TABLE OF CONTENTS

4.5	CUL	ΓURAL RESOURCES	4.5 -1
	4.5.1	Introduction	4.5-1
	4.5.2	Methodology	4.5-2
	4.5.3	Existing Conditions	4.5-3
		Potential Impacts	
	4.5.5	Project Design Features and Ordinary Construction/Operating Restrictions	. 4.5-25
	4.5.6	Applicant Proposed Measures	. 4.5-25
	4.5.7	Detailed Discussion of Significant Impacts	4.5-26
	4.5.8	References	. 4.5-26

LIST OF TABLES

Table 4.5-1: Recorded Cultural Resources within a 0.5 mile of the Proposed Project Area..4.5-10

LIST OF APPENDICES

Appendix 4.5-A Archaeological Survey Report

Appendix 4.5-B Paleontological Resources Record Search

THIS PAGE IS INTENDED TO BE LEFT BLANK

4.5 CULTURAL RESOURCES

Would the project:		Potentially Significant Impact	Potentially Significant Unless APMs 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?		V		
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		V		
c.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		V		
d.	Disturb any human remains, including those interred outside of formal cemeteries?			V	

4.5.1 Introduction

This section of the PEA describes the archaeological, historical, and paleontological resources identified within the Proposed Project area, and identifies potential impacts that could result from construction, operation, and maintenance of the Proposed Project. This section reviews the Proposed Project in accordance with local, state and federal laws and regulations that protect cultural resources and articulates avoidance and minimization measures that will be implemented. Implementation of APMs will ensure that any potential impacts that could affect cultural and paleontological resources would be reduced to a less than significant level. Components of the Proposed Project that could affect cultural and paleontological resources include but are not limited to: removal of existing poles/structures and transmission line; construction of new poles and stringing of new power lines; construction of underground transmission line in Carmel Valley Road; substation alterations; grading access roads or work pads; and clearing and use of stringing sites, guard structures, staging yards, or helicopter incidental landing areas.

Cultural resources as defined in CEQA include prehistoric and historic period archaeological sites, districts, and objects, historic buildings, structures, and traditional/cultural sites or the locations of important historic events. Cultural resources were identified during the literature and records search within the Proposed Project Area of Potential Effect (APE), including prehistoric and historic archaeological sites and isolates. Not all known sites were re-located during the survey, but those that were re-located will be avoided and/or demarcated. Impacts to previously documented and undiscovered cultural resources resulting from the Proposed Project will be less than significant as the Proposed Project has been designed to avoid cultural resources and implementation of SDG&E's APMs will minimize potential impacts to a less than significant level to cultural resources that may be inadvertently discovered.

In addition to cultural resources, there are also eight known fossil localities within 1 mile of the Proposed Project alignment. The Proposed Project alignment is underlain by several geologic

formations, the Friars, Scripps, Mission Valley and the Ardath Shale, which have a high sensitivity and potential for paleontological resources. With the implementation of APMs, potential impacts to cultural and paleontological resources that may result from the Proposed Project would remain less than significant.

4.5.2 Methodology

4.5.2.1 <u>Cultural Resources Records Search</u>

Cultural resources information for existing conditions in the Proposed Project area was obtained from the California Historic Resources Information System (CHRIS). The CHRIS maintains regional offices that manage cultural resource records for known cultural resource locations and related technical studies. The regional office for San Diego County is the South Coastal Information Center (SCIC) housed at San Diego State University. SDG&E conducted the record search under contract to SCIC and provided to Petra Resource Management (PRM) in August 2013. Sources reviewed consisted of all recorded archaeological and historic site records, and cultural resource reports within a 0.5-mile radius of the Proposed Project area. Additional resources that were consulted for relevant information included the National Register of Historic Places (NRHP), the Historic Property Data File, the California Register, the California Historical Landmarks, the California Inventory of Historic Resources, the California Points of Historical Interest, and historic maps. A cultural resources survey report was prepared for the Proposed Project and has been included as Attachment 4.5-A; *Inventory of Cultural Resources along San Diego Gas & Electric's Proposed Sycamore to Peñasquitos 230 Kilovolt (kV) Transmission Line Project, San Diego, California*.

4.5.2.2 Native American Scoping

PRM submitted a request for information in the Sacred Lands file database NAHC on October 1, 2013 in order to acquire more information about potential cultural resources located in or near the Proposed Project area,. The NAHC responded on October 3, 2013 and indicated that there are no Native American traditional cultural places recorded in the NAHC Sacred Lands file within a 0.5 mile of the Proposed Project area. The NAHC also enclosed a list of 20 Native American individuals and/or organizations that might have further knowledge of cultural resources in or near the Proposed Project area. PRM sent letters to the Native American individuals and/or organizations on November 6, 2013. At this time, there has been no response.

4.5.2.3 Cultural Resources Field Survey Methods

The purpose of the cultural resource field surveys was to relocate and update any previously recorded cultural resources, as well as to check for the presence/absence of any cultural resources on any previously unsurveyed portions of the Proposed Project area. PRM conducted cultural resources field surveys of the Proposed Project alignment within a 500-foot corridor. Only two of the five staging areas, Stonebridge and Stowe, were surveyed due to access limitations. Multiple stringing site and pull areas were surveyed as part of this effort. PRM's cultural field surveys occurred October 1, through October 16, 2013. ASM Affiliates, Inc. (ASM) surveyed portions of the Proposed Project area in 2012 (portions of Tie Line 6961 within MCAS Miramar) (Williams and Cordova, 2012). Additionally, AECOM also surveyed an overlapping area in 2012 (Bowden-Renna, 2012). These previously surveyed areas were not

resurveyed. All survey gaps were surveyed or addressed as part of the 2013 effort for the Proposed Project.

The field survey consisted of approximately 390 acres of intensive pedestrian survey and 464 acres of directive survey, which consisted of developed areas (residential and commercial structures, roads, etc.). Areas with a low potential for cultural resources due to slopes greater than 25 percent or areas that are inaccessible because of dense brush or ground cover were addressed by a directed survey strategy. This focused on ridges; midslope terraces; rock outcrops that may contain rockshelters, caches, or rock art; and watercourses where isolated milling stations and task-specific sites may be located. In locations where sites had been previously recorded, transect spacing was decreased to 5 meters, and, when a previously recorded site could not be re-identified, the survey radius was extended an additional 50 meters. Previously recorded sites on MCAS Miramar were not revisited as part of this study. A 90-meter buffer for each pole location was used because the largest of the preliminary work space locations are projected at that distance. Evidence for buried cultural deposits was opportunistically sought through the inspection of natural or artificial erosional exposures and the spoils from rodent burrows. The pedestrian surveys complied with the California Office of Historic Preservation (OHP) instructions for recording cultural resources. All prehistoric and historic sites, both newly discovered and previously recorded (if re-identified in the field), were recorded. No artifacts were collected during the surveys. The Archaeological Survey Report can be found in Appendix 4.5-A.

4.5.2.4 <u>Paleontological Resources</u>

The SDNHM Department of Paleontology conducted a literature and record search on October 10, 2013. The Proposed Project and a 0.25 mile radius were searched for fossil localities. Relevant published geologic maps and reports, unpublished paleontological reports and unpublished museum collection locality data were reviewed. A previous record search covered portions of the alignment dated March 12, 2012 for the Transmission Line 6961 Sycamore to Bernardo Project. Site records document 59 fossil localities within the 0.25 mile radius, with eight of these occurring directly within the Proposed Project alignment boundary. The paleontological record search results letters can be found in Appendix 4.5-B.

4.5.3 Existing Conditions

4.5.3.1 Regulatory Setting

Federal Regulations

National Historic Preservation Act

Enacted in 1966, the National Historic Preservation Act (NHPA), 16 U.S.C., Section 470 et seq., has become the foundation and framework for historic preservation in the United States. The NHPA authorizes the Secretary of the Interior to expand and maintain a NRHP, establishes an Advisory Council on Historic Preservation as an independent federal entity, requires federal agencies to take into account the effects of their undertakings on historic properties, affords the Advisory Council on Historic Preservation a reasonable opportunity to comment on any undertaking that may affect historic properties listed, or eligible for listing, in the NRHP, and

makes the heads of all federal agencies responsible for the preservation of historic properties owned or controlled by their agencies.

