TABLE OF CONTENTS

4.5 CU	LTURAL, PALEONTOLOGICAL, AND TRIBAL RESOURCES	4.5-1
4.5	0 Introduction	4.5-2
4.5	1 Methodology	4.5-2
	2 Existing Conditions	
4.5	3 Impacts	4.5-19
	4 Applicant-Proposed Measures	
	5 References	
	LIST OF TABLES	
	: Cultural Resources within the Proposed Project Study Area 2: Paleontologically Sensitive Geologic Formations Crossed	

LIST OF ATTACHMENTS

Attachment 4.5-A: NAHC Correspondence

4.5 CULTURAL, PALEONTOLOGICAL, AND TRIBAL 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 § 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) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?				✓
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			✓	

4.5.0 Introduction

This section describes the archaeological, historical, and paleontological resources identified within the vicinity of the proposed San Diego Gas & Electric Company (SDG&E) TL674A Reconfiguration & TL666D Removal Project (Proposed Project). The analysis in this section is based on the Cultural Resources Technical Report (CTR) for the Proposed Project that was prepared by AECOM in May 2017, as well as a Paleontological Technical Study that was completed by Paleo Solutions, Inc. (Paleo Solutions) in March 2017.

Cultural resources—as defined under the California Environmental Quality Act (CEQA)—include, but are not limited to, archaeological sites, sacred sites, tribal cultural resources, traditional cultural properties, rock art, rock piles or cairns, historical buildings, or other features of the historic built environment. Tribal cultural resources include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe and that are either listed in or eligible for inclusion in the California Register of Historic Resources (CRHR). 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 Restrictions, potential impacts to cultural and paleontological resources that may result from the Proposed Project will be reduced to a less-than-significant level.

4.5.1 Methodology

Cultural Resources

Records Search

The analysis in this section is based on the desktop and field-level research and investigation conducted to identify and delineate potential cultural and paleontological resources within the Proposed Project area. In September 2016, AECOM conducted a literature review of previously prepared reports and records provided by the South Coastal Information Center (SCIC) at San Diego State University. Record searches were conducted within a 0.5-mile radius from the center line of existing power line facilities associated with the Proposed Project. An additional records search was conducted for Proposed Project components located on State Parks-owned land within the Torrey Pines State Natural Reserve. AECOM conducted this work with the San Diego Coast District archaeologist. A cultural resources field survey of the Proposed Project area was conducted by AECOM in September and October 2016. The results from AECOM's literature review, records search, and field survey are included in the Proposed Project's CTR.

Native American Contacts

The Native American Heritage Commission (NAHC) was contacted for a Sacred Lands Record Search to obtain additional information regarding potential cultural resources within or near the Proposed Project area. The response from the NAHC indicated that no Native American traditional cultural places had been submitted for the Proposed Project area. The NAHC also identified 19 Native American representatives that may be knowledgeable about cultural resources within or near the Proposed Project area. AECOM sent letters to these representatives, and copies of the letters are included in Attachment 4.5-A: NAHC Correspondence. Responses received to date include correspondence from the Inaja Band of Mission Indians, the Campo

Band of Mission Indians, the Mesa Grande Band of Mission Indians, and the Kwaaymii Laguna Band of Mission Indians. No replies have been received to date from the remaining representatives.

Cultural Resources Field Survey

Cultural resources field surveys were conducted by AECOM archaeologists and an architectural historian between September 22 and October 21, 2016. The field surveys were conducted within the cultural resources study area established for the Proposed Project, which included a 300-foot corridor around the power lines and a 100-foot buffer around non-contiguous temporary work areas (Proposed Project study area). Temporary work areas included stringing sites, staging areas/fly yards, guard structures, work areas, and helicopter drop zones. No federal nexus is known or anticipated; therefore, the National Historic Preservation Act area of potential effects concept was not employed for this analysis.

Pedestrian archaeological and historic architecture surveys were conducted to identify cultural resources in the Proposed Project study area and to determine potential impacts that could occur during construction and operation and maintenance (O&M) the Proposed Project. A survey of land under the jurisdiction of the California Department of Parks and Recreation (DPR) was conducted on October 20 and 21, 2016 under California DPR 412A permit number 16-30. A Native American monitor from Red Tail Monitoring and Research was present during the survey.

Paleontological Resources

Records Search

Information on the geologic setting and the potential presence of paleontological resources was derived from published and unpublished geologic and paleontological reports. A paleontological records search was conducted using San Diego Natural History Museum (SDNHM) databases to identify fossil finds within a one-mile radius of the Proposed Project.

Field Investigation

A field investigation was conducted by Paleo Solutions on October 26 and November 13, 2016, which included thorough transects of the Proposed Project alignment. The field investigation focused primarily on previously undisturbed areas and prominent outcrops of native sedimentary units with high paleontological sensitivity. Field activities included the inspection of sediment and bedrock outcrops, the documentation of rock exposures and surrounding areas, the collection of reference points using a Global Positioning System unit, and the analysis of sediment and bedrock lithologies.

4.5.2 Existing Conditions

Regulatory Background

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 historic properties. Historic 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 National Register of Historic Places (NRHP). The governing regulation, Section 106 of the NHPA—which is codified in Title 36 of the Code of Federal Regulations (CFR) Part 800—requires the project's lead federal agency to consult with the State Historic Preservation Officer regarding potential impacts to historic 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 can be found in 36 CFR Part 60.

American Indian Religious Freedom Act of 1978

The American Indian Religious Freedom Act 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.

Paleontological Resources Preservation Act

On March 30, 2009, the Paleontological Resources Preservation Act (16 United States [U.S.] Code § 470aaa) became law. This law requires the U.S. Secretary of the Interior and Secretary of Agriculture to manage and protect paleontological resources on federal lands using scientific principles and expertise. New policies from the agencies regarding paleontological resources are now in progress.

