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4.5 CULTURAL RESOURCES

Would the Proposed Project:	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in California Environmental Quality Act (CEQA) Guidelines § 15064.5?			✓	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 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 21074?			✓	

4.5.0 Introduction

This section describes known cultural and paleontological resources within the San Diego Gas & Electric Company (SDG&E) Tie Line (TL) 649 Wood-to-Steel Replacement Project (Proposed Project) area and identifies potential impacts that could result from construction or operation and maintenance of the Proposed Project. For the purpose of this analysis, cultural resources include, but are not limited to, archaeological sites, sacred sites, traditional cultural properties, tribal cultural resources, rock art, rock piles or cairns, historical buildings, or other features of the historic built environment. Paleontological resources, or fossils, are the remains of ancient plants and animals that can provide information about the history of life on earth. With the implementation of SDG&E's Project Design Features and Ordinary Construction/Operating Restrictions, potential impacts to cultural and paleontological resources that may result from the Proposed Project will be less than significant.

4.5.1 Methodology

The analysis in this section is based on the Cultural Resources Technical Report for the Proposed Project that was prepared by HDR, Inc. (HDR), as well as a Paleontological Record Search that was completed by the San Diego Natural History Museum's (SDNHM's) Department of

PaleoServices. The following subsections describe the desktop-level research, literature review, and field investigation conducted to identify and delineate potential cultural and paleontological resources within the Area of Potential Effect (APE).

In order to identify the location or likely presence of cultural and paleontological resources within the Proposed Project area, an APE was defined surrounding the Proposed Project's permanent and temporary work area footprint. The APE is larger than the Proposed Project impact area and includes approximately 150 feet on either side of the power line centerline. The APE also includes the footprint of the staging yards and an approximately 30-foot buffer on either side of Proposed Project access roads.

Cultural Resources Records Search

Cultural resources records and literature searches of documents and maps on file at the South Coastal Information Center (SCIC) at San Diego State University (SDSU) were conducted by SDG&E in March 2010, and July 2014. Current site and Proposed Project information available in the California Historical Resources Information System (CHRIS) geographical information system inventory was also examined for known and recorded sites and surveyed areas within the APE. The results of the records searches have been included in the Cultural Resources Technical Report prepared by HDR for the Proposed Project.

Native American Contacts and Tribal Consultation

A Sacred Land File (SLF) search for the APE was requested from the California Native American Heritage Commission (NAHC) on April 12, 2010 and on May 28, 2015. To date, no responses have been received. The SLF search results prepared by the NAHC indicating the presence of any Native American cultural resources within the APE and will appear as an addendum to the Cultural Resources Technical Report.

Correspondence was conducted on June 26, 2015, with all individuals and groups indicated by the NAHC as having affiliation with the APE. This consisted of correspondence via a letter describing the Proposed Project and a detailed map indicating the APE. Recipients were requested to reply with any information they are able to share about Native American resources that might be adversely affected by the Proposed Project. To date, no responses have been received. The results of this outreach effort will be included as an addendum to the Cultural Resources Technical Report.

Correspondence with the NAHC and individuals and groups that have an affiliation with the APE is provided in Attachment 4.5-A: NAHC Correspondence.

Cultural Resources Survey

HDR conducted pedestrian surveys of the APE in systematic transects spaced 32 to 50 feet (10 to 15 meters) apart, depending on terrain, on the following dates:

- March 17, 2010;
- April 26, 2010;
- July 16, 2014;

- July 18, 2014; and
- November 13, 2014.

The pedestrian surveys complied with the Secretary of the Interior's Standards and Guidelines for Identification and Evaluation for Local Surveys. All potential work areas and Proposed Project facility locations were included in the pedestrian surveys.

All prehistoric and historic sites, both newly identified and previously recorded (if relocated¹), were recorded in the Cultural Resources Technical Report. Prehistoric or historic sites were defined as any concentration of three or more artifacts in an approximately 82-foot-square area. Separate sites were recorded when artifact concentrations were separated by more than 165 feet. Isolated artifacts were defined as fewer than three artifacts in an approximately 82-foot-square area. Cultural resources that met the definition of an archaeological site were assigned a temporary site number in the field.

Site documentation included definition of site boundaries, features, and diagnostic artifacts. A detailed sketch map was prepared for each site and showed the relationship of the site's location to topographic features and other landmarks. More detailed information on environmental context, artifact content and density, cultural affiliation, and function was recorded on Department of Parks and Recreation (DPR) 523 site forms. The DPR forms were submitted to the SCIC for assignment of Primary and Trinomial site numbers. Each site was plotted on a 7.5-minute United States (U.S.) Geological Survey topographic quadrangle, and Universal Transverse Mercator coordinates were recorded to accurately locate the site and its relationship to the navigation points. Photographs were taken of each site.

Global Positioning System (GPS) data were collected for each cultural resources, feature, and artifact. The North American Datum of 1983 was used as the base coordinate system. A Trimble GPS instrument with sub-meter horizontal accuracy was used for site, artifact, and feature mapping.

No artifacts were collected during the surveys. The presence or absence of evidence for cultural materials or deposits was noted. Diagnostic artifacts were documented in the field (i.e., basic metrics of diagnostic artifacts or tools, location, description, and photographs) and left on site. All artifacts identified in the field were described and photo-documented on appropriate site forms.

Cultural Resources Subsurface Testing

To determine eligibility for listing on the California Register of Historic Resources (CRHR), a subsurface testing program was completed at each cultural resources site in the Proposed Project impact area on the following dates:

- July 30 to August 1, 2013;
- February 26, 2014;

¹ Some of the cultural resources sites could not be relocated in the field and, therefore, these sites were not recorded in the Cultural Resources Technical Report.

- November 3 to 5 and 10 to 13, 2014;
- November 10 to 13, 2014; and
- March 27 and 31, 2015.

In order to evaluate potential impacts to cultural resources, shovel test pits (STPs) were excavated on either side of the existing pole to determine if subsurface cultural components exist in proximity to the proposed replacement pole location. Each STP measured approximately 30 centimeters in diameter and 50 to 60 centimeters deep. The STPs were excavated until sterile (i.e., non-artifact/non-ecofact² bearing) soil was reached and/or maintained for at least 20 centimeters. Excavated soil was removed in decimeter levels and screened through one-eighth-inch wire mesh. The location, depth, soil coloration, and density were recorded for the STPs. The STPs were backfilled upon completion of the testing.

Aerial and topographic maps were used for orientation and coverage guides. The STPs were recorded and plotted in the field using a Trimble GPS instrument with sub-meter horizontal accuracy. Photographs were taken of all ground-disturbing activities and of the site conditions. No artifacts or ecofacts were collected.