Section 106 of the NHPA governs federal agencies' obligations for cultural resources. The goal of the Section 106 process is to offer a measure of protection to sites that are determined eligible for listing on the NRHP. The criteria for determining National Register eligibility are found in 36 CFR Part 60.

Native American Graves Protection and Repatriation Act

For activities on federal lands, the Native American Graves Protection and Repatriation Act (NAGPRA), enacted in 1990, provides a framework for determining the rights of lineal descendants and Native American tribes to repatriate Native American remains, funerary objects, sacred objects, or other objects of cultural patrimony with which they are associated. NAGPRA applies to items found on federal lands, and agencies that obtain federal funding. It requires consultation with "appropriate" Indian tribes prior to the intentional excavation, or removal after inadvertent discovery, of several kinds of cultural items, including human remains and objects of cultural patrimony.

Paleontological Resource Preservation Act

On March 30, 2009, the Paleontological Resources Preservation Act, 16 U.S.C. 470aaa (PRPA) became law. This requires the Secretaries of the Interior and Agriculture to manage and protect paleontological resources on Federal lands using scientific principles and expertise. New policies from these agencies regarding paleontological resources are in progress.

State Regulations

California Environmental Quality Act

CEQA requires that impacts to cultural resources be identified and, if impacts will be significant, that mitigation measures 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 Guideline 15064.5(a), the term "historical resource" includes:

- (1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources.
- (2) 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.
- (3) Any object, building, structure, site, area, place, record, or manuscript, which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California 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:

- a. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- b Is associated with the lives of persons important in our past;
- c. 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
- d. Has yielded, or may be likely to yield, information important in prehistory or history.
- (4) The fact that a resource is not listed in, or determined to be eligible for listing in, the California Register of Historical Resources (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.

As defined in Section 21083.2(g) of CEQA, a "unique archaeological resource" is:

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

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

Section 15064.5(c)-(3) of the *CEQA Guidelines* explains that effects on cultural properties that qualify as historical resources or unique archaeological resources would 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 would be materially impaired.

The statutes and guidelines cited above 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.

California Native American Graves Protection and Repatriation Act

The California Native American Graves Protection and Repatriation Act (Cal NAGPRA) of 2001 is contained in the California Health and Safety Code Sections 8010-8021, and 8025-8030. Cal NAGPRA provides for the repatriation of human remains and cultural items in the possession or control of a state or local agency or museum to the rightful California Native American tribe.

This law defines the term California Native American tribe to include non-federally recognized groups.

California Public Resources Code

Provisions can be found under the PRC regarding the treatment of human remains. These provisions are detailed in Section 5097.9 through 5097.996. These sections explain the actions to be taken when Native American remains are found. Section 7050.5 of the California Health and Safety Code states that anyone who knowingly disinters, disturbs, or willfully removes any human remains in or from any location other than a cemetery without the authority of law is guilty of a misdemeanor, except those circumstances as described in Section 5097.99 of the PRC. Under these provisions, if a county coroner determines that 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 a Most Likely Descendent (MLD) who shall complete inspection of the site within 24 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Local Regulations

City of San Diego

The City of San Diego regulations and policies pertaining to cultural resources can be found in the Historic Preservation Element of the *City of San Diego General Plan*. The City Council adopted the current version of the *City of San Diego General Plan* on March 2008.

The City of San Diego Municipal Code Chapters 11, 12 and 14 establish a Historical Resources Board and regulations for historical resources. These regulations are intended to protect, preserve, and where damaged, restore the historical resources of San Diego. The regulations require that designated historical resources, important archaeological sites, and traditional cultural properties be preserved unless deviation findings can be made as part of a discretionary permit. Along with the Municipal Code, the General Plan has policies in place to protect cultural resources. The City has developed the following policies geared toward the preservation, protection and consideration of cultural resources to help ensure the protection of the City's resources:

- Strengthen historic preservation planning.
- Fully integrate the consideration of historical and cultural resources in the larger land use planning process.
- Foster government-to-government relationships with the Kumeyaay/Diegueno tribes of San Diego.
- Actively pursue a program to identify, document and evaluate the historical and cultural resources in the City of San Diego.
- Designate and preserve significant historical and cultural resources for current and future generations.

City of Poway

The City of Poway regulations and policies pertaining to cultural resources can be found in the Resources Element under Prehistoric and Historic Resources Element of the *City of Poway Comprehensive Plan*. The City of Poway adopted the current version of the *City of Poway Comprehensive Plan* on November 19, 1991 as resolution #91-131.

Policies D and E discuss cultural resources in the Resources Element. Policy D states that archaeological resources are an important part of the city's heritage and should be preserved and protected. Policy E relates to historic resources and states that the historical structures that remain in Poway contribute significantly to the rural small town character of the community and should be preserved. Both policies have strategies to help in the preservation, and protection of cultural resources.

4.5.3.2 <u>Cultural Setting</u>

Historic Overview

Prehistoric Background

There is little evidence of early human occupation of southern California. A few sites have yielded artifacts that may date to the Clovis era (circa 11,000 years before present [B.P.]), and the oldest reliable dates for occupation come from Daisy Cave on San Miguel Island. Dates from this site indicate that the islands (and, therefore, probably the coast) were occupied as early as 11,600 to 11,000 B.P. Radiocarbon dates as old as 10,000 to 9,000 B.P. have been reported from coastal sites.

This early culture represents the post-Pleistocene adaptation to big game hunting of large mammals, possibly even members of the late Pleistocene megafauna such as mammoth, although direct evidence of this type of aboriginal megafauna exploitation is lacking from mainland southern California. Although it is reasonable to assume that vegetable foods were an important part of the diet, a lack of ground stone artifacts indicates that hard seeds were not routinely exploited. This early hunting tradition came to an end around 6,000 B.P. This is probably due to the advent of much warmer and drier times associated with the Altithermal, which led to a shift in subsistence strategies focused on plants and small game. However, regional and sub-regional variation and adaptation of toolkits, residence patterns, and resources exploited appears to have been the rule.

The following period, termed the Millingstone Substratum or the La Jolla/Pauma Complexes, dates from approximately 8,000 B.P. to 3,000 B.P. This horizon marks the technological advancements of seed grinding for flour as a staple of diet. This period has traditionally been thought of as the beginning of large-scale marine fauna exploitation, but recent research indicates marine fauna were probably an important part of the diet in earlier times. Diagnostic artifacts for this tradition include manos, metates, scraper planes, choppers, core tools, doughnut stones, discoidals, and cogstones. This period includes archaeological cultures/complexes such as Pauma, La Jolla, Topanga, Oak Grove, and Sayles. This period was not homogeneous across either time or space, and was characterized by adaptation to changing environments on both the regional and sub-regional scales.

The Pauma Complex, first identified by Delbert L. True, was primarily restricted to the areas east of Escondido in the peninsular ranges of northern San Diego County. It appears to have been a millingstone complex based on a hunting and seed-gathering economy. This complex, dated to around 8,000 B.P., is characterized by an assemblage of San Dieguito-like crescents, leaf-shaped points, La Jollan millingstone artifacts, core scrapers, and stone discoidals. It is not known whether the Pauma Complex was an inland variant of the coastal La Jolla Complex, or represents seasonal inland encampments and adaptations of coastal groups, though recent studies have suggested that permanent inland and interior populations were more common than has traditionally been thought. It was also during this time that geographically expansive trade networks began to appear, with shell beads generated on the Channel Islands during this period being found as far away as Oregon.

The late Middle Holocene of San Diego County has not been well understood, with Moratto stating that there may have been a hiatus or reduction in occupation from 3,000 B.P. to 1,500 B.P. It is unlikely that the interior was abandoned completely, and it may be the case that interior adaptations were similar enough to those of the previous or later periods that they seem "invisible" in the archaeological record, or that occupation of the interior followed an ephemeral pattern that is not easily "seen" through the archaeological record.

The Late Prehistoric period began around 1,000 B.P. and continued until European contact. The period is characterized by three basic shifts in the economy: (a) intensification of land-based collecting and diversification of foods collected, (b) collection at specifically targeted shellfish resource areas and diversification of shellfish collected, and (c) the development or intensification of a quasi-maritime economy. Archaeologically the period is characterized by the introduction of the mortar and pestle, projectile points associated with bow and arrow technology, cremations, and the introduction of pottery around 1,000 B.P. The late period is represented by the San Luis Rey Complex, which is divided into stages I (550-200 B.P.) and II (200-100 B.P.). The complex was first proposed by Meighan based on his work at CA-SDI-132.