State

California Environmental Quality Act

CEQA requires that impacts to cultural resources must be identified and, if impacts will be significant, that mitigation measures must be implemented to reduce those impacts to the extent feasible. In the protection and management of the cultural environment, both the statute and its CEQA Guidelines provide definitions and standards for cultural resources management. Pursuant to Section 15064.5(a) of the CEQA Guidelines, the term "historical resource" includes the following:

- A resource listed in the CRHR, or determined by the State Historical Resources Commission to be eligible for listing in the CRHR.
- A resource included in a local register of historical resources or identified as significant in a historical resource survey will 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, place, record, or manuscript that a lead agency determines to be historically significant or that is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource will be considered by the lead agency to be "historically significant" if the resource meets the following criteria for listing in the CRHR:

- It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- It is associated with the lives of persons who are important in our past.
- It embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of an important creative individual; or possesses high artistic values.
- It has yielded, or may be likely to yield, information important in prehistory or history.
- The fact that a resource is not listed in the CRHR, is not determined to be eligible for listing in the CRHR, is not included in a local register of historical resources, or is identified in a historical resources survey does not preclude a lead agency from determining that the resource may be a historical resource.

As defined in Section 21083.2(g) of the Public Resources Code (PRC), a "unique archaeological resource" includes the following:

- 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:
 - It contains information needed to answer important scientific research questions, and there is a demonstrable public interest in that information.
 - It has a special and particular quality, such as being the oldest of its type or the best available example of its type.
 - It is directly associated with a scientifically recognized, important prehistoric or historical event or person.

Section 15064.5(b)(1) of the CEQA Guidelines explains that effects on cultural properties that qualify as historical resources or unique archaeological resources will be considered adverse if they involve physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource will be materially impaired.

The statutes and the CEQA Guidelines cited 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 (PRC § 21000 et seq.). Paleontological resources are limited, non-renewable resources of scientific, cultural, and educational value. CEQA and PRC Section 5097 et seq. govern the preservation and protection of these resources.

Assembly Bill 52

Assembly Bill (AB) 52 amends CEQA by creating a new category of cultural resources, tribal cultural resources, and new requirements for consultation with Native American tribes. AB 52 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 defines "tribal cultural resources" as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe and that are either listed in the CRHR or eligible for inclusion in the CRHR. A lead agency, at its discretion and supported by substantial evidence, may choose to treat a resource as a tribal cultural resource. AB 52 requires early notice and consultation with California Native American tribes on the NAHC list, if requested by a tribe. Lead agencies will be required to offer Native American tribes the opportunity to consult on CEOA documents if the tribes have an interest in tribal cultural resources located within their jurisdiction. The new procedures under AB 52 offer the tribes an opportunity to take an active role in the CEQA process to protect tribal cultural resources. If the tribe requests consultation within 30 days upon receipt of the notice, the lead agency must consult the tribe. AB 52 went into effect on July 1, 2015. In November 2015, the Governor's Office of Planning and Research (OPR) requested public input on the draft CEQA guidelines that were revised to include tribal cultural resources. The OPR approved revised CEQA Guidelines incorporating AB 52 requirements on September 27, 2016.

AB 52 was codified in Sections 5097.94, 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3 of the PRC. The provisions under these sections govern the consultation procedures with Native American tribes with respect to tribal cultural resources and the inclusion of mitigation or avoidance measures in environmental documents. The provisions under these sections also address the exchange of confidential information obtained from a California Native American tribe and define what a California Native American tribe means in the context of the consultation process.

California Register of Historical Resources

The CRHR is a public listing of specific properties to be "protected from substantial adverse change," and it was established by the California Office of Historic Preservation. Any resource eligible for listing in the CRHR must also be considered under CEQA, as described under PRC Section 21000 et seq. and the CEQA Guidelines.

A historical resource may be listed in 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; represents the work of a master; or possesses high artistic value.
- It has yielded or has the potential to yield information that is important in the prehistory or history of the local area, California, or the nation.

Automatic listings include properties listed in the NRHP—which are determined to be eligible either by the Keeper of the National Register or through a consensus determination on a project

review—and California Historical Landmarks from number 770 onward. In addition, Points of Historical Interest nominated since January 1998 are to be jointly listed as Points of Historical Interest and in the CRHR. California Historical Landmarks prior to number 770 and Points of Historical Interest may be listed through an action of the State Historical Resources Commission.

Resources listed in a local historic register or deemed significant in a historical resources survey, as provided under PRC Section 5024.1(g), are presumed to be historically or culturally significant unless the preponderance of evidence demonstrates that they are not. A resource may still be historically significant even if it is not listed in the CRHR, 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 (PRC § 21084.1).

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

Broad provisions for the protection of Native American cultural resources are contained in Division 7, Part 2, Chapter 5 (§§ 8010 through 8030) of 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 who 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 Section 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, and the NAHC must determine and notify the Most Likely Descendant (MLD). The MLD may make recommendations for the 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

The Proposed Project is not subject to local discretionary land use regulations because the CPUC has exclusive jurisdiction over the siting, design, and construction of the Proposed Project. The following analysis of local regulations relating to cultural resources is provided for informational purposes.

City of San Diego Municipal Code

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. These regulations and policies establish the Historical Resources Board authority, appointment and terms, meeting conduct, and powers and duties; the designation process including the nomination process, noticing and report requirements, appeals, recordation, amendments or recision, and nomination of historical resources to state and national registers; and development regulations for historical resources. The purpose of these regulations is to protect, preserve, and restore (if damaged) the historical resources of the City of San Diego.

The historical resources regulations require that designated historical resources, important archaeological sites, and traditional cultural properties be 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 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.

City of San Diego Land Development Manual

In the City of San Diego's Land Development Manual, the Historical Resources Guidelines provide property owners, the development community, consultants, and the general public with 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. The guidelines also address the need for a survey, how impacts are to be assessed, available mitigation strategies, and report requirements. They also include appropriate methodologies for treating historical resources located in the City of San Diego.

City of Del Mar Community Plan and Municipal Code

The Community Plan and Municipal Code for the City of Del Mar do not contain any goals or policies that are relevant to cultural or paleontological resources in the Proposed Project area.

Cultural Setting

The following subsections describe the cultural setting of the Proposed Project area. The Proposed Project's CTR contains a more detailed description of the setting, including all sources used in the preparation of the study.

Prehistoric Background

The Proposed Project is located along the central San Diego coast within the Southern Coast Archaeological Region of California. The approximately 10,000 years of documented prehistory of the San Diego region is often divided into the Early Prehistoric Period (San Dieguito tradition/complex), Archaic Period (Milling Stone Horizon, Encinitas tradition, and La Jolla and Pauma complexes), and Late Prehistoric Period (Cuyamaca and San Luis Rey complexes). These prehistoric periods are described in the following subsections.