Tie Line 649 Historic Resource Significance Evaluation

A historical significance evaluation of Tie Line (TL) 649 was conducted by HDR as some of the power line facilities are over 50 year old and could be considered historic resources eligible for the National Register of Historic Places (NRHP) and/or CRHR listing. The report prepared by HDR is provided in Attachment 4.5-B: Historic Significance Evaluation. The evaluation included historic research, analysis of a sub sample of 14 percent of the poles along the power line, and a significance evaluation in accordance with the CEQA. Although only a portion of the poles will be impacted, this evaluation considered TL 649 in its entirety.

This significance evaluation involved extensive background research on the history of power within San Diego County, field visits to selected poles and the substations connected to the power line, and a full CEQA significance evaluation of the power line. The historic context for the evaluation was developed from extensive background research at SDG&E, the SCIC, the San Diego History Center, the San Diego Central Library, and the SDSU library. Documents referenced from these institutions include historic maps, historic photographs, newspaper articles, aerials, previous cultural resource management technical reports, and reference books.

Sub samples of poles were targeted for detailed evaluation. These poles are considered representative of the poles on the power line collectively and represent poles installed in each decade beginning in 1916 through to the 1980s. Field crews documented 14 percent of the poles on the power line, focusing on poles that were installed over 50 years ago. Although the substations are not considered in the significance evaluation of the power line, they were documented as related to the TL 649.

² An artifact is any object that was made, used, and/or transported by humans that provides information about human behavior in the past, such as pottery, stone tools, bones with cut marks, and coins. An ecofact is a naturally produced object found on an archaeological site that provides information about past environments, and examples include seeds, animal bones, and soil.

Paleontological Resources Records Search

Information on the geologic setting and the potential presence of paleontological resources was derived from published geologic reports, as well as published and unpublished paleontological reports. No paleontological resource surveys were conducted. Additionally, the SDNHM databases were searched for records of fossil finds within one mile of the Proposed Project APE.

4.5.2 Existing Conditions

Regulatory Background

The following federal, state, and local regulations and policies pertaining to cultural and paleontological resources are relevant to the Proposed Project.

Federal

National Historic Preservation Act

The National Historic Preservation Act (NHPA), enacted in 1969, requires federal agencies to consider the effects of their undertakings on historical properties. Historical properties are cultural resources (i.e., archaeological sites, historic built environment features, or Native American sites) that are listed on or determined to be eligible for listing on the NRHP. The governing regulation, Section 106 of the NHPA, is codified in Title 54 of the United States Code (U.S.C.) (54 U.S.C. § 300101 *et seq.*). The historic preservation review process mandated by Section 106 is outlined in regulations issued by the Federal Advisory Council on Historic Preservation located at Title 36, Part 800 of the Code of Federal Regulations (CFR). Part 800 requires a project's lead federal agency to consult with the State Historic Preservation Officer (SHPO) regarding potential impacts to historical properties. The goal of the Section 106 process is to offer a measure of protection for cultural resources that are determined eligible or potentially eligible for listing on the NRHP. The criteria for determining eligibility, which can be found in 36 CFR Section 60.4, are as follows:

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

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

American Indian Religious Freedom Act of 1978

The American Indian Religious Freedom Act, codified in Title 42 U.S.C. Section 1996, establishes a federal policy of respect for, and protection of, Native American religious practices. It also contains provisions that allow limited access to Native American religious sites.

Native American Graves Protection and Repatriation Act of 1990

The Native American Graves Protection and Repatriation Act provides for the repatriation of certain items from the federal government and certain museums to the native groups to which they once belonged. The Act defines “cultural items,” “sacred objects,” and “objects of cultural patrimony,” and establishes a means for determining ownership of these items. However, the provisions for repatriation only apply to items found on federal lands.

Executive Orders 13007 and 13084

Executive Order 13007 requires federal agencies with land management responsibilities to allow access to and use of Native American sacred sites on public lands and to avoid adversely affecting these sites. Executive Order 13084 reaffirms the government-to-government relationship between the federal government and recognized Native American tribes, and requires federal agencies to establish procedures for consultation with tribes. These executive orders only apply to projects that are federal undertakings or have federal involvement.

Archaeological Resources Protection Act of 1979

The Archaeological Resources Protection Act applies to projects that are located on public lands and Native American lands. The purpose of this act is “the protection of archaeological resources and sites which are on public lands and Indian lands, and to foster increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals having collections of archaeological resources and data which were obtained before the date of the enactment of this Act.”

Paleontological Resources Preservation Act

On March 30, 2009, the Paleontological Resources Preservation Act (16 U.S.C Title 16, Chapter 1C) became law. This law requires the U.S. Secretaries of the Interior and Agriculture to manage and protect paleontological resources on federal lands using scientific principles and expertise. The U.S. Forest Service published its final regulations regarding paleontological resources on April 17, 2015 (see 80 Federal Register 21588). Final regulations from the agencies within Department of Interior (including the Bureau of Land Management, Bureau of Reclamation, Fish and Wildlife Service, and National Park Service) are forthcoming.

State

California Environmental Quality Act

CEQA requires that impacts to cultural resources are identified and, if impacts will be significant, that mitigation measures are implemented to reduce those impacts to the extent feasible. In the protection and management of the cultural environment, both the statute (California Public Resources Code [PRC] § 21000 et seq.) and its CEQA Guidelines provide definitions and standards for cultural resources management. Pursuant to CEQA Guidelines

(Title 14 California Code of Regulations) Section 15064.5(a), the term “historical resource” includes the following:

- A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the California Register of Historical Resources.
- A resource included in a local register of historical resources or identified as significant in a historical resource survey shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- Any object, building, structure, site area, 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 may be considered to be a historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a cultural resource shall be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing on the California Register of Historical Resources, including the following:
 - 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 values; or
 - Has yielded, or may be likely to yield, information important in prehistory or history. The fact that a resource is not listed in, or determined to be eligible for listing in the CRHR, not included in a local register of historical resources, or identified in a historical resources survey, does not preclude a lead agency from determining that the resource may be a historical resource.

CEQA, in PRC Section 21083.2(g) defines a “unique archaeological resource” as follows:

An archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

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

CEQA Section 21083.2 and CEQA Guidelines Sections 15064(c) and 15064.5 explain that effects on cultural properties that qualify as historical resources or unique archaeological resources would be adverse if they involve physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource would be materially impaired.

The statutes and guidelines described previously specify how cultural resources are to be analyzed for projects subject to CEQA. Archival and field surveys must be conducted, and identified cultural resources must be inventoried and evaluated in prescribed ways.

Paleontological resources are protected under CEQA. Paleontological resources are limited, non-renewable resources of scientific, cultural, and educational value. PRC Section 5097 et seq. governs the preservation and protection of these resources.

Assembly Bill 52

California Assembly Bill (AB) 52 was enacted on September 25, 2014, and specifies that a project that may cause a substantial adverse change to a tribal cultural resource is a project that may have a significant effect on the environment. The bill, as codified in PRC Section 21074, defines “tribal cultural resources” as (1) sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe and is either on or eligible for inclusion in the CRHR and (2) a resource determined by a lead agency, at its discretion and supported by substantial evidence, to be significant. As of July 1, 2015, AB 52 requires early notice and, if requested by a tribe, consultation with California Native American tribes on the NAHC list. Although the CEQA Guidelines will not be updated with the new question regarding tribal cultural resources until July 2016, in the interim period, the Governor’s Office of Planning and Research (OPR) suggests that lead agencies consider the following question in their environmental documents:

- Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC 21074?