Archaeologically, the San Luis Rey Complex represents a termination of most of the millingstone practices in favor of greater reliance on acorn exploitation and establishment of semi-permanent villages in centralized resource locations. Small satellite camps surrounding the villages served as strategic foraging locations, allowing a flexible and varied resource base. San Luis Rey I assemblages are characterized by millingstones, bedrock mortars, cremations and small triangular points. San Luis Rey II contains all those plus pottery, cremation urns and, after contact, glass beads and metal knives.

The Late Prehistoric period essentially ended with Spanish colonization and establishment of the missions. Disease and forced relocation, which reduced the populations considerably among the coastal settlements, did much to destroy the cultural pattern established during that period.

Historic Background

The first Europeans to explore future California were in the 1542 expedition of Juan Rodriguez Cabrillo. It is possible that the Santa Maria Valley (Ramona area) near the Proposed Project could have been first visited in 1769 by Gaspar de Portola, as he led a 62-person expedition from San Diego to Monterey.

The closest mission to the Proposed Project area is the Mission San Luis Rey, which was founded in 1798 under the supervision of Padre Presidente Fermin Francisco de Lasuen. The mission inducted large numbers of mountain Indians. In 1818, the Santa Ysabel mission outpost (asistencia) was established several miles north of the Santa Maria Valley near the present day community of Santa Ysabel.

In 1833, during the secularization process, Narcisco Botello, a Mexican soldier, received the Santa Maria land grant. He was unsuccessful at ranching, and abandoned the land. In 1843, the grant was passed to Jose Joaquin Ortega and his son-in-law, Captain Edward Stokes.

In 1872, Adolfo Stokes sold all but 1,000 acres to Juan Arrambide. Arrambide and French immigrant Bernardo Etcheverry developed the valley in fruit orchards, vineyards, and grain fields, and ran a prosperous sheep operation on several thousand acres in Santa Maria Valley.

A steady flow of settlers came to southern California during the 1880s and 1890s; this included the Santa Maria Valley. The Santa Maria land grant was sold off in large and small parcels to various land speculators, and homesteaders. The area continued to grow gradually, with the predominant emphasis on turkey ranches, beehives and horse stables. From 1930 to the early 1970s, Santa Maria Valley and Ramona itself were known as the "Turkey Capital" of the world. The area has continued to grow with urban developments over the last several decades.

Ethnographic Overview

At the time of European contact, the Proposed Project area was occupied by the Kumeyaay (also known as Kamia, Ipai, Tipai, and Diegueño), a Yuman speaking people. The Kumeyaay ranged from the San Diego coastal region east to beyond the Salton Sea and south to beyond Ensenada in Mexico, the northern extents included Mount Palomar. They lived in semi-sedentary villages, with temporary camps radiating out from the central location. The basic social unit was the patrilocal extended family with marriage being exogamy (marriage outside of group) and virilocal residence (couples living with the male's group).

The Kumeyaay were hunter-gatherers with an emphasis placed on acorn procurement and processing, as well as the capture of rabbits and other small game. Several scholars believe that the Kumeyaay, or at least some bands of the Kumeyaay, were practicing proto-agriculture at the time of Spanish contact. Although there is no definitive evidence of this, the Kumeyaay were adept resource managers with a history of intensive plant management.

Most tools were made from locally available materials, but obsidian was imported from the desert areas. Flaked tools included projectile points, scrapers, and biface knives. The common groundstone tools included metates, manos as well as mortars and pestles. Pottery came to the Kumeyaay quite late and was predominantly a plain brownware. The Kumeyaay were highly skilled in basket weaving, utilizing both coiled and twined construction methods. Some baskets were so tightly woven that they could carry water.

The Kumeyaay practiced many forms of spiritualism with the assistance of shamans. These spiritual leaders neither were elected nor inherited their position. Important ceremonies included male and female puberty rites, the cremation ceremony, as well as the yearly mourning ceremony. The primary ceremonial direction among the Kumeyaay is east, and the Kumeyaay

are the only California tribe known to possess a color-direction system in which white represents the east, green-blue the south, black the west, and red the north.

Cultural Resources in the Proposed Project Area

Record Search Results

The record search results were taken from the cultural technical report (see Appendix 4.5-A, Archaeological Survey Report). Table 4.5-1, Recorded Cultural Resources within a 0.5 mile of the Proposed Project Area includes the 29 cultural resources previously recorded, as well as the two new sites and six new isolates located by PRM.

Table 4.5-1: Recorded Cultural Resources within a 0.5 mile of the Proposed Project Area

Site/Isolate Designation	USGS Quad	Description	Evaluation Status	Re-located
CA-SDI-5389	Poway	Prehistoric Bedrock Milling	Not Eligible	Yes in 2012
CA-SDI-5536	Del Mar	Prehistoric Rock Feature/Lithic Scatter, presumed destroyed	Not Eligible	No
CA-SDI-11148	Del Mar	Historic Ranch Remains	Not Evaluated	Yes
CA-SDI-11256	Poway	Historical Homestead Remains	Not Evaluated	Yes
CA-SDI-11910	Del Mar	Prehistoric Artifact Scatter	Evaluated – Status Unknown	Yes
CA-SDI-12254	Poway	Spare Lithic Scatter, presumed destroyed	Not Eligible	No
CA-SDI-12931	Del Mar	Multiple Component	Not Eligible	No
CA-SDI-12932	Del Mar	Multiple Component	Not Evaluated	Yes but outside of the APE
CA-SDI-12933	Del Mar	Multiple Component, presumed destroyed	Not Eligible	No
CA-SDI-13082	Del Mar	Prehistoric Lithic Scatter	Not Eligible	No
CA-SDI-13194	Del Mar	Lithic Scatter, presumed destroyed	Not Eligible	No
CA-SDI-13738	Poway	Prehistoric Quarry	Not Evaluated	Yes
CA-SDI-14120	Del Mar	Prehistoric Lithic Scatter	Not Eligible	No
CA-SDI-14123	Del Mar	Prehistoric Lithic Scatter	Not Evaluated	Yes

Table 4.5-1 (cont.): Recorded Cultural Resources within a 0.5 mile of the Proposed Project Area

Site/Isolate Designation	USGS Quad	Description	Evaluation Status	Re-located
CA-SDI-14124	Del Mar	Prehistoric Lithic Scatter	Not Evaluated	Yes
CA-SDI-14131	Del Mar	Prehistoric Lithic Scatter	Not Evaluated	Yes
CA-SDI-14136	Del Mar	Prehistoric Lithic Scatter	Not Eligible	No
CA-SDI-18276	Poway	Prehistoric Bedrock Milling	Not Evaluated	Yes
CA-SDI-18277	Poway	Prehistoric Shell Scatter	Not Eligible	No
CA-SDI-18278	Poway	Prehistoric Bedrock Milling	Not Evaluated	Yes
CA-SDI-18437	Del Mar	Prehistoric Shell and Lithic Scatter	Not Evaluated	Yes
37-014115	Del Mar	Prehistoric Isolate	Not Eligible	No
37-014513	Del Mar	Prehistoric Isolate	Not Eligible	No
37-014516	Del Mar	Prehistoric Isolate	Not Eligible	No
37-015066	Poway	Prehistoric Isolate, presumed destroyed	Not Eligible	No
37-015217	Del Mar	Prehistoric Isolate	Not Eligible	No
37-015218	Del Mar	Prehistoric Isolate	Not Eligible	No
37-024244	Del Mar	Prehistoric Isolate	Not Eligible	No
37-028352	Del Mar	Prehistoric Isolate	Not Eligible	No
SXPQ-01*	Del Mar	Prehistoric Isolate	Not Eligible	Yes
SXPQ-06*	Del Mar	Prehistoric Isolate	Not Eligible	Yes
SXPQ-07*	Del Mar	Prehistoric Isolate	Not Eligible	Yes
SXPQ-09*	Del Mar	Prehistoric Isolate	Not Eligible	Yes
SXPQ-10*	Poway	Prehistoric Isolate	Not Eligible	Yes
SXPQ-11*	Del Mar	Prehistoric Isolate	Not Eligible	Yes