Early Prehistoric Period

The Early Prehistoric Period represents the time period of the first known inhabitants in California. This time period is often referred to as the Paleo-Indian period and is defined by biggame hunting activities occurring during the Terminal Pleistocene (pre-10,000 years ago) and the Early Holocene (10,000 years ago). Cultural assemblages associated with Paleo-Indian or biggame hunting peoples in the western U.S. during this time period include large fluted spear and Fluted-Point Tradition projectile points.

The best-documented sites in the San Diego area from the Early Prehistoric Period belong to the San Dieguito Tradition, which dates back to 9,000 years ago. This tradition is characterized by an artifact inventory consisting almost entirely of flaked stone biface and scraping tools, and lacks the fluted points associated with the Fluted-Point Tradition. Diagnostic artifact types and categories associated with the San Dieguito Tradition include elongated bifacial knives; scraping tools; crescentics; and Silver Lake, Lake Mojave, and leaf-shaped projectile points. It has been suggested that the subsistence system or emphasis of the San Dieguito Tradition is a hunting economy, based on an artifact assemblage of tools that were primarily associated with hunting, in contrast to the more gathering-oriented complexes that were to follow in the Archaic Period. Other researchers have interpreted the San Dieguito subsistence system to be possibly ancestral to the predominantly gathering-oriented "La Jolla/Pauma complex" of the Archaic Period.

Archaic Period

In the southern coastal region, the Archaic Period dates from 8,600 Before Present (B.P.) to 1,300 B.P. A large number of archaeological site assemblages from this period have been identified at several coastal and inland sites. These assemblages, designated as the La Jolla/Pauma complexes, generally include manos and metates; shell middens; terrestrial and marine mammal remains; burials; rock features; bone tools; doughnut stones; discoidals; stone balls; plummets; biface points/knives; and beads made of stone, bone, or shell. Coastal sites typically include cobble-based tools, and inland sites typically include hunting equipment and quarry-based tools.

Archaic Period sites are more numerous along the coast, including several in the vicinity of the Proposed Project area. While inland archaeological sites containing Archaic Period assemblages are not unknown in the central San Diego County area, most of the substantiating archaeological evidence is derived from sites in near-coastal valleys, estuaries, and/or embayments that are along the San Diego coast south of the San Luis Rey River (e.g., the Scripps Estate Site). The Proposed Project area closest to the coast is located within an area where Archaic Period sites are commonly found that may contain La Jolla/Pauma complex assemblages.

Several sites dating to the Archaic Period are located within, or in proximity to, the Proposed Project study area. Four sites recorded within the Proposed Project study area have been identified as Archaic Period sites using radiocarbon and/or relative dating methods. Investigations at CA-SDI-10,238 have produced radiocarbon dates from a shell midden deposit, spanning the middle to early Archaic Period from approximately 5790 to 7690 B.P. CA-SDI-4513/4609/5443 is the recorded location for the ethnohistoric village of Ystagua.

Late Prehistoric Period

The beginning of the Late Prehistoric Period is characterized by evidence of several new tool technologies and subsistence shifts in the archaeological record. The changes observed in the archaeological record during the Late Prehistoric Period include shifts in settlement patterning, a reduction in shellfish gathering, an increase in the storage of food (e.g., acorns), the production of pottery, the use of the bow and arrow for hunting, and the cremation of the dead.

Based on early research, the Cuyamaca and San Luis Rey complexes have been proposed for the Late Prehistoric Period in modern-day San Diego County. Cuyamaca complex sites generally contain both Cottonwood Triangular-style points and Desert Side-notched arrow points, while Desert Side-notched points are rare or absent in San Luis Rey complex sites. Other examples include ceramics and Obsidian Butte obsidian, the latter of which is far more common in Cuyamaca complex sites than in San Luis Rey complex sites. Ceramics are more common in the southern or Cuyamaca complex portions of San Diego County. Both the Cuyamaca and San Luis Rey complexes have produced a variety of vessel types, along with rattles, straight and bow-shaped pipes, and effigies. Interment of the dead at Cuyamaca complex sites is almost exclusively by cremation and often in special burial urns for interment, while archaeological evidence from San Luis Rey complex sites indicates both inhumation and cremation. Based on ethnographic data, it is now generally accepted that the Cuyamaca complex is associated with the Yuman Diegueño/Kumeyaay people and the San Luis Rey complex is associated with the Shoshonean Luiseño/Juaneño people. Archaeological data indicate that the Proposed Project is located within areas that may contain Cuyamaca complex assemblages.

Compared to Archaic Period sites, Late Prehistoric Period sites attributable to the San Luis Rey or Cuyamaca complexes are less common in the near-coastal areas of San Diego County. The best-documented and closest Late Prehistoric Period site to the Proposed Project is CA-SDI-4513/4609/5443, which is the previously described ethnohistoric village of Ystagua. This site contains a significant Late Prehistoric Period Cuyamaca complex artifact assemblage that includes ceramics, Desert Side-notched points, Cottonwood Triangular points, and 38 radiocarbon dates ranging from approximately 5,040 to 220 B.P. CA-SDI-4625 has been noted to contain both Desert Side-notched and Cottonwood Triangular points from the Late Prehistoric Period.

Ethnographic Setting

Ethnographically, the Proposed Project area is situated within the traditional territory of the prehistoric Yuman people who were inhabiting the area at the time of European contact. These people were first designated by the Spaniards as the Diegueño, which is a term that originates from the Mission San Diego de Alcalá. More recently, "Kumeyaay"—a Yuman term—has been initiated for the people formerly designated as the Diegueño. The term Diegueño was adopted

by early anthropologists and further divided into the southern and northern Diegueño. Researchers have designated the Kumeyaay living north of the San Diego River as 'Iipai (Northern Diegueño), and those living south of the river and into Baja California as Tipai (Southern Diegueño). The southern boundary between the territories of the Shoshonean Luiseño/Juaneño and the Northern Diegueño, or 'Iipai Kumeyaay, extended from the coast eastward along Agua Hedionda Creek to the northern tip of the valley between the San José and Palomar mountains.

