4.4 Cultural and Paleontological Resources

This section describes the environmental and regulatory settings and discusses impacts associated with construction and operation of the Mesa 500-kilovolt (kV) Substation Project (proposed project) proposed by Southern California Edison Company (SCE, or the applicant) with respect to cultural and paleontological resources. During scoping, a comment was received from the Gabrieleño Band of Mission Indians/Kizh (Kit'c) Nation stating that the proposed project was within their traditional territory and could affect cultural resources.

Cultural resources discussed in this section include historic resources, archeological resources (which may be historic or prehistoric and are a subset of historical resources), Native American resources, and paleontological resources:

- **Historic Resources:** The California Environmental Quality Act (CEQA) defines historic resources as resources that are listed on, or determined to be eligible for listing on, the California Register of Historical Resources (CRHR) or a local register, or are otherwise determined to be historic pursuant to CEQA or the CEQA Guidelines (Public Resources Code [PRC] § 21084.1 or Code of Regulations, Title 14, § 15064.5, respectively). According to the CEQA Guidelines, a historic resource may be an object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in terms of California's architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural records. Typically, in order to be considered historic for purposes of listing, a resource must be at least 50 years old.
- **Archaeological Resources:** Archaeological resources may be considered historic resources pursuant to the CEQA Guidelines. Archaeological resources may also be determined to be "unique" as defined by CEQA (PRC § 21083.2). Unique archaeological resources are artifacts, objects, or sites that can be demonstrated to (1) contain information needed to answer important scientific research questions and that there is a demonstrable public interest in that information; (2) have a special and particular quality such as being the oldest of its type or the best available example of its type; or (3) be directly associated with a scientifically recognized important prehistoric or historic event or person. Archaeological resources that are neither a unique archaeological nor an historical resource are not required to be addressed in an Environmental Impact Report (EIR).
- **Native American Resources:** Native American cultural resources that may include historical or archaeological resources, rock art, and prominent topographical areas, features, habitats, plants, animals, or minerals that contemporary Native Americans value and consider important for the preservation of Native American traditions.[1]
- **Paleontological Resources:** For the purpose of this EIR, paleontological resources refer to fossilized plant and animal remains of prehistoric species. They are valued for the information they yield about the history of the earth and its past ecological settings. Paleontological resources represent a limited, non-renewable, impact-sensitive scientific

[1] Assembly Bill (AB) 52, signed by Governor Brown in 2014, requires a lead agency to offer Native American tribes with an interest in tribal cultural resources located within its jurisdiction the opportunity to consult on CEQA documents. The new procedures under AB 52 apply to projects that issue draft negative declarations or notices of preparation after July 1, 2015. Because the Notice of Preparation for the proposed project was issued on June 5, 2015, AB 52 does not apply to the project.

and educational resource. Fossil remains such as bones, teeth, shells, and leaves are found in geologic deposits (i.e., rock formations). Paleontological resources, in general, include fossils as well as the collecting localities and the geologic formations that contain those fossils.

4.4.1 Environmental Setting

4.4.1.1 Regional Setting

The discussion of the regional setting presented in the following prehistory, ethnography and ethnohistory, and history sections is based on information provided in the Proponent's Environmental Assessment (SCE 2015) and supplemental cultural reports and information submitted by the applicant for the proposed project (Chiang and Tinsley Becker 2014a, 2014b; Williams 2014; Williams et al. 2014; DeBiase and Tinsley Becker 2015; Tinsley Becker et al. 2015; Williams 2015a, 2015b) unless otherwise cited.

Cultural Resources

The cultural history of the Los Angeles area can be divided into three nonexclusive time periods: (1) prehistory (more than 500 to 600 years ago but up to and including the 1700s depending on the amount of contact between native groups and Spanish and European settlers), (2) ethnohistory (roughly, the mid 1500s through the early 1800s), and (3) history (roughly, the mid to late 1700s to present).