Site/Isolate USGS **Description Evaluation Status** Re-located **Designation** Ouad 37-033556 Del Mar Historic Dam Not Evaluated Yes 37-033557 Poway Historic Road Not Evaluated Yes Source: *Appendix 4.5-A Archaeological Survey Report*

Table 4.5-1 (cont.): Recorded Cultural Resources within a 0.5 mile of the Proposed Project Area

Archaeological Field Survey Results

During the field surveys, twelve of the previously recorded archaeological resources were relocated, and updated by PRM (CA-SDI-5389, SDI-11148, SDI-11256, SDI-11910, SDI-12932, SDI-13738, SDI-14123, SDI-14124, SDI-14131, SDI-18276, SDI-18278, and SDI-18437). Seventeen of the previously recorded sites were not re-located within the Proposed Project area (SDI-5536, SDI-12254, SDI-12931, SDI-12933, SDI-13082, SDI-13194, SDI-14120, SDI-14136, SDI-18277, 37-014115, 37-014513, 37-014516, 37-015066, 37-015217, 37-015218, 37-024244, and 37-028352). Additionally, PRM identified two new sites (P-37-033556 and P-37-033557) and six new isolates (SXPQ-01, 06, 07, 09, 10, and SXPQ-11) during the 2013 field surveys.

CA-SDI-5389: R.H. Norwood originally recorded this prehistoric site in 1977 y. It consisted of one milling slick on an isolated granitic outcrop. The slick measured 30 x 21 x 1 centimeter. Today, the milling feature is on the south side of a slope overlooking a football field. The site was re-located by ASM in 2012 during survey for SDG&E TL-6961, and was noted to be as originally described. The location was recorded with a Trimble GPS unit, and the milling element and feature outcrop were measured and photographed. The slick was noted to be in good condition, and no new site constituents were identified. The site was not revisited during the current survey effort.

CA-SDI-5536: Dave Hanna recorded this prehistoric site in 1977 as a light scatter of lithics and seven possible stone features, located on a knoll overlooking a tributary canyon of McGonigle Canyon. Hanna noted that the rock features were difficult to interpret, and consisted of "two conical piles, one rock alignment, and four irregular cobble piles". Lithics included "a few flakes, both percussion and pressure". The site does not appear to have been updated (no update form on file at SCIC). The current survey determined that the site has been destroyed by construction of Collins Ranch Place, the associated, surrounding housing development, and the grading and landscaping of the remaining southern slope above Carmel Valley Road.

CA-SDI-11148H: RECON recorded this historic site in 1989, and consisted of two earthen dams, graded terraces, a concrete retaining wall and foundation, a metal lined well, and artifacts including burned lumber, metal pipe, barbed wire and glass. Research conducted at that time indicated that the components date from the 1920's and were part of a ranch owned by John Stelling of Del Mar. During the current survey, the concrete foundation remains, metal-lined well, and a large earthen dam were re-located. The southern part of the site has been impacted by construction of Carmel Valley Road.

CA-SDI-11256H: RECON originally recorded this historic site in 1989 and the site consisted of a raised wooden house floor with cobblestone pits, multiple trash scatters, and various cobblestone arrangements, all surrounded by eucalyptus trees. A porch roof was found on the south side of the site. A cobblestone "wall" surrounded the site in all four directions. During the current survey, a small, square concrete structure at approximate ground level, and an unformed concrete and cobble foundation section appear to be all that remain of the raised floor were noted. The site is ringed by 13 large eucalyptus trees, many of which are enclosed in low, loosely assembled cobble walls. Additional cobble walls appear to delineate a section of an entrance road. Small pits and a surface scatter of trash are present on the north margin of the site. The site boundary and several of the remaining elements were recorded with a Trimble GPS unit, as was the trash scatter, which extends, slightly, from the original site area, to the north. The site is close to residential development, and is apparently heavily trafficked, as evidenced by large amounts of modern bottle glass and refuse. Some of the previously described components may have been burned in place.

CA-SDI-11910: Brian F. Smith and Associates recorded this prehistoric site in 1990. The site was described as an artifact scatter, with three choppers, two scrapers, one hammerstone, two metate fragments, four cores, four debitage, and four flakes. Smith collected the surface artifacts and subsurface artifacts that were excavated from one test unit, and shovel test pits. The site was revisited by Gallegos & Associates in in 2005, and a single piece of debitage was observed. During the current survey, a single quartzite interior flake with two dorsal scars was identified near the center of the recorded site area, and the location was recorded with a Trimble GPS unit. Visibility was fair to poor over much of the site area. Access roads are located within the mapped site boundary.

CA-SDI-12254: Recorded by Affinis in 1991 as a sparse lithic scatter. Revisited in 1995 by Ogden Environmental and described as destroyed by construction of substation. Located within Miramar MCAS.

CA-SDI-12931: According to an update performed by Ogden Environmental in 1992, Cardenas originally recorded the site as SDM-W-2790. The site consists of two loci, located on low ridges, south of a tributary of La Zanja Canyon. Locus B, which extends minimally into the current Proposed Project area, is described as a small artifact scatter, containing one hammerstone, one flake, and one basin metate fragment. Locus A is not located within the current survey area. During the current survey, the site was not re-located. Dense, matted grasses and other vegetation created very poor visibility over the site area of both loci. The southern edge of locus B, as mapped, overlaps only very minimally with the current survey area.

CA-SDI-12932: Ogden Environmental originally recorded the site in 1992, as a hill-top rock enclosure. A prehistoric mano was identified within the structure. Ogden noted that the site is at the location of a structure shown on the 1903 USGS map. During the current survey, the rock enclosure was re-located. The structure was found to be somewhat indistinct, but clearly manmade. The site may have been altered, or expanded since its initial recording, by continued use, possibly as a recreational "fort". A Trimble GPS unit was employed to obtain accurate dimensions and location for the structure. The structure's location was found to be mismapped, actually lying considerably further north, and outside of the current survey area. The structure contained a small amount of modern trash, including a number of wooden landscaping poles, and pieces of plastic shelving. The mano noted on the original site record was not re-located, due to

poor visibility. The structure is overgrown with native vegetation, and contains a considerable amount of naturally accumulated plant debris.

CA-SDI-12933: Ogden Environmental originally recorded this site in 1992, as a small scatter of prehistoric and historic artifacts. The site contained three fragments of purple glass, a metavolcanic flake, and a porphyritic volcanic fire-affected mano fragment. Ogden noted that the site is at the location of a structure shown on the 1903 USGS map. The current survey determined that the site has been destroyed by construction. The southwest end of a large, fourplex baseball filed now lies over the eastern half of the original site area, and a steeply cut and landscaped slope occurs over the western half of the site area.

CA-SDI-13082: Gallegos and Associates recorded the site in 1992 as a sparse lithic scatter, containing one quartzite core, one quartzite flake, and one porphyritic volcanic flake. During the current survey, the site was not re-located. Visibility ranged from fair to poor over the site area, and disturbances were evident within the access roads and near existing structures. The site may have been destroyed/displaced by grading activities.

CA-SDI-13194: Gallegos & Associates recorded the site in 1993 as a lithic scatter containing one metavolcanic core, one metavolcanic flake, and one quartzite flake. The current survey determined that the site has been destroyed by residential development and adjacent landscaping.

CA-SDI-13738: KEA recorded the site in 1994. The site was identified as a prehistoric quarry, consisting of 14 low bedrock outcrops which exhibit varying degrees of quarrying. More than ten+ flakes were identified in association with the quarry, and a single retouched flake was identified in an adjacent graded road. The original recording noted evidence of heavy machinery in the vicinity, and noted that some of the observed rock scars could be attributed to modern damage.

During the current survey, the quarrying activity could not be definitively identified. Dense matted grasses obscure much of the ground surface in the vicinity, and no surface artifacts were observed. The presumed site area appears to be somewhat mismapped, as the original boundary/location contains only a couple of outcrops, none of which appear to exhibit quarrying. A large grouping of slightly more exposed outcrops located further north likely represents the identified quarrying area. A Trimble GPS unit was employed to record the location of this more prominent cluster of outcrops. All of the outcrops observed in the vicinity are of a relatively coarse grade of volcanic material, and none were observed to exhibit obvious quarrying activity, however a specialized study, and improved ground visibility may help identify such activity.