The Kumeyaay maintained a large territory bordered by the San Luis Rey River to the north, Baja California to the south, the Pacific Ocean to the west, and the Imperial Valley to the east. It has been estimated that approximately 3,000 inhabitants were present in this area during the mission era. The Kumeyaay depended on seeds, acorns, nuts, beans, and berries. Large and small game were hunted with bows and arrows. Fishing occurred at rivers and the Pacific Ocean. Similar to the Luiseño, the Kumeyaay utilized different resource areas depending on the season. They sometimes inhabited larger villages during winter or summer months, and clans had access to their own land and resources.

Historic Setting

Coastal Southern California's historic period began in September 1542 when Juan Rodriguez Cabrillo reached San Diego Bay as part of his expedition up the coast north of "New Spain." Although the impact of that single event did not cause instant changes in the region, it marks the opening of the area to new contact, colonialism, and cultural shifts. The Spanish period (1769 to 1821) began more than 200 years after the time of Cabrillo's initial explorations. The Spanish period represents a time of European exploration and settlement. In 1769, Gaspar de Portola's expedition was the driving force of Spanish Imperial expansion into Alta California, seeking suitable locations to establish military presidios and religious missions up the coast. Built between 1769 and 1821, the San Diego presidio and the San Diego, San Luis Rey, and San Juan Capistrano missions stood as symbols of Spanish colonialism. These establishments imported new systems of labor, demographics, settlement, and economies to the area. The cultural systems and institutions established by the Spanish continued to influence the region beyond 1821, when California came under Mexican rule.

The Mexican period (1821 to 1848) retained many of the Spanish institutions and laws. The missions continued to operate as they had in the past, and laws governing the distribution of land were also retained for a time. One major alteration occurred in 1835 when the missions were secularized and their large landholdings were made available to private citizens. This allowed for increased Mexican settlement, but it also meant that many Native Americans were dispossessed. After secularization, large tracts of land were granted to individuals and families, and a rancho system was established. Land was used primarily for grazing cattle. Cattle ranching dominated the agricultural activities, and development of hide and tallow trade with the U.S. increased during the early part of this period. The Mexican period ended when Mexico ceded California to the U.S. after the Mexican-American War (1846 to 1848).

The American period (1848 to present) brought an influx of settlers to California who were driven by the prospects of gold, the end of the Civil War, and the passage of the Homestead Act implementing the U.S.'s manifest destiny to occupy and exploit the North American continent.

The 1880s saw "boom and bust" cycles that brought thousands of people to the San Diego region. Sparse settlements and ranching lifestyles defined much of the 19th and early 20th century. The influence of military development, beginning in 1916 and 1917 during World War I, moved much of the population away from this life, and the need to fight a two-ocean war during World War II resulted in substantial development in infrastructure and industry to support the military and accommodate soldiers, sailors, and defense industry workers. Aspects of development included the creation of transportation networks based on port facilities, railroads, highways, and airports; more elaborate systems of water supply and flood control; grazing livestock and growing a changing array of crops; supporting military facilities, including the extensive Camp Pendleton facility established in 1942; limited amounts of manufacturing; and accommodating visitors and retirees. Following World War II, residential densities on the coast spiked due to the Interstate 5 corridor connecting the once-remote coastal region to other urban centers of the California coastline.

Proposed Project Area Historic Background

The first attempt to establish a city on the San Diego Bay occurred in 1850 when William Heath Davis and Andrew B. Gray purchased approximately 160 acres of bayfront property bounded by present-day Broadway, Market Street, First Street, and Pacific Highway. However, due to financial and other constraints, this initial enterprise was unsuccessful. It was not until approximately 20 years later that Southern California's first true boom resulted in the establishment of the City of San Diego.

San Diego's first boom was due to the energy of Alonzo E. Horton, a San Francisco merchant and former land speculator who came to California to seek his fortune in the gold rush. He established a mercantile business in San Francisco and, in 1867, he purchased a tract of approximately 1,000 acres on San Diego Bay. In 1869, people began pouring into San Diego to buy lots from Horton. By March 24, 1869, 124 dwellings had been erected. Framed Italianate-style buildings, which were typical of most urban areas of the west, dominated the local architecture for the next 15 years. By 1870, San Diego was a community of approximately 2,300 inhabitants. On April 3, 1871, the county courts moved from Old San Diego to Horton's Addition, signifying that San Diego was no longer to be identified as a small pueblo of adobe houses, but as a city on the bay.

The Community of Del Mar started in 1882 when Theodore M. Loop purchased land and built a home on the north side of Los Peñasquitos Lagoon. Del Mar was officially founded later in 1882, when Colonel Jacob Taylor, a resident of Rancho Peñasquitos, saw the potential for a seaside resort. Taylor and Loop purchased a total of 338.11 acres from homesteader Enoch Talbert for \$1,000. The vision was to transform the new town into an attraction for the rich and famous. Throughout the early 20th century, many Hollywood stars frequented the area's attractions. The Depression affected the growth of Del Mar, but the selection of the San Dieguito Valley as the site for the San Diego County Fair brought life once again to Del Mar. The first San Diego County Fair opened on October 8, 1936, and was attended by 50,000 people. In 1937, the Del Mar Turf Club was opened next to the fairgrounds as a place for horse racing.

During World War II, the racetrack was closed, and the club and the surrounding fairgrounds were utilized by the U.S. military. By 1943, the troops had left the racetrack and the area was utilized to manufacturer parts for the B-17 "Flying Fortress" bomber up until 1944. After World War II, life in Del Mar resumed and the San Diego County Fair opened once again. Del Mar became a city in 1959, and the city continued to flourish during the 1960s. The University of California, San Diego opened in nearby La Jolla and brought more socially active and environmentally aware residents to Del Mar.

Cultural Resources in the Proposed Project Area

Records Search Results

The records search indicated that 191 previously recorded cultural resources have been recorded within 0.5 mile of the Proposed Project. None of the resources in the Proposed Project study area or the 0.5-mile buffer area are listed in or have been determined eligible for listing in the CRHR or NRHP, and none are listed as a California Historical Landmark or California Point of Historical Interest.