California Register of Historical Resources

The CRHR is a public listing of specific properties that are to be protected from substantial adverse change. Any resource eligible for listing in the CRHR must also be considered under CEQA.

As defined under PRC Section 5024.1(c), a historical resource may be listed on the CRHR if it meets one or more of the following criteria:

- It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the U.S.
- It is associated with the lives of persons important to local, California, or national history.
- It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic value.
- It has yielded or has the potential to yield information important in the prehistory or history of the local area, California, or the nation.

Automatic listings include properties listed on the NRHP, determined eligible either by the Keeper of the National Register or through a consensus determination on a project review, or State Historical Landmarks from number 770 onward. In addition, Points of Historical Interest nominated from January 1998 onward are to be jointly listed as Points of Historical Interest, as well as in the CRHR. Landmarks prior to number 770 and Points of Historical Interest may be listed through an action of the State Historical Resources Commission.

Resources listed on a local historic register or deemed significant in a historical resources survey, as provided under Section 5024.1(g) of the PRC, 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 is determined to be ineligible for listing in the CRHR, is not included in a local register of historical resources, or is not deemed significant in a historical resources survey may, nonetheless, be historically significant (PRC Section 21084.1).

California Health and Safety Code, California Native American Graves Protection and Repatriation Act of 2001

Broad provisions for the protection of Native American cultural resources are contained in the California Health and Safety Code (HSC), including the California Native American Graves Protection and Repatriation Act (Cal NAGPRA). Cal NAGPRA established a state policy to ensure that California Native American human remains and cultural items are treated with respect and dignity. Cal NAGPRA also provides the mechanism for disclosure and return of human remains and cultural items held by publicly funded agencies and museums in California. Likewise, Cal NAGPRA outlines the process that California Native American tribes that are not recognized by the federal government may follow to file claims for human remains and cultural items held in agencies or museums.

California Public Resources Code

Several provisions of the PRC govern archaeological finds in terms of human remains, or any other related object of archaeological or historical interest or value. Procedures are detailed under PRC Sections 5097.9 through 5097.996 for actions to be taken whenever Native American remains are discovered. Under these provisions, if a county coroner determines that human remains found during excavation or disturbance of land are Native American, the coroner must contact the NAHC within 48 hours. In addition, the NAHC must determine and notify the Most Likely Descendant (MLD), who may make recommendations for removal and nondestructive analysis of the remains and for the removal of items associated with Native American burials or cremations. Furthermore, Section 7050.5 of the HSC states that any person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any 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 PRC Section 5097.99. Any person removing any human remains without authority of law or written permission of the person or persons having the right to control the remains under PRC Section 7100 has committed a public offense that is punishable by imprisonment.

Local

Because the California Public Utilities Commission (CPUC) has exclusive jurisdiction over the siting, design, and construction of the Proposed Project, the Proposed Project is not subject to local discretionary land use regulations. The following analysis of the local regulations relating to cultural and paleontological resources is provided for informational purposes. As outlined in the following subsections, the construction and operation of the Proposed Project will not conflict with any environmental plans, policies, or regulations related to cultural or paleontological resources.

County of San Diego

The County of San Diego's goals and policies pertaining to cultural and paleontological resources can be found in the Conservation and Open Space Element of the County of San Diego General Plan. The Conservation and Open Space Element includes three goals that are relevant to cultural, historic, and paleontological resources.

Goal 1 is the protection and preservation of the County's important archaeological resources for their cultural importance to local communities, as well as for their research and educational potential. To ensure the protection of archaeological resources, the County has developed the following policies that are relevant to the Proposed Project:

- Preserve important archaeological resources from loss or destruction and require development to include appropriate mitigation to protect the quality and integrity of these resources.
- Require development to avoid archaeological resources whenever possible. If complete avoidance is not possible, require development to fully mitigate impacts to archaeological resources.
- Require consultation with affected communities, including local tribes to determine the appropriate treatment of cultural resources.
- Require human remains be treated with the utmost dignity and respect and that the disposition and handling of human remains will be done in consultation with the MLD and under the requirements of federal, state and county regulations.

Goal 2 is the protection, conservation, use, and enjoyment of the County's important historic resources. The County has developed the following policy to ensure the protection of historic resources:

- Encourage the preservation and/or adaptive reuse of historic sites, structures, and landscapes as a means of protecting important historic resources as part of the discretionary application process, and encourage the preservation of historic structures identified during the ministerial application process.

Goal 3 is the conservation of paleontological resources and unique geologic features for education and/or scientific purposes. The County has developed the following policies to ensure the protection of paleontological resources:

- Require the salvage and preservation of unique paleontological resources when exposed to the elements during excavation or grading activities or other development processes.
- Require development to minimize impacts to unique geological features from human related destruction, damage, or loss.

City of San Diego

The City of San Diego's regulations and policies pertaining to cultural resources and paleontological resources can be found in Chapters 11, 12, and 14 of the Municipal Code, which establish the development regulations for historical resources. The purpose of these regulations is to protect, preserve, and, where damaged, restore the historical resources within the City of San Diego.

The historical resources chapters require that designated historical resources, important archaeological sites, and traditional cultural properties are preserved, unless deviation findings can be made by the decision-maker as part of a discretionary permit. Minor alterations consistent with the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties are exempt from the requirement to obtain a separate permit, but must comply with the regulations and associated historical resources guidelines. Limited development may encroach into important archaeological sites if adequate mitigation measures are provided as a condition of approval.

The Historical Resources Guidelines, located in the City of San Diego's Land Development Manual, provide property owners, the development community, consultants, and the general public explicit guidance for the management of historical resources located within the City of San Diego's jurisdiction. These guidelines are designed to implement the historical resources regulations and guide the development review process. In addition, the guidelines address the need for a survey and how impacts are to be assessed, and also provide available mitigation strategies and reporting requirements. They also include appropriate methodologies for treating historical resources located in the City of San Diego.

City of Chula Vista

The City of Chula Vista's objectives and policies pertaining to historical resources can be found in the Land Use and Transportation Element of the City of Chula Vista General Plan. The Land Use and Transportation Element includes one objective pertaining to cultural resources: protect the city's important historical resources. The city has developed the following policies to help ensure the protection of the important historical resources:

- Continue to assess and mitigate the potential impacts of private development and public facilities and infrastructure to historic resources in accordance with CEQA.

- Promote the maintenance; repair; stabilization; rehabilitation; restoration; and preservation of historical resources in a manner consistent with federal and state standards.
- Prior to the approval of any projects that propose the demolition or significant alteration of a potentially significant historic resource (as defined pursuant to applicable state and federal laws), require the completion of an historic survey report to determine significance. If determined to be significant, require appropriate and feasible mitigation pursuant to CEQA Guidelines, Section 15064.5.
- In instances where projects may adversely affect significant historic resources, require the implementation of an appropriate conservation program in accordance with applicable state and federal laws.