CA-SDI-14120: Gallegos & Associates recorded this prehistoric site in 1995 as a sparse lithic scatter with three loci. Locus B, the southernmost of the loci, overlaps minimally with the current survey area. Locus B was identified as containing one core tool and one flake. The current survey determined that the northern loci, A and B, were destroyed by development of residential pads. Locus B lies on the edge of the development, and associated landscaping. Visibility was fair to poor over the locus area, due to dense chaparral, mostly chamise (probably regrowth). Locus B was not re-located, and may have been displaced or destroyed by adjacent development

CA-SDI-14123: Gallegos & Associates recorded this prehistoric site in 1995 as a chipping station/raw material prospect, located on the east edge of a northern finger of Del Mar Mesa.

The site consisted of three cores and more than 12 flakes including metasedimentary, metavolcanic, and quartzite material. The materials were noted in an approximate 7 x 5 meter area. During the current survey, one dark gray quartzite core, three interior flakes and one primary flake of the same material, and two light gray quartzite flakes were identified in a location corresponding to the *sketch map* and the description provided with the original site form (and the adjoining, more inclusive sketch map for adjacent site SDI-14124). This location is at variance with the *location map* provided with the original site form, which (after modern GIS overlay) places the site on the steep, eastern slope of the mesa finger. The wooden stake and aluminum tag which originally marked the site were not re-located, however the disturbances were evident in the area as well as recreational traffic associated with proximal, residential development. The site vicinity is covered with dense, native vegetation, and visibility is fair to poor, except in areas void of vegetation within graded roads. The currently identified constituents likely represent the actual location of the site. The currently identified materials lie within a 5 x 5 meter area, and the location was recorded with a Trimble GPS unit.

CA-SDI-14124: Gallegos & Associates recorded this prehistoric site in 1995. The site was described as a sparse lithic scatter with a dense concentration at the north end, located on the west side of a northern finger of Del Mar Mesa. The original description noted "several cores and about two dozen flakes". The current survey noted two porphyritic volcanic interior flakes, one porphyritic volcanic secondary flake, and one quartzite primary flake in a long, narrow clearing along the west edge of the finger. The surrounding area is covered in dense native vegetation, and visibility is generally fair to poor, with occasional cleared areas. The wooden stake and aluminum tag that originally marked the site were not re-located. The currently identified artifacts were recorded with a Trimble GPS unit.

CA-SDI-14131: Gallegos & Associates recorded this prehistoric site in 1995 as a flaking station, or lithic raw material prospect. The original recording noted two cores, one Teshoe flake, and three flakes of quartzite and volcanic material, located on the southern edge of a westerly trending finger of northern Del Mar Mesa. The site size was noted as 10 x 10 meters.

During the current survey, the wooden stake and aluminum tag which originally marked the site were re-located. The stake was no longer embedded, however the location corresponds to the original site location, and has apparently not been displaced. Two quartzite tested cobbles/cores were noted within 5 meters of the stake. Dense native vegetation surrounds the relatively clear area of the site, at the edge of the mesa finger. A well utilized recreational trail (pedestrian and bicycle) runs approximately 2 meters south of the wooden stake location.

CA-SDI-14136: Gallegos & Associates recorded this prehistoric site in 1995 as a chipping station/raw material prospect, located on the south side of the head of a seasonal drainage which extends northward to Deer Canyon. One core and five flakes of quartzite material were noted within an area measuring 5 x 7.5 meters. The site was not re-located during the current survey. The current survey determined that the mapped location is at some variance with the site description and sketch map, as the location map shows a site size of over 40 x 60 meters. The entire site area and vicinity is covered in dense native vegetation, and visibility is poor throughout. It is important to note that due to the mapping discrepancy; it is unclear whether the site is located within the current survey corridor.

CA-SDI-18276: ASM originally recorded this prehistoric site in 2005 as an isolated bedrock milling feature with one slick. The slick measured 32 x 23 centimeter on an irregular granitic outcrop. The slick was less than one centimeter deep. During the current survey, the milling was identified and rerecorded. The slick is in good condition, and exhibits minimal use. The granitic outcrop which contains the slick is in excellent condition. No additional cultural resources were located at the site.

CA-SDI-18277: This prehistoric site consists of a sparse marine shell scatter located down slope of a low saddle. ASM recorded five fragments of shell in 2005 over a 17 x 10 meter area; three California oyster and two *Chione* sp. It is noted on the site form that the site was in very poor condition due to a dirt road bulldozed through the area and dense vegetation in some areas. This site was not re-located during the current survey. The previous record of the site cited excellent visibility due to recent burning of ground cover. Current conditions include dense matted grasses over the entire site area, and very poor visibility.

CA-SDI-18278: ASM originally recorded this prehistoric site in 2005 as an isolated bedrock feature containing one mortar at the base of Black Mountain. The original recording noted the presence of a small boulder apparently placed on top of the outcrop to hide the mortar. A quartzite cobble, located next to the feature was also recorded as a possible pestle, however no obvious use-wear was noted. The site was re-identified as previously described, during the current survey. The rounded quartzite cobble that was noted in 2007 was not re-identified at this time, however dense ground cover and other, native vegetation covers the site and surrounding area. As noted in the previous site record, a small boulder rests atop the milling feature in an apparent attempt to shield the mortar from view. The mortar was recorded in excellent condition and no new cultural resources were observed. The feature was photographed and the location recorded with a Trimble GPS unit.

CA-SDI-18437: Gallegos and Associates recorded this prehistoric site in 2006. The site was described as an artifact scatter consisting of a sparse scatter of marine shell, and a single, quartzite battered implement, located on a mesa top, just east of the SDG&E Peñasquitos Substation. Shell species included primarily *Chione* sp., with one burned *Argopectin* sp. specimen, and two *Ostrea* sp. fragments. The site measured 32 x 80 meters, and was observed within and adjacent to an SDG&E access road. The battered implement was noted on the edge of the graded road, and was reportedly damaged by heavy equipment. HDR Inc. revisited the site in 2010. The study was limited to examination of the access road. A sparse scatter of marine shell was noted approximately 2.5 meters east of the graded road. During the current survey, a sparse scatter of marine shell was noted over the site area as originally described. Shell was not noted within the road, however, probably due to ongoing grading. The battered implement was not re-located, however ongoing grading disturbance has also likely displaced or obscured it.

37-014115: Gallegos and Associates recorded this prehistoric isolate in 1995, and the isolate consists of a volcanic core and a metavolcanic flake. The isolate was not re-located during the current study.

37-014513: Gallegos and Associates recorded this prehistoric isolate in 1995, and the isolate consists of a quartzite scraper plane and a quartzite bifacial core. The isolate was not re-located during the current study.

37-014516: Gallegos and Associates this prehistoric isolate in 1995, and the isolate consists of one quartzite flake, and one metasedimentary flake. The isolate was not re-located during the current study.

37-015066: Affinis Corporation recorded this prehistoric isolate in 1991, and the isolate consists of a fine grained metavolcanic core. The isolate was located within Miramar MCAS, and was destroyed by construction of the SDG&E Sycamore Substation.

37-015217: Ogden Environmental recorded this prehistoric isolate in 1992 and the isolate consists of a black quartzite secondary flake. The location has been subjected to heavy disturbance from adjacent development. The isolate was not re-located during the current study.

37-015218: Ogden Environmental recorded this prehistoric isolate in 1992 and the isolate consists of a black quartzite core. The location is covered in dense native vegetation. The isolate was not re-located during the current study.

37-024244: This historical feature is an unknown linear resource (no site form available from SCIC), apparently an historic, graded roadway or truck trail. Within the Proposed Project corridor, the road is deeply cut into a steep slope, otherwise covered in dense native vegetation. The feature was not addressed during the current survey.

37-028352: Gallegos and Associates recorded this prehistoric isolate in 2006, and the isolate consists of one, gray-green metavolcanic flake. This location is covered in dense, matted grass and native vegetation. The isolate was not re-located during the current study

SXPQ-01: This prehistoric isolate consists of a single, volcanic mano fragment, located on a slope above a north trending, unnamed tributary drainage of La Zanja Canyon. The area has been disturbed by construction of Carmel Valley Road, channelization of the drainage, and by agricultural activity on the mesa top above. The mano fragment is bifacial, and appears to be fire affected.