These 191 previously recorded resources include 124 prehistoric archaeological sites and 41 prehistoric isolates; nine multi-component (prehistoric and historic) archaeological sites; 14 historic sites, structures, or buildings; two historic isolates; and one unknown site. The temporal affiliation of one resource, a rock cairn, is indefinite. The 124 prehistoric archaeological sites include one bedrock milling site, one rock art site, and 10 sites recorded as hearths. The remaining 112 sites, depending on content, represent either temporary or permanent habitation locations or locations where resource procurement and/or processing occurred. The function of four sites are unknown because a site description was not included on the original site form for these sites. Most of the 41 prehistoric isolates likely also represent locations where some, more minimal, resource procurement and/or processing activity occurred. The 14 historic sites include one standing building residence, two cisterns, one railroad bridge, one railroad line, one well, one water control feature, one water tank, and six trash scatters.

Of the 191 previously recorded cultural resources, 24 were recorded within the Proposed Project study area, including 18 sites and five isolates. The 18 previously identified sites include the following:

- One prehistoric archaeological site (CA-SDI-16,653, which consists of sites CA-SDI-195 and CA-SDI-4629)
- One multi-component site containing prehistoric shell scatter and historic trash scatter (CA-SDI-14,457)
- One multi-component site containing prehistoric lithic scatter and historic trash scatter (CA-SDI-20,839)
- Three historic sites containing a cistern (CA-SDI-14,456), a cistern and trash scatter (CA-SDI-14,457), and trash scatter (CA-SDI-12,122)
- Six prehistoric habitation or seasonal habitation sites (CA-SDI-191, CA-SDI-197, CA-SDI-686, CA-SDI-7289, CA-SDI-5957, CA-SDI-14,460, and CA-SDI-17,388)
- Two unknown sites (CA-SDI-192 and CA-SDI-193)
- One prehistoric lithic scatter site (CA-SDI-531)

- Two prehistoric lithic scatter and shell scatter sites (CA-SDI-10,143 and CA-SDI-12,121)
- One lithic scatter and hearths site (CA-SDI-16,253)

Native American Contact and Tribal Consultation

An email was sent to the NAHC on September 6, 2016, requesting a search of its Sacred Lands File and a list of Native American individuals and organizations that might have knowledge of or concerns regarding cultural resources within the Proposed Project area. A response was received on September 9, 2016, indicating that no Native American sacred places or sites are on file within the Proposed Project site. The NAHC identified 19 Native American representatives, and a letter was sent to each on September 9, 2016. A list of all Native American recipients is provided in the Cultural Resources Survey Report prepared by AECOM. A comment letter was sent by Rebeca Osuna from the Inaja Band of Mission Indians (Inaja) on September 14, 2016, and she stated that the Inaja did not have any comments on the Proposed Project. On October 21, 2016, Ralph Goff from the Campo Band of Mission Indians and Virgil Oyos's assistant from the Mesa Grande Band of Mission Indians indicated via phone that they had no issues or concerns with the Proposed Project. Carmen Lucas from the Kwaaymii Laguna Band of Mission Indians returned a voice message on October 21, 2016, and stated that the Proposed Project area is rich with cultural resources and that an archaeological monitor and qualified Native American monitor should be present during construction. Responses have not been received from the 15 remaining Native American representatives.

Archaeological Field Investigation Results

Between September 22 and October 21, 2016, the Proposed Project study area was surveyed to identify cultural resources. The survey resulted in the identification of 45 total resources, including 22 archaeological sites, 12 isolates, and 11 built environment resources. Of the 45 resources identified during the survey, 27 resources were previously recorded and 18 resources were newly identified. The cultural resources identified within the Proposed Project area are summarized in Table 4.5-1: Cultural Resources within the Proposed Project Study Area.

Paleontological Resources in the Proposed Project Area

The Proposed Project is underlain primarily by Eocene-, Pleistocene-, and Holocene-age sedimentary deposits. The sedimentary deposits, grouped by geological age, include the following:

- Eocene-age deposits, including Ardath Shale, Delmar Formation, Torrey Sandstone, Scripps Formation, and undivided Eocene deposits;
- Pleistocene-age deposits, including old and very old paralic deposits; and
- Holocene-age deposits, including artificial fill, young alluvial floodplain deposits, paralic estuarine deposits, wash deposits, and marine beach deposits.

The paleontological potential of the sedimentary formations crossed by the Proposed Project is provided in Table 4.5-2: Paleontologically Sensitive Geologic Formations Crossed.

Table 4.5-1: Cultural Resources within the Proposed Project Study Area

Site Number	Resource Type	Site Type	Newly Recorded?	Impact by the Proposed Project?	CRHR Eligibility Status
CA-SDI-191	Prehistoric	Habitation site	No	Yes	May be eligible+
CA-SDI-192	Prehistoric	Unknown	No	No	Not evaluated*
CA-SDI-193	Prehistoric	Unknown	No	Yes	May be eligible+
CA-SDI-197	Prehistoric	Unknown	No	Yes	Not eligible
CA-SDI-531	Prehistoric	Habitation site	No	No	Not evaluated*
CA-SDI-686	Prehistoric	Habitation site	No	Yes	May be eligible+
CA-SDI-5957	Prehistoric	Habitation site	No	No	Not evaluated*
CA-SDI-7289	Prehistoric	Habitation site	No	No	Not evaluated*
CA-SDI-10143	Prehistoric	Lithic and shell scatter	No	No	Not evaluated*
CA-SDI-12121	Prehistoric	Lithic and shell scatter	No	No	Not evaluated*
CA-SDI-12122	Prehistoric	Lithic and shell scatter	No	No	Not evaluated*
CA-SDI-14456	Historic	Cistern	No	No	Not evaluated*
CA-SDI-14457	Multi-component	Debris and shell scatter	No	No	Not evaluated*
CA-SDI-14458	Historic	Debris scatter and cisterns	No	No	Not evaluated*
CA-SDI-14460	Prehistoric	Habitation site	No	No	Not evaluated*
CA-SDI-16237	Prehistoric	Habitation site	No	No	Not evaluated*
CA-SDI-16653	Prehistoric	Habitation site	No	Yes	May be eligible+
CA-SDI-17388	Prehistoric	Habitation site	No	No	Not evaluated*
CA-SDI-20839	Multi-component	Debris scatter and lithic scatter	No	No	Not evaluated*
P-37-035936	Historic	Del Mar Racetrack and outer buildings	No	No	Eligible