Environmental Setting

Cultural Setting

The following subsections describe the cultural and paleontological setting of the larger surrounding area of the Proposed Project location.

Prehistoric Background

Early assemblages, often described as the San Dieguito complex, date from approximately 10,000 Before Present (BP) to 7,000 BP. San Dieguito was defined from sites throughout San Diego County, especially those in the San Dieguito Valley. Material culture consists of scrapers, choppers, large blades, and a lack of milling technology.

The earlier, less understood San Dieguito complex is followed by the La Jolla complex. It is recognized by millingstone assemblages and shell middens. Along the coast, habitation is thought to have been concentrated around the many highly productive lagoons and estuaries formed by the flooding of coastal stream channels. These habitats provided Archaic populations with abundant shellfish, fish, birds, and plant resources, as well as terrestrial game animals that were attracted to these resource patches. Settlement patterns during the early portion of the Archaic period are not very well understood at present, although the presence of substantial midden deposits around lagoon margins at this time suggests some residential stability in coastal areas. Several scholars have divided La Jolla into phases based on typological change and stratigraphically controlled radiocarbon dating. La Jolla I is identified by flexed burials, the first appearance of millingstones, and percussion-flaked stone scrapers. La Jolla II adds to the assemblage with ground-stone discoidals, projectile points, and the first true cemeteries. La Jolla III shows the influence of Yuman culture from the east.

Similar controversy surrounds the semi-contemporaneous assemblages found in inland San Diego County. This Pauma complex showed similarities to both the San Dieguito and La Jolla complexes with leaf-shaped points and knives, as well as millingstones and stone discoidals. There is also evidence of a considerable temporal separation between the Pauma complex and its successor, San Luis Rey. It is now hypothesized that this Pauma complex may represent an inland variant of the La Jolla complex, or likely seasonal movements of La Jollan groups

between coastal and inland resource areas. If this hypothesis is correct, a broad, seasonal migration range is implied for the inhabitants of the early portion of the Archaic period in coastal Southern California.

Indications in the archaeological record of coastal San Diego County suggest some settlement reorientation began approximately 3,500 years ago. Compilations of radiocarbon data from Batiquitos Lagoon provide evidence for the lack of habitation at this location between approximately 3,000 BP and 1,500 BP. In addition to evidence from some other locations in San Diego County, this led researchers to postulate that a population movement into areas located farther inland and southward occurred during this time period in response to the increased siltation and declining productivity of coastal lagoons in the northern portion of the County.

The archaeological record of the Late Prehistoric period is represented by the San Luis Rey Complex in the northern San Diego County and the Cuyamaca complex in the south. A major change at or around this time is the introduction of acorn processing. This subsistence change altered land-use patterns away from the coastal zones to the interior upland areas. The San Luis Rey complex is the archaeological manifestation of the ethnohistoric Luiseño, while the Cuyamaca complex represents the Kumeyaay or Diegueño. Agua Hedionda is roughly the separation between these two territories.

The common use of ceramics and the replacement of inhumations with cremations are interpreted as characteristic of the San Luis Rey complex during the Late Prehistoric period. The San Luis Rey complex is divided into two phases: San Luis Rey I (A.D. 1400 to A.D. 1750) and San Luis Rey II (A.D. 1750 to A.D. 1850). Assemblages associated with these phases were considered to be quite similar, and the principal differences were the presence of ceramics, steatite arrow shaft straighteners, and European American objects in San Luis Rey II assemblages.

While there are few major technological differences between the San Luis Rey I and II assemblages, important differences with respect to land use and mobility exist between the two phases. Along the San Luis Rey River, for example, the settlement pattern appears to have shifted from a fairly wide-ranging mobility pattern during San Luis Rey I to a territorially constricted pattern of seasonal movement between upland and lowland settlements during the San Luis Rey II phase. On the lower San Luis Rey River, residential mobility is thought to have been even more restricted, with only one principal village per group territory. During the San Luis Rey II phase along the lower San Luis Rey River, the nature of the village locations and estimated catchment boundaries made significant use of subsidiary camps somewhat superfluous because almost all resources were located within easy reach of the primary camps.

The Cuyamaca complex is marked by the appearance of ceramics, and small cottonwood Triangular, Desert Side-notched, and Dos Cabezas Serrated projectile points. It is similar to the San Luis Rey complex, with the exceptions of defined cemeteries, cremations placed in urns, side-notched projectile points, and with much greater emphasis on the use of scrapers, scraper planes, ceramics, and millstone elements.

Some researchers attempted to correlate observed settlement changes during the Late Prehistoric period with the migration of Takic speakers into the region. Considerable disagreement

surrounds the timing of this intrusion, with some researchers suggesting it occurred within the past 1,500 years, and others argue that it dates farther back. The inception of the San Luis Rey complex is suggested as marking the arrival of Takic speakers in this area from regions located farther inland. This migration was sporadic, taking place over a long period. However, the Cuyamaca complex in southern San Diego County appears to be the end product of continual development from the earlier La Jolla complex with influence from Colorado River peoples. Because there is no break between La Jolla and the historic Diegueño, these Hokan speakers were likely responsible for the millingstone cultures (i.e., the La Jolla and Pauma complexes). The cultural continuum of northern San Diego millingstone culture was likely broken by the influx of the Takic groups.

Ethnographic Setting

The Proposed Project falls within the Otay Mesa and Tijuana River Valley, within the ethnographic boundaries of the Kumeyaay (or Diegueño) territory.

The people living in the southern part of San Diego County at the time of Spanish Contact were called the Diegueño, after the mission in San Diego. However, as Hedges pointed out, many of the people living in the region were not affiliated specifically with the mission. In general, the term Kumeyaay has come into common usage to identify the Yuman-speaking people living in the central and southern part of the County. Luomala used the terms Tipai and Ipai to refer to the southern and northern Kumeyaay, respectively. The dividing line between the Tipai and the Ipai is approximately Point Loma to Cuyamaca Peak and Julian. The name Kamia has been used by anthropologists to refer to the Yuman-speaking people living in Imperial Valley.

Examples of baskets and pottery from the 19th and early 20th centuries indicate a high level of artistic achievement and craftsmanship. Many different types of stone material were used for manufacturing tools, and exotic types were procured from other parts of the region. The remains of structures that were built at village sites can be seen in the archaeological record as stone foundations and circles. The Kumeyaay recognize many traditional cultural areas, and these locations continue to be held as sacred today.