SXPQ-06: This prehistoric isolate consists of one gray-green porphyritic secondary flake, and one dark gray porphyritic interior flake fragment. The isolate is located on a southeast trending mesa finger, south of a graded SDG&E access road. The area appears to have been disturbed by light grading, or a fire break.

SXPQ-07: This prehistoric isolate consists of one gray porphyritic interior flake, located on the slightly sloping, southern edge of a mesa finger. The area is covered with dense native vegetation, and does not appear to have been disturbed.

SXPQ-09: This prehistoric isolate consists of a porphyritic volcanic scraper. The isolate was located on a moderate to steep, cobble-strewn slope, above an unnamed, south trending tributary drainage of Peñasquitos Canyon. The immediate area of the isolate does not appear to have been disturbed.

SXPQ-10: This prehistoric isolate consists of a quartzite primary flake. The isolate is located on a small, relatively flat bench on a ridge finger, which descends from Black Mountain to the east. The location is above, and to the south of a steep drainage, which forms part of the head waters

of McGonigle Canyon. A graded road lies approximately 30 meters south of the isolate, and the area may have been subjected to some disturbance.

SXPQ-11: This prehistoric isolate consists of a quartzite, multidirectional core, located at the head of a small, north trending tributary drainage that flows into a fork/tributary of Deer Canyon. The isolate is located in a linear clearing, possibly graded for a fire break. Dense native vegetation covers much of the surrounding area.

37-033556 (**SXPQ-12**): This historical feature is an earthen dam. The dam is located within a small, northern fork/tributary of McGonigle Canyon. The dam consists of an earthen berm rising roughly 15 feet from the floor of the drainage, and measuring roughly 75 feet thick at its base. The pond area behind it, to the northeast, measures roughly 120 x 120 feet, and is filled with a mixture of native and non-native vegetation. An eroded spillway is located in the approximate center of the dam, and is also filled with vegetation. No structures or associated artifacts were identified in the immediate vicinity of the dam or pond, however, historic site SDI-11148H lies within view, approximately 700 feet to the west, and may be related. Carmel Valley Road is approximately 250 feet away, and a recently constructed housing tract is approximately 400 feet away.

37-033557 (**SXPQ-13**): This historical feature is an abandoned section of Old Pomerado Road/Highway 395. This slightly curving section of road measures approximately 190 feet long by 20 feet wide, and is located on a steep, east-facing slope, above a north-trending tributary of Beeler Creek.

This section of road was cut into the side of the slope, and is bounded on the west by a steep cobble, cut-bank rising approximately 15 feet to present day Pomerado road, and on the east by a steep drop-off. The north and south end of the road section are covered in eroding cobble-filled soils and no edges or cross-section are visible. The asphalt surface of the road has small remnants of a yellow painted center-line, and a white painted shoulder. Numerous plants have cracked through the surface, attaining heights of up to 8 feet. This section of Old Pomerado Road is shown on a County aerial survey map from 1928. In the 1930's, Hwy 395 was extended south from the Canadian border, and by 1939, incorporated this section of Pomerado road. The feature corresponds to the footprint of Hwy 395 shown on the historic 1942 Poway USGS topographic map. Pending additional research, construction of this abandoned portion of roadway may date to this period.

Nine of the proposed pole/work area locations are in the vicinity of fourteen identified cultural resources. These fourteen sites were identified through record searches and the current field studies and are summarized in Table 4.5.1. Eligibility status is included within the table. Table 4.5.1 describes the previously recorded cultural resources, as well as the new sites and isolates located by PRM. Isolated finds are not eligible for listing by nature. Sites that have been evaluated are listed as either eligible or not eligible, depending upon the determinations made from the evaluation, and sites that have not been evaluated are treated as significant. The Proposed Project has been designed to be far enough from these 14 cultural resource locations that no direct impacts should occur if minimal avoidance measures are implemented. There are an additional 15 poles and six work areas proposed in areas of high sensitivity for buried cultural deposits. It is recommended that a cultural monitor be present during initial grading activities.

4.5.3.3 Paleontological Resources within the Proposed Project Area

The literature and record search conducted by the SDNHM indicates that there are eight known fossil localities within the Proposed Project alignment (refer to Appendix 4.5-B). The eight fossil locations occur in the Scripps Formation (one locality), the Ardath Shale (one locality), the Friars Formation (four localities) and the Mission Valley Formation (two localities), all of which are high sensitivity.

The Proposed Project area has a large occurrence of metavolcanic and metasedimentary rocks. The high temperature and pressure conditions associated with the formation of the plutonic rocks are responsible for the absence of fossils. However, there are portions of the Proposed Project area that are underlain by sedimentary rocks, including the Scripps Formation, the Friars Formation and the Mission Valley Formation as well as the Ardath Shale.

The Scripps Formation is a Middle Eocene age sedimentary formation, which is approximately 47 million years in age. This formation has a high paleontological sensitivity due to its production of both land mammals (i.e., rhinoceros, and artiodactyl) and marine organisms (i.e., sharks and bony fishes).

The Ardath Shale is a Middle Eocene age sedimentary formation, which is approximately 45 to 46 million years in age. This formation has a high paleontological sensitivity due to its production of diverse and well-preserved assemblages of fossils.

The Friars Formation consists predominantly of sandstones, and siltstones, and is a Middle Eocene age sedimentary formation, which is approximately 45 to 46 million years in age. This formation has a high paleontological sensitivity due to its rich vertebrate terrestrial mammal fossil collections such as primates, and artiodactyls. It also can contain well-preserved marine microfossils as well as fossil leaves.

The Mission Valley Formation is a Late Eocene age sedimentary formation, which is approximately 43 million years in age. This formation has a high paleontological sensitivity due to its production of abundant and generally well-preserved marine microfossils as well as large and diverse assemblages of fossil land mammals.

Some pole locations are within sedimentary rock formations that could potentially yield fossils. The type of foundation for the pole replacements would need to be considered. A (micropile) small borehole diameter (<12 inches) for installation of a single utility pole would typically pulverize subsurface deposits including any fossil remains. In contrast, larger pole diameters (concrete pier), or excavations for deep utility trenches could result in the potential for buried fossil remains. Final engineering would determine installation method (micropile versus concrete pier), but at this time we assume that all poles foundations would be constructed using the concrete pier method.

4.5.4 Potential Impacts

4.5.4.1 <u>Significance Criteria</u>

Cultural Resources

Under CEQA, the effects of Proposed Project construction, operation, and maintenance on historically significant cultural resources must be considered. A cultural resource is historically significant if it meets any of the following criteria:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work on 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 Proposed Project could have a potentially significant impact to cultural resources if it would:

- Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.
- Directly or indirectly, destroy a unique paleontological resource or site or unique geologic feature.
- Disturb any human remains, including those interred outside of formal cemeteries.

For purposes of the first two thresholds, a "substantial adverse change" is defined as physical destruction, demolition, relocation, or alteration of an historical resource in Section 15064.5(b)(1) of the CEOA Guidelines.

4.5.4.2 Question 5a - Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Construction – Less than Significant

There are 37 identified cultural resources located within or adjacent to the Proposed Project area. Twenty-three of the cultural resources have been deemed not eligible for the NRHP/CRHR. The other 14 sites have not been evaluated for historical significance and may qualify as historical resources as identified in *CEQA Guidelines* Section 15064.5(a). For the purpose of this Proposed Project, these 14 sites are being assumed to qualify as "historical resources" as defined by CEQA.

Nine of the proposed pole/work area locations are in the vicinity of these 14 identified cultural resources. There are an additional 15 poles and six work areas proposed in areas of high

sensitivity for buried cultural deposits. The current design is far enough from the cultural resource locations that no direct impacts should occur, with the implementation of APMs CUL-1 through CUL-6. With the implementation of these APMs, any possible potential impacts to such historical resources would remain less than significant.