Site Number	Resource Type	Site Type	Newly Recorded?	Impact by the Proposed Project?	CRHR Eligibility Status
P-37-014052	Historic	El Camino Real	No	No	Eligible
Sorrento Tower	Historic	Sorrento Valley Industrial Park	Yes	Yes	Eligible
CA-SDI-22046	Prehistoric	Prehistoric bedrock milling	Yes	No	Not evaluated*
CA-SDI-22047	Prehistoric	Lithic and shell scatter	Yes	No	Not evaluated*
CA-SDI-22048	Historic	Historic trash dump	Yes	No	Not evaluated*
P-37-036418	Historic	Del Mar Substation	Yes	Yes	Not eligible
P-37-036412	Historic	1601 San Dieguito Drive	Yes	No	Not eligible
P-37-036413	Historic	1604 San Dieguito Drive	Yes	No	Not eligible
P-37-036415	Historic	TL666D	Yes	Yes	Not eligible
P-37-036414	Historic	Commercial	Yes	No	Not eligible
P-37-036422	Historic	Corrugated metal warehouse	Yes	Yes	Not eligible
P-37-036423	Historic	Old Grand Avenue Bridge	Yes	Yes	Not eligible
P-37-036419	Historic	Old Pacific Surf Liner Railroad	Yes	Yes	Not eligible
P-37-016571	Prehistoric	Shell	No	No	Not eligible
P-37-016572	Prehistoric	Shell	No	No	Not eligible
P-37-033076	Prehistoric	Lithic scatter	No	No	Not eligible
P-37-033077	Prehistoric	Lithic scatter	No	No	Not eligible
P-37-034567	Prehistoric	Chopper	No	Yes	Not eligible
P-37-036421	Historic	Insulator	Yes	No	Not eligible
P-37-036427	Prehistoric	Flake	Yes	No	Not eligible
P-37-036428	Prehistoric	Flake	Yes	No	Not eligible

Site Number	Resource Type	Site Type	Newly Recorded?	Impact by the Proposed Project?	CRHR Eligibility Status
P-37-036429	Prehistoric	Lithic scatter	Yes	No	Not eligible
P-37-036424	Prehistoric	Flake	Yes	No	Not eligible
P-37-036425	Prehistoric	Ceramic sherd	Yes	No	Not eligible
P-37-036426	Prehistoric	Shell	Yes	No	Not eligible

Notes:

^{+ =} Sites that may be eligible for listing, but a testing program is not feasible or safe.

* = Sites that are not within the area of direct impact were not evaluated because they will not be impacted and can be avoided by construction.

Table 4.5-2: Paleontologically Sensitive Geologic Formations Crossed

Paleontological Potential	Geologic Formation	Age	Length Crossed by the Proposed Project (miles)
	Torrey Sandstone	Eocene	1.8
	Delmar Formation	Eocene	0.3
High Potential	Old paralic deposits	Pleistocene	1.8
	Very old Paralic deposits	Pleistocene	1.0
	Subtotal	-	4.9
	Paralic estuarine deposits	Holocene	1.7
Low Potential	Young alluvial floodplain deposits	Holocene	1.6
Low Potential	Artificial fill	Not Applicable	0.3
	Subtotal		3.6

A review of the SDNHM Department of PaleoServices' paleontological locality and specimen records revealed 215 recorded fossil localities from within one mile of the Proposed Project alignment. Eocene-age sedimentary deposits yielded 185 recorded fossil localities. Of these, 75 localities were recorded from the Ardath Shale, 54 localities were recorded from the Delmar Formation, 17 localities were recorded from the Torrey Sandstone, and 39 localities were recorded from the Scripps and Friar Foundation—the latter of which is not mapped within the Proposed Project alignment. Fossils recorded from the Eocene-age sedimentary deposits include trace fossils, plant impressions, marine and terrestrial invertebrates, marine and terrestrial invertebrates, and freshwater vertebrates.

Twenty-nine fossil localities were recorded from the old paralic deposits, and one fossil locality was recorded from the very old paralic deposit. Fossil localities recorded from the Pleistoceneage include trace fossils, marine and terrestrial invertebrates, and marine and terrestrial vertebrates. No fossil localities were recorded within one mile of the Proposed Project alignment from Holocene-age sedimentary deposits.

In addition to reviewing the SDNHM paleontological locality and specimen records, a field survey was conducted of the Proposed Project area. During the survey, four non-significant fossil localities were recorded. All four fossil localities consisted of invertebrate shells and shell fragments, and were recorded from sediments of the Eocene-age Delmar Formation.

4.5.3 Impacts

Significance Criteria

Standards of significance were derived from Appendix G of the CEQA Guidelines. Impacts to cultural, paleontological, and tribal resources will 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
- Directly or indirectly destroys a unique paleontological resource or site or unique geologic feature
- 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 PRC Section 21074

Question 4.5a – Historical Resource Change

Construction – Less-than-Significant Impact

The majority of the identified historical resources within the Proposed Project study area will not be located within work areas requiring ground disturbance. Therefore, these resources will not be impacted by Proposed Project construction and are not be discussed further. As presented in Table 4.5-1: Cultural Resources within the Proposed Project Study Area, the Proposed Project will potentially impact the following six historical resources:

- Sorrento Tower Sorrento Valley Industrial Park
- P-37-036418 Del Mar Substation
- P-37-036415 TL666D
- P-37-036422 Corrugated metal warehouse
- P-37-036423 Old Grand Avenue Bridge
- P-37-036419 Old Pacific Surf Liner Railroad

The Sorrento Tower was determined to be eligible for inclusion in the CRHR. The remaining five historical resources were determined not to be eligible for CRHR listing. As described in the Cultural Resources Survey Report, P-37-036422 (Corrugated metal warehouse) and P-37-036419 (Old Pacific Surf Liner Railroad) are not located in the vicinity of any Proposed Project components requiring ground disturbance. Because disturbance near these resources will only include light foot traffic, the significance of these historical resources will not be changed by Proposed Project construction.

