the project area is likely to yield significant paleontological resources.

Subsequent Monitoring: The results of initial monitoring shall be described in a memo, to be submitted to CPUC for review and approval. CPUC will review and either request revisions or approve the memo within 2 business days of submittal by PG&E. PG&E shall not reduce or stop monitoring until CPUC approves the memo. Based on the results of initial monitoring, the following measures shall be required and described in the PRMMP:

- If PG&E's CPUC-approved paleontological resource specialist determines that no part of the project area is likely to yield significant paleontological resources, further monitoring shall not be required. PG&E must still make available the paleontological resource specialist and paleontological field monitor (available to go to the work site as needed). Training provided pursuant to APM PAL-1 will enable work crews to identify likely fossils, and inform the appropriate parties if such deposits are identified.
- If PG&E's CPUC-approved paleontological resource specialist discovers significant paleontological resources or determines the project area is likely to yield significant paleontological resources, then continued monitoring shall be required as deemed appropriate by the paleontological resource specialist, in consultation with the CPUC and PG&E's construction team, based on the nature, location, and geologic context of the fossil(s), as well as the potential for further disturbance.

If a paleontological resource is discovered at any time during initial monitoring, continued monitoring, or unmonitored construction, PG&E shall notify the CPUC immediately and the paleontological resource specialist will inspect the matrix for fossils. If a paleontological resource is discovered, MM CUL-3 shall be implemented.

## Operation and Maintenance

*NO IMPACT*

Operation and maintenance activities would all occur within areas already disturbed during construction of the proposed project. No ground-disturbing activities in previously undisturbed areas would occur during operation and maintenance. There would be no potential to affect paleontological resources during operation and maintenance. As a result, there would be no impact on these resources.

***d. Would the project disturb any human remains, including those interred outside of formal cemeteries?***

## Construction

*LESS THAN SIGNIFICANT WITH MITIGATION*

Research has not uncovered any known Native American or other human remains in the project area. With ground disturbance, there is a possibility that previously unknown human remains may be encountered during construction activities. PG&E would have to adhere to relevant state laws if human remains are found, including CEQA Guidelines section 15064.5(e); PRC sections 5097.94, 5097.98, and 5097.99; and California Health and Safety Code section 7050.5. These laws require actions such as notification of the county coroner as well as Native American consultation for Native American burial sites. Impacts on human remains could still result in a significant impact, however, if workers are not trained in and made aware of these procedures and continue to work in the area. APM CUL-4 requires that work in the area of the discovery will stop immediately; however, APM CUL-4 does not require that workers be trained in the procedures to follow in the case of discovery. A significant impact could therefore still occur. MM CUL-2 supplements APM CUL-4 and requires that SCE train workers on the procedures to follow if human remains are discovered during construction. Impacts would be less than significant with the implementation of APM CUL-4 and MM CUL-2.

## Operation and Maintenance

*NO IMPACT*

Operation and maintenance activities would all occur within areas already disturbed during construction of the proposed project. No ground-disturbing activities in previously undisturbed areas would occur during operation and maintenance. There would be no potential to affect human remains during operation and maintenance. As a result, there would be no impact on these resources.

***e. Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074?***

## Construction

*LESS THAN SIGNIFICANT WITH MITIGATION*

No TCRs have been identified on the site. There are no known sites, features, places, cultural landscapes, sacred places, or other objects considered of cultural value to a California Native American tribe that is either on the CRHR or local historic register, or eligible for the CRHR or a local historic register. There is a potential for uncovering a previously undiscovered TCR during excavation. Construction activities could cause a substantial adverse change in the significance of a previously undiscovered TCR, which

would be a significant impact. MM CUL-5 would be implemented if a potential TCR is encountered during excavation activities, and thus impacts would be less than significant.

**MM CUL-5: Undiscovered potential Tribal Cultural Resources.** The following procedure shall be employed (after stopping work and following the procedure for determining eligibility in MM CUL-1) if a resource is encountered and determined by the project's qualified archaeologist to be eligible for the CRHR or a local register of historic resources and is associated with a California Native American Tribe(s) with a traditional and cultural affiliation with the geographic area of the proposed project:

- The project's qualified archaeologist shall notify the CPUC for appropriate action. PG&E will assist the CPUC if needed to identify the lead contact person for the California Native American Tribe(s) potentially associated with the cultural resource and with a traditional and cultural affiliation with the geographic area of the proposed project. The CPUC will contact the lead contact person to set up a meeting with PG&E and the CPUC.
- The project's qualified archaeologist shall participate with the CPUC in discussions with the California Native American Tribe(s) whether the resource is a "tribal cultural resource" as defined by PRC section 21084.3(b) and the tribe(s)' preferred method of mitigation, if the resource is determined to be a TCR.
- If no agreement can be reached for mitigation after discussions with the California Native American Tribe(s) or it is determined that the tribe(s)' preferred mitigation is not feasible, PG&E will implement one of the example mitigation measures listed in PRC section 21080.3(b), or other feasible mitigation.

### Operation and Maintenance

Operation and maintenance activities would all occur within areas already disturbed during construction of the proposed project. No ground-disturbing activities in previously undisturbed areas would occur during operation and maintenance. There would be no potential to uncover and affect undiscovered TCR during operation and maintenance. As a result, there would be no impact on these resources.