Construction of the Proposed Project (including excavation of holes and underground trenches for the installation of new structures and duct bank packages) could potentially impact unknown historical resources by disturbing subsurface soils, and potentially disturbing or destroying unknown buried cultural deposits. With the implementation of APMs CUL-1 through CUL-6, any possible potential impacts to such unknown historical resources would remain less than significant.

Operation & Maintenance - No Impact

SDG&E currently maintains and operates existing electric power, transmission, distribution and substation facilities throughout the Proposed Project site. To the extent operation and maintenance of the Proposed Project would occur in the same location as existing facilities and would have the same or substantially the same impacts, frequency and duration as operation and maintenance activities of the existing facilities, such activities are incorporated into the existing environmental setting and baseline for assessing impacts. Moreover, SDG&E already has standard internal programs and practices that avoid impacts to cultural resources and those programs and practices would not change as a result of the Proposed Project. There would be no regular operational impacts (ground disturbance) on cultural resources along the Proposed Project once the Proposed Project is constructed. The only activities that would occur would be regular inspection, maintenance, and repairs, such as structure and insulator replacements and underground line inspection (performed from the nine underground splice vaults). With the exception of the underground transmission line inspection and maintenance (Segment B) these activities would decrease slightly from existing conditions, and would have no effect on historical resources. Any ground-disturbing activities associated with Proposed Project operation and maintenance would be performed at locations already disturbed for Proposed Project construction. Any future potential maintenance-related construction projects would be evaluated under General Order 131-D and CEQA for purposes of assessing whether further CPUC approval is required. Therefore, no impacts to cultural resources are anticipated during the continuing operation and maintenance following construction of the Proposed Project.

4.5.4.3 Question 5b - Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Construction – Less than Significant

Potential impacts to the 37 archaeological sites would remain less-than-significant with the implementation of APMs. Twenty-three of the cultural resources have been deemed not eligible for the NRHP/CRHR. The other 14 sites have not been evaluated for significance and may qualify as archaeological resources as identified in *CEQA Guidelines* Section 15064.5(a). For the purpose of this Proposed Project, these 14 sites are being assumed to qualify as "archaeological resources" as defined by CEQA.

Nine of the proposed pole/work area locations are near these 14 identified archaeological resources. There are an additional 15 poles and six work areas proposed in areas of high sensitivity for buried cultural deposits. Evidence for buried cultural deposits was opportunistically sought through the inspection of natural or artificial erosional exposures and the spoils from rodent burrows. In the daily survey notes, the field director assessed the potential for buried sites on the basis of subregional geomorphology. For instance, the potential would be rated as high in large alluvial valleys and as low in areas with shallow bedrock. Construction of the Proposed Project (including excavation of holes and underground trenches for the installation of new structures and duct bank packages) could potentially impact identified archaeological resources by disturbing subsurface soils, and potentially disturbing or destroying unknown buried cultural deposits. By implementing APMs CUL-1 through CUL-6, any possible potential impacts to archaeological resources would remain less than significant.

Operation & Maintenance - No Impact

SDG&E currently maintains and operates existing electric power, transmission, distribution and substation facilities throughout the Proposed Project site. To the extent operation and maintenance of the Proposed Project would occur in the same location as existing facilities and would have the same or substantially the same impacts, frequency and duration as operation and maintenance activities of the existing facilities, such activities are incorporated into the existing environmental setting and baseline for assessing impacts. Moreover, SDG&E already has standard internal programs and practices that avoid impacts to cultural resources and those programs and practices would not change as a result of the Proposed Project. There would be no operational impacts (ground disturbance) on cultural resources along the Proposed Project once the Proposed Project is constructed. The only activities that would occur would be regular inspection, maintenance, and repairs, such as structure and insulator replacements and underground line inspection (performed from the nine underground splice vaults). With the exception of the underground transmission line inspection and maintenance (Segment B) these activities would decrease slightly from existing conditions, and would have no effect on Any ground-disturbing activities associated with Proposed Project historical resources. operation and maintenance would be performed at locations already disturbed for Proposed Project construction and thus would have no effect on archaeological resources. Therefore, no impacts to cultural resources are anticipated during the continuing operation and maintenance following construction of the Proposed Project.

4.5.4.4 Question 5c - Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

If the Proposed Project directly or indirectly destroys a unique paleontological resource or geologic feature, the impacts to paleontological resources would be considered significant. CEQA does not define "a unique paleontological resource or site". Paleontologists generally use existing fossil and geological data to determine areas of potential significance, and a resource is deemed unique or important if:

- The particular geologic unit has previously recovered fossils.
- The geologic units that occur within the project area have recorded fossil localities.
- The fossil material recovered from the geologic unit are considered unique or important.

A fossil is defined as the remains of a prehistoric plant or animal. Fossils are considered to be non-renewable. Paleontological sensitivity is defined as the potential for a geologic unit to produce scientifically significant fossils. The sensitivity is based upon fossil data collected from the entire geologic unit, not just from a specific location or survey. Impacts to paleontological resources are identified from high to zero. The specific criteria are defined as follows:

- High Potential Rating: Rock units with a high potential for significant paleontological resources are those known to have yielded vertebrate fossils within the Proposed Project area or region. This does not necessarily imply that vertebrate fossils would always be recovered from high potential rated rock units, but only that there are recorded occurrences within the unit.
- Moderate Potential Rating: Rock units possessing some degree of potential, such as favorable depositional environment for resource preservation or lithologically similar rock units in the region that have yielded vertebrate fossils.
- Low Potential Rating: Rock units containing lithologies that do not commonly preserve significant fossil resources such as sediments of Holocene, sub-Holocene or Recent age are usually considered too young (less than 10,000 years old) in geologic time to preserve fossils.
- Zero Potential Rating: This rating is assigned to geologic formations that are igneous in origin, and therefore have no potential for producing fossil remains. This would also include artificial fill, as well as any non-fossilferous metamorphic rock units.

Construction – Less than Significant

Much of the Proposed Project area contains non-fossilferous metamorphic rocks making impacts to significant paleontological resources unlikely in these areas. However, there are areas that contain rock unit types that have a high potential for paleontological resources throughout the region (the Friars, Mission Valley, Scripps and the Ardath Shale Formations). The records search indicated that eight previously recorded paleontological sites are known to exist within the Proposed Project area (refer to Appendix 4.5-B). The eight fossil locations occur in the Scripps Formation (one locality), the Ardath Shale (one locality), the Friars Formation (four localities) and the Mission Valley Formation (two localities), these rock units have high sensitivity.

Some pole locations are within sedimentary rock formations that could potentially yield fossils. The type of pole replacements would need to be considered for impacts. A (micropile) small borehole diameter (<12 inches) for installation of a single utility pole would typically pulverize subsurface deposits including any fossil remains. In contrast, larger pole diameters (concrete pier), or excavations for deep utility trenches could result in the potential for buried fossil remains. Final engineering would determine installation method (micropile versus concrete pier), but at this time we assume that all poles foundations will be constructed using the concrete pier method.

There is the potential for impacts to these paleontological resources to occur when earthwork activities are performed, such as grading operations and excavation that cuts into the geological deposits (formations) within which fossils may be buried, especially when the excavations go below three feet in depth. Any possible potential impacts would remain less than significant

with the implementation of ordinary construction and operating restrictions (refer to Section 3.8) and APMs CUL-7, and CUL-8.

Operation & Maintenance – No Impact

SDG&E currently maintains and operates existing electric power, transmission, distribution and substation facilities throughout the Proposed Project site. As previously discussed above, to the extent operation and maintenance of the Proposed Project would occur in the same location as existing facilities and would have the same or substantially the same impacts, frequency and duration as operation and maintenance activities of the existing facilities, such activities are incorporated into the existing environmental setting and baseline for assessing impacts. Moreover, SDG&E already has standard internal programs and practices that avoid impacts to cultural resources and those programs and practices would not change as a result of the Proposed Project. The only activities that would occur would be regular inspection, maintenance, and repairs, such as structure and insulator replacements and underground line inspection (performed from the nine underground splice vaults). With the exception of the underground transmission line inspection and maintenance (Segment B) these activities would decrease slightly from existing conditions, and would have no effect on paleontological resources. Any grounddisturbing activities associated with Proposed Project operation and maintenance would be performed at locations already disturbed for Proposed Project construction. Therefore, no impacts to paleontological resources are anticipated during the continuing operation and maintenance following construction of the Proposed Project.