Construction activities will require ground disturbance within the direct vicinity of the historic Sorrento Tower, Del Mar Substation, TL666D, and the Old Grand Avenue Bridge. Proposed ground-disturbing activities within 100 feet of these resources include the installation of underground facilities, pole installation, and removal of existing poles. As described in the CTR, site investigations and historic research indicated that the portion of TL666D within the

Proposed Project area does not possess the requisite significance to be eligible for listing in the NRHP or CRHR. In addition, pole removal and replacement activities were periodically conducted on this portion of TL666D between the 1920s and 1980s. Based on the previous alterations of TL666D and its ineligibility for listing in the NRHP and CRHR, removal activities associated with this portion TL666D will not result in a substantial or adverse change in the significance of TL666D. To ensure that historical resources are not impacted during construction, SDG&E will implement the following Project Design Features and Ordinary Construction Restrictions, which have been included in Chapter 3 – Project Description:

- Cultural Resource Monitoring. A qualified archaeologist will monitor ground-disturbing activities in all cultural resource sites identified within Proposed Project impact areas. The requirements for archaeological monitoring will be noted in 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.
- Cultural Resource Training. Prior to construction, all SDG&E, contractor, and subcontractor personnel on the Proposed Project will receive training regarding the appropriate work practices necessary to effectively implement SDG&E's Project Design Features and Ordinary Construction 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 paleontological resources.
- Cultural Resource Discovery. 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 at an appropriate institution. All artifacts will be analyzed to identify their 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 Restrictions, construction of the Proposed Project will not change the significance of historical resources. Ground-disturbing activities will be performed under the supervision of a qualified archaeologist who will have the authority to stop or divert construction in the event of a discovered historical resource. Should a historical resource be discovered, it will be recorded and handled in accordance with SDG&E's Project Design Features and Ordinary Construction Restrictions. Furthermore, construction personnel will receive training on the potential for

exposing subsurface historical resources and how to recognize potential buried resources, along with procedures to follow if historical materials are discovered. As a result, any potential impacts to historical resources will be less than significant.

Operation and Maintenance - No Impact

O&M activities for the Proposed Project will be conducted in the same manner as they were prior to construction of the Proposed Project. As described in Chapter 3 – Project Description, the proposed underground duct banks within Via De La Valle will be installed parallel to existing facilities where O&M activities are currently being conducted. The removal of approximately six miles of 69 kilovolt power lines from TL666D will eliminate all future O&M activities associated with these facilities. The conversion of C510 and C738 will eliminate O&M requirements associated with approximately 4,530 feet of existing overhead distribution line. Although these conversions will introduce approximately 4,230 feet of new underground duct bank, SDG&E currently owns and operates existing underground distribution facilities in the vicinity of these Proposed Project components. Based on the removal of existing overhead facilities and the installation of Proposed Project components in areas already covered by existing O&M activities, post-construction O&M requirements in the Proposed Project area will be reduced, and no new impacts will occur.

Ground disturbance is not anticipated during O&M of the Proposed Project. However, in the event that ground-disturbing activities are required during O&M, these activities will be conducted in areas that were previously disturbed during construction. Therefore, historical resources will not be encountered during O&M, 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 Proposed Project Study Area, 24 archaeological resource sites are located within the Proposed Project study area. Of these, 18 archaeological sites are located near Proposed Project components in work areas that will not require ground disturbance. Therefore, these sites are not evaluated further. The remaining six sites could potentially be impacted during construction based on their proximity to work areas involving proposed ground-disturbing activities. Construction of the Proposed Project may potentially impact the following six archaeological sites:

- CA-SDI-191 Prehistoric habitation site
- CA-SDI-193 Unknown
- CA-SDI-197 Shell scatter
- CA-SDI-686 Prehistoric habitation site
- CA-SDI-16653 Prehistoric habitation site
- P-37-034567 Chopper

Two of the six sites identified, which include a shell scatter (CA-SDI-197) and chopper (P-37-034567), were determined not to be eligible for CRHR listing. An evaluation of the remaining four sites indicated that they may be eligible for CRHR listing. One prehistoric habitation site is partially located within the footprint of the Pumpkin Patch staging area/fly yard. Although no

Proposed Project components will be installed within the staging area/fly yard, minor ground disturbance may be required during the initial setup of the staging area/fly yard. As part of SDG&E's previously described Project Design Features and Ordinary Construction Restrictions, a qualified archaeologist will monitor ground-disturbing activities in all cultural resource sites, including the prehistoric habitation site within the Pumpkin Patch staging area/fly yard. Therefore, potential cultural resources will be properly identified and preserved during construction activities within the site and impacts will be less than significant.

Additional ground-disturbing activities proposed within 100 feet of the six identified archaeological sites include the installation of underground facilities and pole installation and removal. Potential impacts may result from pole removal and excavations required for pole holes, underground facilities, and foundations. To minimize potential impacts to the extent possible, SDG&E will implement the Project Design Features and Ordinary Construction Restrictions described previously in the response to Question 4.5a.

The Project Design Features and Ordinary Construction Restrictions will require that ground-disturbing activities associated with construction of the Proposed Project must be monitored by a qualified archaeologist who will have the authority to stop or divert construction in the event of a discovered archaeological resource. Should an archaeological resource be discovered, it will be recorded and handled in accordance with SDG&E's aforementioned Project Design Features and Ordinary Construction Restrictions. Furthermore, construction personnel will receive training on the potential for exposing subsurface archaeological resources and how to recognize potential buried resources, along with procedures to follow on the discovery of archaeological materials. With the implementation of these Project Design Features and Ordinary Construction Restrictions, potential impacts to known archaeological resources will be less than significant.

Operation and Maintenance – No Impact

As discussed in the response to Question 4.5a, O&M activities will be conducted in the same manner as they were prior to construction of the Proposed Project. Based on the removal of existing overhead facilities and the installation of Proposed Project components in areas already covered by existing O&M activities, post-construction O&M requirements in the Proposed Project area will not change.

Ground disturbance is not anticipated during O&M of the Proposed Project. However, if ground-disturbing activities are required during O&M, these activities will be conducted in areas that were previously disturbed during construction. Therefore, no new impacts on archaeological resources will occur during O&M of the Proposed Project.