The diet of the Kumeyaay included both plant and animal foods. There was considerable seasonality in the relative importance of plant versus animal food, and also the types of plant and animal food. Nutritionally, the plant foods were high in fat, carbohydrates, and protein, and thus provided a high-energy diet. Some of the plants exploited for food included acorns, annual grass seeds, yucca, Manzanita, sage, sunflowers, lemonade berry, chia, and various wild greens and fruits. None of these plants are available throughout the year; instead they were only seasonally available. For example, elderberries are available during July and August, chia are available mainly in June, acorns in the fall only and many grasses are summer and fall resources. Of course, if these resources were stored, they could be consumed throughout the year.

Protohistoric Kumeyaay (Ipai-Tipai-Diegueño-Kamia) territory extended from approximately the San Luis River mouth in the north to about Todos Santos Bay near Ensenada, Mexico in the south. From the Pacific Ocean, the Kumeyaay ranged inland across San Diego and Imperial counties to about Sand Hills. No list exists of all Kumeyaay settlements, names and locations. Many villages were only temporary campsites that a band occupied in its territory during a year.

A campsite was selected for access to water, drainage, boulder outcrops, or other natural protection from weather and ambush, as well as abundant flora and fauna of that ecological niche. A concentration of campsites in an area was considered a permanent village, settlement or “Rancheria.”

Specific Kumeyaay traditional cultural locations or places were identified on a map by Kroeber and include the following 27 locations:

- Along the San Dieguito River: Kuiaumai; Hapai; Sinyau-pichkara; Ahmukatkatl; Pauha; Tukumak (near Mesa Grande); Setmunumin; and Atikwanon.
- Between the San Dieguito and San Diego Rivers: Pauwai and Pamo.
- Along the San Diego River: Kosoi; Nipawai; Sinyeweche; Witlimak; Anyaha; Kosmit; and Sinyau-tehwir.
- Between the San Diego and Sweetwater Rivers: Amotaretuwe.
- San Diego Bay and Sweetwater River: Totakamalare; Pauipa; Hamacha (Jamacha); Sekwan (Sycuan); Ekwianiak; and Tlokwhi.
- Along the Otay River: Hamul (Jamul).
- Between the Otay River and Cottonwood Creek: Otai (Otay Mountain).
- Along Cottonwood Creek: Kwatai (Guatay)—see also Carrico for an excerpt of an interview with Tom Lucas, Kwaaymii, of Laguna Ranch regarding this village.

Delfina Cuero notes that the Kumeyaay had names for locations in their territory that referred to characteristics of that place. “Otay” refers to a kind of weed that grows at that location. “Jamacha” is the name of a wild gourd that grows abundantly in that named-area. “Jamul” was named after another weed that is common where water is abundant in that area. Point Loma was called “black earth” because of its appearance from a distance.

Historic Background

The history of Southern California can be broken down into three major periods: Spanish (1769 to 1822), Mexican (1822 to 1848), and American (1848 to present). Otay Mesa is an unincorporated community within San Diego County, just north of the U.S.-Mexico border. During the Spanish period, Otay Mesa was under the jurisdiction of the Mission San Diego de Alcalá, but was far away and fairly isolated from the mission system. In 1821, Mexico won its independence from Spain. The missions were given 10 years to complete their education of the Native Americans before the enactment of the Secularization Act of 1833. This privatized the Franciscans’ landholdings, redistributing the lands and holdings through land grants. El Rancho del Rey (renamed El Rancho de la Nacion after independence from Spain, and eventually became National City and Chula Vista) was located in the vicinity of Otay Mesa. Within Otay Mesa, Rancho Otay was established in 1829. The ranchos in California focused on the sale of hide and tallow, devoting large tracts of land to sheep, cattle, grazing, and grain crops.

California became a territory of the U.S. in 1848. Soon after, the Gold Rush brought an influx of settlers, causing a large increase in the demand for beef. California gained statehood in 1850. In 1862, President Lincoln signed the Homestead Act, encouraging western migration by offering 160 acres in exchange for a small fee. This brought the first influx of residents to Otay Mesa,

with the first settlers arriving around 1870. These settlers focused on cultivating wheat, barley, corn, tomatoes, and beans with water pumped from nearby streams and the Otay River.

Throughout the 1870s, approximately 10 families lived in Otay Mesa. The community was relatively isolated from the City of San Diego. With a period of economic growth in the 1880s, demand for agricultural land increased and Otay Mesa was promoted as a rich agricultural resource. By 1887, there were 40 households in Otay Mesa. The community expanded with the addition of a school, store, post office, and blacksmith shop.

Despite its location near the Otay River, the growth of Otay Mesa was limited by the supply of water. Being on the mesa several hundred feet above the river meant water could only be supplied by cisterns, catchments, or delivery by wagon. A drought between 1900 and 1920 caused a decline in the population, followed by the agricultural depression in the 1920s and the Great Depression of the 1930s. Many farmers sold their land and left the area. One prominent family that remained was the Pipers. They built their homestead in 1887 and remained in the area, cultivating hay, grain, and garbanzo beans into the 1980s.

The U.S. Army Air Corps established an air field in Otay Mesa in 1918 to provide advanced training for World War I pilots. During the 1920s, the U.S. Navy also began using the East Field airstrip as a practice landing field. The U.S. Army officially transferred East Field to the U.S. Navy in 1935, and it became known as Navy Auxiliary Air Station, Otay Mesa. Many improvements and expansions were made between 1940 and 1943, with another name change to the current Brown Field in 1943. At the end of World War II, the U.S. Navy leased the facility to the County of San Diego. However, the U.S. Navy briefly used the field again in the 1950s during the Korean War. In 1961, the San Diego City Council voted to use Brown Field as a general aviation facility.

Though farming continued in Otay Mesa, the City of San Diego rezoned most of the area from agriculture to commercial-industrial when a second border crossing was opened in 1985. Otay Mesa became dominated by industrial space and manufacturing warehouses, reflecting the built environment that is visible today.

Cultural Resources in the Proposed Project Area

The results of the records search and field surveys indicate that 34 archaeological resources and five historical resources are located either partially or completely within the APE for the Proposed Project, as provided in Table 4.5-1: Cultural Resources within the Area of Potential Effect. The Cultural Resources Technical Report provides additional information about these cultural sites. Sixteen cultural sites within the Proposed Project impact area were evaluated by HDR for eligibility to be listed on the CRHR. Two cultural sites were not evaluated because one site (CA-SDI-9976) was previously determined to be eligible for listing and one site (CA-SDI-11386) contains historic structures that will not be impacted by the Proposed Project. The following provides a discussion of these sites. In addition, isolates were not evaluated. All cultural resources that were evaluated were determined to be not eligible for NRHP or CRHR listing.