4.5.4.5 Question 5d - Disturb any human remains, including those interred outside of formal cemeteries?

Construction – Less Than Significant

There are no known existing cemeteries, previously recorded Native American or other human remains within or directly adjacent to the Proposed Project area. Therefore, the potential for the inadvertent discovery of Native American or other human remains during subsurface construction associated with the Proposed Project is considered low. If human remains are encountered during the course of construction, SDG&E would halt work in the vicinity of the find and would implement the appropriate notification processes as required by law (California Health and Safety Code 7050.5, Public Resources Code 5097.98-99, and NAGPRA). As a result, potential impacts would be less than significant.

Operation & Maintenance - No Impact

SDG&E currently maintains and operates existing electric power, transmission, distribution and substation facilities throughout the Proposed Project site. As previously discussed, to the extent operation and maintenance of the Proposed Project would occur in the same location as existing facilities and would have the same or substantially the same impacts, frequency and duration as operation and maintenance activities of the existing facilities, such activities are incorporated into the existing environmental setting and baseline for assessing impacts. Moreover, SDG&E already has standard internal programs and practices that avoid impacts to cultural resources and those programs and practices would not change as a result of the Proposed Project. Ground-disturbing activities associated with Proposed Project operation and maintenance would be performed at locations that have been previously disturbed for Proposed Project construction.

Therefore, no impacts to human remains are anticipated during the continuing operation and maintenance of the Proposed Project.

4.5.5 Project Design Features and Ordinary Construction/Operating Restrictions

With the implementation of the project design features and ordinary construction restrictions (as outlined within Section 3.8) and APMs outlined below, potential impacts relating cultural resources will remain less than significant.

4.5.6 Applicant Proposed Measures

When implemented, the following APMs would reduce the potential adverse impacts to cultural resources to a less than significant level:

- **CUL-1:** A qualified archaeologist would attend preconstruction meetings, as needed, and a qualified archaeological monitor would monitor activities in the vicinity of all known cultural resources within the Proposed Project area. The requirements for archaeological monitoring would be noted on the construction plans. The archaeologist's duties would include monitoring, evaluation of any finds, analysis of collected materials, and preparation of a monitoring results report conforming to Archaeological Resource Management Reports guidelines.
- **CUL-2:** Known cultural resources that will be avoided would be demarcated as Environmentally Sensitive Areas. Construction crews would be instructed to avoid disturbance of these areas.
- CUL-3: In the event that cultural resources are discovered, the archaeologist would have the authority to divert or temporarily halt ground disturbance to allow evaluation of potentially significant cultural resources. The archaeologist would contact SDG&E's Cultural Resource Specialist and Environmental Project Manager at the time of discovery. If the resource was discovered on MCAS Miramar, the base archaeologist would also be contacted by SDG&E. The archaeologist, in consultation with SDG&E's Cultural Resource Specialist, would 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. For significant cultural resources, a Research Design and Data Recovery Program would be prepared and carried out to mitigate impacts.
- **CUL-4:** All collected cultural remains would be cataloged, and permanently curated with an appropriate institution. All artifacts would be analyzed to identify function and chronology as they relate to the history of the area. Faunal material would be identified as to species.
- **CUL-5:** An archaeological monitoring results report (with appropriate graphics), which describes the results, analyses, and conclusions of the monitoring program, would be prepared and submitted to SDG&E's Cultural Resource Specialist and Environmental Project Manager following termination of the program. Any new cultural sites or features encountered would be recorded with the SCIC.
- **CUL-6:** Native American monitoring may be implemented if transmission line construction has the potential to impact identified and mapped traditional locations or places. The role of the Native American monitor shall be to represent tribal concerns and communicate with the tribal

council. Appropriate representatives will be identified based on the location of the identified traditional location or place.

CUL-7: A paleontological monitor would work under the direction of a qualified Project paleontologist and would be on site to observe excavation operations that involve the original cutting of previously undisturbed deposits for the eight poles located within paleontologically sensitive formations (i.e., Friars, Mission Valley, Scripps and the Ardath Shale Formations). A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials.

CUL-8: In the event that fossils are encountered, the paleontological monitor would 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 would 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 would 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) would recover them along with pertinent stratigraphic data. In most cases, this fossil salvage can be completed in a short period of time. Because of the potential for recovery of small fossil remains, such as isolated mammal teeth, 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 would be cleaned, repaired, sorted, cataloged, and deposited in a scientific institution with permanent paleontological collections, and a paleontological monitoring report would be written.

4.5.7 Detailed Discussion of Significant Impacts

Based upon the preceding analysis, no significant impacts relating to cultural resources are anticipated from the Proposed Project.

4.5.8 References

- Bowden-Renna, Cheryl. 2012. Revised Letter Report: eTS 21980-Cultural Resources Survey for 56 Wood-to Steel Pole Replacements along TL 13804 Encinas Substation to Penasquitos Substation, Central San Diego County, California.
- Anderson, Nikki. 2013. Paleontological Record Search Results letter for SX to PQ Project. Dated October 10, 2013.
- Byrd, B. F. and L. M. Raab. 2007. *Prehistory of the Southern Bight: Models for a New Millenium*. In California Prehistory: Colonization, Culture, and Complexity, T. Jones and K. Klar, eds. Altimira Press, New York.
- California [State of], California Environmental Quality Act. 2011. *Statutes and Guidelines*. Printed by the Association of Environmental Professionals.

- City of Poway. 1991. *Poway Comprehensive Plan*. Prehistoric and Historic Resources Element. Accessed October 21, 2013.
- City of San Diego. 2008. *City* of *San Diego General Plan*. Historic Preservation Element. Accessed October 10, 2013.
- Cordova, Isabel and Brian Williams. 2012. Inventory of the Cultural Resources for the SDG&E Undergrounding of Distribution Lines Associated with Tie Line 6961 San Diego County, California.
- El Adli, Joseph J. 2012. Paleontological Record Search Results letter for Transmission Line 6961 Sycamore to Bernardo dated March 12, 2012.
- Kroeber, Alfred L. 1925. *Handbook of the Indians of California*. Bureau of American Ethnology Bulletin No. 78. U.S. Government Printing Office, Washington, D.C.
- LeMenager, Charles R. 1989. Ramona and Round About: A History of San Diego County's Little Known Backcountry. Eagle Peak Publishing Company, Ramona, California.
- Luomale, Katherine. 1978. Tipai and Ipai. In *Handbook of North American Indians, Volume 8: California*. Smithsonian Institution.
- Meighan, C. W. 1954. *A Late Complex in Southern California Prehistory*. Southwestern Journal of Anthropology 10: 215-217.
- Moratto, M. J. 1984. California Archaeology. Academic Press, Inc. San Diego.
- National Environmental Policy Act. 2011. Online: http://ceq.hss.doe.gov/welcome.html
- Native American Graves Protection and Repatriation Act. 1990. Online: http://www.nps.gov/nagpra/mandates/index.htm
- Shipek, Florence C. 1982. *Kumeyaay Socio-Political Structure*. Journal of California and Great Basin Anthropology. Vol. 4, No. 2. Pp. 296-303.
 - 1991. Delfina Cuero: Her Autobiography, An Account of Her Last Years and Her Ethnobotanic Contributions. Ballena Press. Menlo Park, California.
- Spier, Leslie. 1923. *Southern Diegueno Customs*. University of California Publications in American Archaeology and Ethnology. 20:297-358.
- State of California. 2012. Health and Safety Code 7050.5
- State of California. 2012. Public Resources Code 5097.98-99.
- True, D. L. 1958. An Early Complex in San Diego County, California. American Antiquity, 23(3): 255-263.
 - 1966. An Early Complex in San Diego County, California. American Antiquity 23(3): 255-263.

- True, D. L., C. W. Meighan, and H. Crew. 1974. *Archaeological Investigations at Molpa, San Diego County, California*. University of California Publications in Anthropology, 11.
- Williams, Brian and Larry Tift. 2013. Inventory of the Cultural Resources along SDG&E's Proposed Sycamore to Penasquitos 230 kV Transmission Line Project San Diego County, California.
- Williams, Brian and Isabel Cordova. 2012. Inventory of the Cultural Resources along SDG&E's Tie Line 6951, San Diego County, California.