Question 4.5c – Paleontological Resource Destruction

Construction – Less-than-Significant Impact

Excavation and other earth-moving activities associated with construction of the Proposed Project have the potential to impact paleontological resources within the Proposed Project area. Surface grading or shallow excavations in the uppermost few feet of the younger Quaternary deposits in the Proposed Project area are unlikely to uncover significant fossil vertebrate remains. However, excavations that extend more than five feet below ground surface (bgs) into

older sedimentary deposits—as well as any excavations into old and very old paralic deposits, Ardath Shale, the Delmar Formation, Torrey Sandstone, Scripps Formation, and undivided Eocene-age rocks—may uncover significant vertebrate fossils. Excavations required for pole installation will range from eight to 30 feet bgs and trenching for duct bank installation will require excavations between six and nine feet bgs.

As described in Table 4.5-2: Paleontologically Sensitive Geologic Formations Crossed, the Proposed Project will cross approximately 4.8 miles of geologic formations with a high paleontological potential. These formations include the Torrey Sandstone Formation, Delmar Formation, old paralic deposits, and very old paralic deposits. Several portions of the TL674A reconfiguration involve the installation of underground facilities within the Torrey Sandstone Formation and old paralic deposits. In addition, portions of the TL666D removal and the majority of C510 conversion activities will occur within paleontologically sensitive geologic formations, which primarily include the Torrey Sandstone Formation and very old paralic deposits. Excavations into artificial fill and landslide deposits are unlikely to uncover significant fossil vertebrate remains.

Construction activities that could potentially impact paleontological resources include the installation of underground facilities, pole installation, and removal of existing poles. The majority of the ground-disturbing activities required for the Proposed Project will occur during the installation of underground duct banks for the TL674A reconfiguration, C510 conversion, and C738 conversion. To minimize potential impacts to paleontological resources during the Proposed Project's ground-disturbing activities, SDG&E will implement the previously described Project Design Features and Ordinary Construction Restrictions, as well as the following additional Project Design Features and Ordinary Construction Restriction, which is included in Chapter 3 – Project Description:

Paleontological Resource Monitoring and Discovery. A qualified paleontologist will attend pre-construction meetings, as needed, to consult with the excavation contractor on 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 is defined as an individual who has experience in the collection and salvage of fossil materials. The paleontological monitor 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., Torrey Sandstone Formation, old paralic deposits, and very old paralic deposits). 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 at 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 Restrictions, construction of the Proposed Project will not change the significance of paleontological resources. A qualified paleontological monitor will be on site to observe excavation operations and divert or temporarily halt construction activities in the event that a fossil is encountered. Fossil remains collected during monitoring will be handled in accordance with the previously described Project Design Features and Ordinary Construction Restrictions. Furthermore, construction personnel will receive training on the potential for exposing paleontological resources and how to recognize potential buried resources, along with procedures to follow if paleontological materials are discovered. As a result, any potential impacts to paleontological resources will be less than significant.

Operation and Maintenance - No Impact

As discussed in the response to Question 4.5a, O&M activities will be conducted in the same manner as they were prior to construction of the Proposed Project. Based on the removal of existing overhead facilities and the installation of Proposed Project components in areas already covered by existing O&M activities, post-construction O&M requirements in the Proposed Project area will not change.

Typically, O&M of the Proposed Project will not involve ground disturbance. In the event that ground-disturbing activities are required during O&M, these activities will be conducted in areas that were previously disturbed during construction. Therefore, paleontological resources will not be encountered during O&M, and no impact will occur.

Ouestion 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 Section 7050.5. As a result, any potential impacts will be less than significant.

Operation and Maintenance - No Impact

As discussed in the response to Question 4.5a, O&M activities will be conducted in the same manner as they were prior to construction of the Proposed Project. Based on the removal of existing overhead facilities and the installation of Proposed Project components in areas already covered by existing O&M activities, post-construction O&M requirements in the Proposed Project area will not change.

As previously discussed, if human remains are encountered during O&M, SDG&E will implement the appropriate notification processes as required by HSC Section 7050.5. As a result, any potential impacts will be less than significant.

Ouestion 4.5e – Tribal Cultural Resources

i. Listing or Eligible for Listing - No Impact

No tribal cultural resources were identified in the Proposed Project study area to date. In the event that a tribal cultural resource is discovered in the Proposed Project area, and the archaeological monitor or qualified Native American monitor determines that it is listed or eligible for listing in the CRHR, the resource will either be avoided, preserved in place, or handled as determined during tribal consultation. However, because no tribal cultural resources were identified in the Proposed Project study area, none are listed or eligible for listing in the CRHR. Therefore, no impact will result.

ii. Significance of Tribal Cultural Resources – Less-than-Significant Impact

Based on the findings presented in the CTR and the responses received to date from Native American representatives, no tribal cultural resources were identified in the Proposed Project study area. As previously described, letters were sent to 19 Native American representatives that may be knowledgeable about cultural resources within or near the Proposed Project area. Copies of the letters are included in Attachment 4.5-A: NAHC Correspondence. Responses received to date include correspondence from the Inaja Band of Mission Indians, the Campo Band of Mission Indians, the Mesa Grande Band of Mission Indians, and the Kwaaymii Laguna Band of Mission Indians. With the exception of the response from Carmen Lucas of the Kwaaymii Laguna Band of Mission Indians, the responses received to date specified no issues or concerns with the Proposed Project. In a voice message dated October 21, 2016, Carmen Lucas stated that the Proposed Project area is rich with cultural resources and that an archaeological monitor and qualified Native American monitor should be present during construction. Contact has not been established with the 15 remaining Native American representatives.

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 or paleontological resources, no applicant-proposed measures have been proposed.

4.5.5 References

- AECOM. 2017. Cultural Resources Survey Report for the Proposed San Diego Gas & Electric TL674A Reconfiguration & TL666D Removal Project.
- City of Del Mar. 1976. *The Community Plan For the City of Del Mar, California*. Online. http://www.delmar.ca.us/156/Planning-Community-Development. Site visited on October 18, 2016.
- City of Del Mar. 2016. Municipal Code. Online. http://www.delmar.ca.us/171/Municipal-Code. Site visited on October 18, 2016.
- City of San Diego. 2008. *City of San Diego General Plan*. Online. http://www.sandiego.gov/planning/genplan/. Site visited on October 18, 2016
- City of San Diego. Municipal Code. Online. http://www.sandiego.gov/city-clerk/officialdocs/legisdocs/muni.shtml. Site visited on October 18, 2016.
- Paleo Solutions. 2017. Paleontological Technical Study: San Diego Gas & Electric TL674A Reconfiguration & TL666D Removal Project.