Table 4.5-1: Cultural Resources within the Area of Potential Effect

Site Number	Site Type	Site Description	Existing Poles within Site Boundary	NRHP/CRHR Listing Eligibility
<i>Cultural Sites</i>				
W-170	Archaeological	Destroyed village site	0	Not Evaluated
CA-SDI-8912	Archaeological	Groundstone and lithic scatter	0	Not Evaluated
CA-SDI-9970	Archaeological	Lithic scatter	2	Not Eligible
CA-SDI-9975	Archaeological	Lithic scatter	5	Not Eligible
CA-SDI-9976	Archaeological	Lithic scatter	3	Eligible
CA-SDI-9980	Archaeological	Lithic scatter	1	Not Eligible
CA-SDI-9981	Archaeological	Lithic scatter	1	Not Eligible
CA-SDI-10452	Archaeological	Lithic and shell scatter	0	Not Evaluated
CA-SDI-10783	Archaeological	Lithic scatter	6	Not Eligible
CA-SDI-10875	Archaeological	Lithic scatter	11	Not Eligible
CA-SDI-11385	Historical	Brown Field bombing range	6	Not Eligible
CA-SDI-11386	Historical	House and several outbuildings	0	Not Evaluated
CA-SDI-11952	Archaeological	Lithic scatter	1	Not Eligible
CA-SDI-12337	Archaeological	Extremely large lithic scatter	15	Not Eligible
CA-SDI-12940 and CA-SDI-14196	Archaeological	Shell and lithic scatter with rock alignments	2	Not Eligible

Site Number	Site Type	Site Description	Existing Poles within Site Boundary	NRHP/CRHR Listing Eligibility
CA-SDI-14178	Archaeological	Shell (determined non-archaeological) and lithic scatter	1	Not Eligible
CA-SDI-14185	Archaeological	Lithic and groundstone scatter	0	Not Evaluated
CA-SDI-14186	Archaeological	Shell and lithic scatter	3	Not Eligible
CA-SDI-14194	Archaeological	Lithic scatter	3	Not Eligible
CA-SDI-14195	Archaeological	Lithic scatter	0	Not Eligible
CA-SDI-14199	Archaeological	Lithic scatter	6	Not Eligible
CA-SDI-19922	Historical	Structure and trough	0	Not Evaluated
CA-SDI-21507	Archaeological	Lithic scatter	0	Not Eligible
<i>Isolates</i>				
P-37-014534	Archaeological	One scraper	0	Not Eligible
P-37-014793	Archaeological	One flake	0	Not Eligible
P-37-026549	Historical	Structure	2	Not Eligible
P-37-031360	Archaeological	One metavolcanic core	0	Not Eligible
P-37-031361	Archaeological	One metavolcanic core	0	Not Eligible
P-37-031362	Archaeological	One metavolcanic flake	0	Not Eligible
P-37-031363	Archaeological	One flake	0	Not Eligible
P-37-031364	Archaeological	One metavolcanic core	0	Not Eligible
P-37-031365	Archaeological	One flake and one core	0	Not Eligible
P-37-031368	Archaeological	One flake	0	Not Eligible
P-37-031491	Historical	Otay Mesa Road	0	Not Evaluated

Site Number	Site Type	Site Description	Existing Poles within Site Boundary	NRHP/CRHR Listing Eligibility
P-37-034473	Archaeological	One flake	0	Not Eligible
P-37-034474	Archaeological	One utilized flake	0	Not Eligible
P-37-034475	Archaeological	Two flakes	0	Not Eligible
P-37-034476	Archaeological	One bifacial flake	0	Not Eligible
P-37-034477	Archaeological	Two flakes	0	Not Eligible

Source: HDR, 2015a

CA-SDI-9976 is the only eligible cultural resources site located within the APE for the Proposed Project. CA-SDI-9976 was originally recorded by SDSU in 1984 as a small lithic scatter. SDSU revisited the site in 1985, observed additional artifacts and shell fragments, and adjusted the site boundaries. Brian F. Smith and Associates revisited the site in 2007 and conducted an extensive surface collection and subsurface testing program. The surface collection identified 15 manos, one metate, over 2,000 pieces of debitage, seven multi-use tools, three shell beads, two pieces of worked bone, 43 percussion tools, seven sherds of Tizon Brown Ware, and 63 precision tools. Subsurface deposits extended to a depth of approximately 4.6 feet and site boundaries were expanded by Brian F. Smith and Associates at this time. HDR revisited the site in 2010, but observed only nine flakes and several marine shell fragments, primarily along an access road.

The previous extensive surface collection and limited ground visibility outside the road prevented any additional observations. Since CA-SDI-9976 has been evaluated and determined eligible, HDR conducted subsurface testing at the site in 2014 and 2015, which confirmed presence of subsurface site material within the Proposed Project's APE.

The historical evaluation determined that TL 649 presents diminished integrity of design, materials, craftsmanship, location, setting, feeling, and associations. Therefore, the power line is not eligible for NRHP, CRHR, or local listing. In addition, the power line does not qualify as a significant historic resource under the terms of CEQA or the County of San Diego Resource Protection Ordinance; nor is the power line determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.

Tribal Cultural Resources in the Proposed Project Area

Letters to all individuals and groups indicated by the NAHC as having affiliation with the APE were sent on June 26, 2015. To date, no responses have been received. Tribal consultation will continue throughout all phases of the Proposed Project, as deemed necessary.

Paleontological Resources in the Proposed Project Area

The Proposed Project is underlain by Tertiary and Quaternary sediment deposits, including the following:

- the middle Eocene-age (43 million years old) Mission Valley Formation, late Oligocene-age (29 million years old) Otay Formation;
- early to middle Pleistocene-age (0.5 to 1.5 million years old) old alluvial floodplain deposits; and
- late Pleistocene to Holocene-age (200,000 years to recent) older terrace deposits and young alluvial floodplain deposits.

The Otay Formation is divided into three distinct units—a basal fanglomerate unit, a middle gritstone unit, and an upper sandstone unit. The Mission Valley Formation and the upper sandstone of the Otay Formation have a high paleontological resource sensitivity rating. The fanglomerate unit of the Otay Formation, the Lindavista Formation, the old alluvial floodplain deposits, and the older terrace deposits have a moderate paleontological sensitivity rating. The Holocene-age young alluvial floodplain deposits have a low paleontological sensitivity rating.

The following provided the number of existing poles in each paleontological sensitivity rating category:

- 41 existing poles are located in an area with a high paleontological sensitivity rating;
- 59 existing poles are located in an area with a moderate paleontological sensitivity rating; and
- 32 existing poles are located in an area with a low paleontological sensitivity rating.

The SDNHM Department of PaleoServices' paleontological locality and specimen records reveal 26 fossil discovery sites located within one mile of the Proposed Project APE. Three of these localities were discovered in late Pleistocene-age (500,000 to 10,000 years old), unnamed, non-marine terrace deposits. These localities produced fossilized remains of marine vertebrates (e.g., fish) and terrestrial vertebrates (e.g., horses). Thirteen localities were found in the near-shore marine deposits of Pliocene-age (2 million to 4 million years old) San Diego Formation. These localities produced leaf impressions of plants (e.g., legumes, willow, oak, laurel, and flowering plants), shell and internal molds of marine invertebrates (e.g., snails, clams, tusk shells, branchiopods, and crabs), mineralized remains of marine vertebrates (e.g., fish, whales, and walrus), and fossilized remains of terrestrial vertebrates (e.g., birds, deer, camels, and tortoises). Eight localities were discovered in the fluvial deposits or the late Oligocene-age (29 million years old) Otay Formation. These localities produced internal molds of marine invertebrates (e.g., snails), and fossilized remains of terrestrial vertebrates (e.g., artiodactyls, rodents, snakes, and lizards). Two localities were found in the marine deposits of the Eocene-age (43 million years old) Mission Valley Formation. These localities produced shell material and internal molds of marine invertebrates (e.g., snails and clams) and fossilized remains of marine vertebrates (e.g., fish, rays, and sharks).

4.5.3 Impacts

The following subsections describe the significance criteria used to assess potential impacts to cultural and paleontological resources that may result from implementation of the Proposed Project, as well as an examination of those potential impacts.

Significance Criteria

Standards of significance were derived from Appendix G of the CEQA Guidelines and are described in the following subsections.

Cultural Resources

Under CEQA, Proposed Project construction or operation and maintenance effects to unique or important resources must be considered. A resource is unique or important if it meets any of the following criteria:

- it is associated with an event or person of recognized importance in California or American history or scientific importance in prehistory;
- it is associated with the lives of persons important to our past;
- it can provide useful information of demonstrable public interest and is useful in addressing scientifically consequential and reasonable archaeological research questions;

- it has a special or particular quality, such as oldest, best example, largest, or last surviving example of its kind.

Construction-related subsurface and surface disturbances could result in a loss of integrity of cultural deposits, a loss of scientific information, and the alteration of an archaeological site setting. Potential indirect impacts, primarily vandalism, can result from increased access and use of the general area during construction and long-term operation and maintenance activities. The potential also exists for the inadvertent discovery of buried or masked archaeological materials during construction activities.

Standards of significance were derived from Appendix G of the CEQA Guidelines. Impacts to cultural resources would be considered significant if the Proposed Project:

- causes a substantial adverse change in the significance of a historical resource, as defined in Section 15064.5 of the CEQA Guidelines;
- causes a substantial adverse change in the significance of an archaeological resource, pursuant to Section 15064.5 of the CEQA Guidelines; or
- disturbs any human remains, including those interred outside of formal cemeteries
- causes a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074

“Substantial adverse change” means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired. Section 21084.1 of the CEQA Guidelines provides that any resource listed on, or eligible for listing on, the CRHR is presumed to be historically or culturally significant for CEQA purposes.

Paleontological Resources

Impacts to paleontological resources would be considered significant if the Proposed Project directly or indirectly destroys a unique paleontological resource or site or unique geologic feature. Because fossils are the remains of prehistoric animal and plant life, they are considered to be non-renewable. Impacts to paleontological resources are characterized as high, moderate, low, or zero, depending on the resource sensitivity of impacted formations. The specific criteria applied for each sensitivity category are summarized as follows:

- High significance: Impacts to high-sensitivity formations
- Moderate significance: Impacts to moderate-sensitivity formations
- Low significance: Impacts to low-sensitivity formations
- Zero significance: Impacts to zero-sensitivity formations

Question 4.5a – Historical Resource Change

Construction – Less-than-Significant Impact

Four historic resource sites will be impacted by the Proposed Project, CA-SDI-11385, CA-SDI-11386, P-37-026549, and TL 649 itself. CA-SDI-11385 was evaluated and determined not to be eligible for NRHP or CRHR listing. A portion of a pier foundation pole work area will be located within CA-SDI-11386 which consisted of a historic house and several outbuildings with

no artifacts, site material, or features associated with them. The Proposed Project will not change the significance of this historical resource because removal of the existing pole and installation of the new pole will not impact the historic structures or their overall context. Two pole work areas will be located within P-37-026549, which consists of an historic structure; however, no evidence of an historic structure were found during HDR's surveys. Therefore, no impacts on the significance of this historical resource are anticipated. The historical significance of TL 649 was also evaluated and determined not to be eligible for NRHP, CRHR, or local listing. To ensure that the structures are not impacted during construction, SDG&E will implement the following Project Design Features and Ordinary Construction/Operating Restrictions, which have been included in Chapter 3 – Project Description:

- A qualified archaeologist will monitor ground-disturbing activities within all cultural resource sites identified within Proposed Project impact areas. The requirements for archaeological monitoring will be noted on the construction plans. The archaeologist's duties will include monitoring, evaluation of any finds, analysis and curation of materials, and preparation of a monitoring results report conforming to Archaeological Resource Management Reports guidelines.
- Prior to construction, all SDG&E, contractor, and subcontractor Proposed Project personnel will receive training regarding the appropriate work practices necessary to effectively implement the Project Design Features and Ordinary Construction/Operating Restrictions relating to cultural resources to comply with the applicable environmental laws and regulations, including the potential for exposing subsurface cultural resources and paleontological resources and to recognize possible buried resources. This training will include presentation of the procedures to be followed upon the discovery or suspected discovery of archaeological materials, including Native American remains, as well as of paleontological resources.
- In the event that cultural resources are discovered, SDG&E's Cultural Resource Specialist and Environmental Project Manager will be contacted at the time of discovery. SDG&E's Cultural Resource Specialist will determine the significance of the discovered resources. SDG&E's Cultural Resource Specialist and Environmental Project Manager must concur with the evaluation procedures to be performed before construction activities in the vicinity of the discovery are allowed to resume. For significant cultural resources, a Research Design and Data Recovery Program will be prepared and carried out to mitigate impacts. All collected cultural remains will be cleaned, cataloged, and permanently curated with an appropriate institution. All artifacts will be analyzed to identify function and chronology as they relate to the prehistory or history of the area. Faunal material will be identified as to species.

With the implementation of these Project Design Features and Ordinary Construction/Operating Restrictions, potential impacts to known historical resources will be less than significant.

Operation and Maintenance – No Impact

Other than road maintenance activities, operation and maintenance activities will not require ground disturbance. However, if ground disturbance is required for the repair of Proposed

Project components, it will be conducted in areas that were previously disturbed during construction. If ground disturbance is required within the potentially CRHR-eligible historical resource site CA-SDI-11386 for the repair of Proposed Project components, it will not impact the structures associated with this site because the closest pole is approximately 80 feet from the nearest structure associated with this site. Therefore, operation and maintenance activities will not have an adverse effect on historical resources, and no impact will occur.

Question 4.5b – Archaeological Resource Change

Construction – Less-than-Significant Impact

As shown in Table 4.5-1: Cultural Resources within the Area of Potential Effect, 34 archaeological resource sites are located within the APE; however, only 15 sites are within the Proposed Project work areas. Fourteen of these sites were evaluated and determined not to be eligible for NRHP or CRHR listing; therefore, they are not discussed further. One site (CA-SDI-9976) has been previously evaluated and determined to be eligible for listing. Two direct-bury steel poles, one micro-pile steel pole, and the associated pole work areas; an access road turnaround; and two road modification areas will be located within CA-SDI-9976. Potential impacts will result from excavation for the pole holes and foundations, pole removal, earthwork for the modified access road, as well as operation of construction vehicles and equipment within the site boundaries. These activities have the potential to disturb surface and subsurface soils and potentially disturb or destroy archaeological resources. To minimize impacts to CA-SDI-9976, SDG&E will implement the following Project Design Feature and Ordinary Construction/Operating Restriction, which have been included in Chapter 3 – Project Description:

- Prior to ground-disturbing activities within CA-SDI-9976, SDG&E will prepare and implement a formal treatment plan and a full data recovery program that includes procedures for protection and avoidance, evaluation and treatment, and the curation of any cultural materials collected.

In addition, construction of the Proposed Project will involve earthwork and excavation activities, which have the potential to uncover and potentially damage or destroy unknown archaeological resources. To minimize potential impacts to the extent possible, SDG&E will also implement the Project Design Features and Ordinary Construction/Operating Restrictions described previously in response to Question 4.5a – Historical Resource Change. With the implementation of these Project Design Features and Ordinary Construction/Operating Restrictions, potential impacts to known archaeological resources will be less than significant.

Operation and Maintenance – No Impact

Other than road maintenance activities, operation and maintenance activities will not require ground disturbance. However, if ground disturbance is required for the repair of Proposed Project components, it will be conducted in areas that were previously disturbed during construction. Since the only significant archaeological resource identified in the Proposed Project area will be treated and curated in accordance with SDG&E's Project Design Features and Ordinary Construction/Operating Restrictions, operation and maintenance activities will not

cause a substantial adverse change in the significance of an archaeological resource, and no impact will occur.

Question 4.5c – Paleontological Resource Destruction

Construction – Less-than-Significant Impact

As discussed in Chapter 3 – Project Description, the Proposed Project will consist of wood-to-steel pole replacement and underground distribution line extensions, which will require drilling or excavation activities for the installation of direct-bury replacement steel poles, pier foundations, micro-pile foundations, and underground duct banks. The installation of direct-bury steel poles will require the excavation of holes that are six to 16 feet deep. Pier foundation and micro-pile foundation installation will require the excavation of holes that are approximately 30 feet deep. The underground duct banks will require the excavation of trenches that are three to five feet deep. Because paleontological resources are found beneath the surface, these activities have the greatest potential to disturb paleontological resources in areas where they have a potential to occur.

Within the Proposed Project area, construction activities at approximately 41 pole installations have a high potential to encounter buried paleontological resources and 59 pole installations have a moderate potential to encounter buried paleontological resources. At these pole locations, it is possible that excavation activities will result in damage to or destruction of buried paleontological resources. To minimize potential impacts to these resources, SDG&E will implement the previously described Project Design Features and Ordinary Construction/Operating Restrictions, as well as the following additional Project Design Features and Ordinary Construction/Operating Restriction, which has been included in Chapter 3 – Project Description:

- A qualified paleontologist will attend pre-construction meetings, as needed, to consult with the excavation contractor concerning excavation schedules, paleontological field techniques, and safety issues. A qualified paleontologist is defined as an individual with a Master of Science or Doctor of Philosophy in paleontology or geology who is experienced with paleontological procedures and techniques, who is knowledgeable in the geology and paleontology of San Diego County, and who has worked as a paleontological mitigation project supervisor in the region for at least one year. The requirements for paleontological monitoring will be noted on the construction plans. A paleontological monitor, defined as an individual who has experience in the collection and salvage of fossil materials, will work under the direction of a qualified paleontologist and will be on site to observe excavation operations that involve the original cutting of previously undisturbed deposits with high paleontological resource sensitivity (i.e., Mission Valley Formation and the upper sandstone unit of the Otay Formation). In the event that fossils are encountered, the paleontologist will have the authority to divert or temporarily halt construction activities in the area of discovery to allow recovery of fossil remains in a timely fashion. The paleontologist will contact SDG&E's Cultural Resource Specialist and Environmental Project Manager at the time of discovery. The paleontologist, in consultation with SDG&E's Cultural Resource Specialist, will determine the significance of the discovered resources. SDG&E's Cultural Resource Specialist and Environmental Project Manager must concur with the evaluation

procedures to be performed before construction activities are allowed to resume. Because of the potential for recovery of small fossil remains, it may be necessary to set up a screen-washing operation on site. If fossils are discovered, the paleontologist (or paleontological monitor) will recover them, along with pertinent stratigraphic data. Because of the potential for recovery of small fossil remains, recovery of bulk sedimentary-matrix samples for off-site wet screening from specific strata may be necessary, as determined in the field. Fossil remains collected during monitoring and salvage will be cleaned, repaired, sorted, cataloged, and deposited in a scientific institution with permanent paleontological collections. A final summary report will be completed that outlines the results of the recovery program. The report will discuss the methods used, stratigraphic section(s) exposed, fossils collected, and significance of recovered fossils.

With implementation of these Project Design Features and Ordinary Construction/Operating Restrictions, any potential impacts to paleontological resources will be less than significant.

Operation and Maintenance – Less-than-Significant Impact

Other than road maintenance activities, operation and maintenance activities will not require ground disturbance. However, if ground disturbance is required for the repair of Proposed Project components, it will be conducted in areas that were previously disturbed during construction. Therefore, operation and maintenance activities are not anticipated to have an adverse effect on paleontological resources, and impacts will be less than significant.

Question 4.5d – Human Remains Disturbance

Construction – Less-than-Significant Impact

No known cemeteries exist and no recorded Native American or other human remains have been previously identified within or adjacent to the Proposed Project area. As such, the potential for the unintended discovery of Native American or other human remains during subsurface construction activities required for the Proposed Project is considered to be low. If human remains are encountered during the course of construction, work will be halted in the vicinity of the find, and SDG&E will implement the appropriate notification processes as required by HSC 7050.5. As a result, any potential impacts will be less than significant.

Operation and Maintenance – Less-than-Significant Impact

Other than road maintenance activities, operation and maintenance activities will not require ground disturbance. However, if ground disturbance is required for the repair of Proposed Project components, it will be conducted in areas that were previously disturbed during construction. As previously described, the presence of human remains is considered unlikely in the Proposed Project area. If human remains are encountered, work will be halted in the vicinity of the find, and SDG&E will implement the appropriate notification processes as required by law. As a result, any potential impacts will be less than significant.

Question 4.5e – Tribal Cultural Resources – Less-than-Significant Impact

At this time, SDG&E is not aware of any tribal cultural resources in the APE. Tribal consultation will continue throughout all phases of the Proposed Project, as deemed necessary.

If any tribal cultural resources are identified in the Proposed Project area, they will be either avoided, preserved in place, or handled as determined during consultation. As a result, any potential impacts will be less than significant.

4.5.4 Applicant-Proposed Measures

Because the Proposed Project will not result in any significant impacts to cultural and paleontological resources, no applicant-proposed measures have been proposed.

4.5.5 References

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