Prehistory

The prehistory of Southern California consists of four periods—Late Pleistocene, Early Millingstone, Intermediate, and Late Prehistoric/Canaliño:

- **Late Pleistocene Period (pre-10,000 before present [BP]):** There is a certain level of uncertainty about this period due to the limited archaeological record for occupation during this period. The uncertainty results from geological conditions that do not favor preservation of remains from the period. It is possible that people inhabited the coastal areas of California during this time, but evidence is limited. Petroglyphs have been found from 20,000 years BP and stone tools have been found from 30,000 years BP in the inland Mojave Desert region, indicating possible occupation of Pleistocene lakeshores.
- **Early Millingstone Period (10,000 to 3,500 BP):** The record of the Early Millingstone Period is more evident along the California Coast, although some examples of the period are found in inland California. The record from inland California dates from a later time period than the record along the coast, suggesting that habitation during the Early Millingstone Period was limited to the California coast. People during this time were general foragers, relying on a variety of resources for survival. This period differentiates from the Late Pleistocene Period due to a focus on seed and plant consumption; animals and shellfish were consumed on a limited scale. Archaeological resources associated with this period include metates, manos, and large projectile points.
- **Intermediate Period (3,500 to 800 BP):** The Intermediate Period saw increased reliance on marine resources, though a diversity in resources remained due to continued consumption of plants, seeds, and animals. Hunting became more important in inland areas.

Archaeological resources associated with this period include mortars and pestles, large projectile points, and small projectile points.

- **Late Prehistoric/Canaliño Period (800 to 200 BP):** The Late Prehistoric Period was marked by establishment of larger settlement sand communities and development of localized cultures. People increasingly used bows and arrows and bone tools. Obsidian was used more commonly.

Ethnography and Ethnohistory

The proposed project area is located in Gabrieleño/Tongva territory. The name "Gabrieleño" refers to the association with Mission San Gabriel, but some descendant populations refer to themselves as Tongva. Traditional Gabrieleño/Tongva territory extends from the Pacific Ocean across the Los Angeles Basin and into western Riverside and San Bernardino Counties. Some local villages were inhabited year-round, but many large villages came together during the fall and winter when stored food resources were used. Smaller family units dispersed in the spring and summer when resources were more widespread. The Tongva were hunters and gatherers. Sources of food included acorns, yucca, sage seeds, pinyon, and other plants, while small and large game were hunted (SCE 2015).

History

The historic period in Southern California is divisible into three distinct periods: (1) Spanish Mission, (2) Mexican Rancho, and (3) Anglo-American:

- **Spanish Mission Period (1769–1821):** Spain made its first mainland contact with the Gabrieleño in 1769. Mission San Gabriel was established in 1771 in what is now Montebello and Rosemead as the fourth of an eventual 21 missions in California. The goal of the mission system was to convert the Native American population to Christianity and to use their labor in the development of the territory. Diseases brought by the Europeans and conditions in the missions had a heavy impact on the native population, severely reducing their numbers and destroying their established culture. The area that now comprises Monterey Park was part of the southern portion of the Mission San Gabriel Arcángel lands, and was used for cattle, horses, and sheep grazing. Mission San Gabriel was eventually moved to present-day San Gabriel to avoid flooding that occurred at the original site.
- **Mexican Rancho Period (1822–1848):** After gaining independence from Spain, the Mexican government secularized the missions, taking the land away from the Catholic Church and giving it to private citizens through a series of land grants. Native populations provided the labor for these ranchos. The rancheros raised cattle, and the trade in hides and tallow fueled California's economy at this time. Ranchos in the area included:
  - Rancho La Merced
  - Rancho Potrero Grande
  - Rancho Potrero Chico
  - Rancho San Antonio (Lugo)
  - Rancho Potrero de Felipe Lugo
  - Rancho La Puente
  - Rancho Santa Anita

The United States gained ownership of California from Mexico in 1848 with the signing of the Treaty of Guadalupe Hidalgo, ending Mexican control.

- **Anglo–American Period (1848–present):** California became a state in 1850. The state's population increased due to emigrants interested in land, gold, agriculture, and other pursuits. The United States was obligated to recognize the Mexican land grants under the Treaty of Guadalupe Hidalgo. The history of local cities is provided below:
  - **Monterey Park:** In 1866, approximately 5,000 acres surrounding what is now Monterey Park were purchased and subsequently used as a sheep ranch until 1885. In 1906, the land was divided into 0.5-acre and 1-acre lots. By 1944, half of the land in the city, mostly in the southern area of the city, was still generally undeveloped. By the late 1970s, the city's population growth had slowed.
  - **Montebello:** From 1900 to 1920, Montebello was an ideal agricultural community due to the climate, soil, and reliable water supply. In 1917, oil was discovered in the Montebello Hills. By the 1920s, the oil field accounted for one-eighth of the state's total crude oil production (City of Montebello not dated). Montebello's population was 5,498 in 1930, and the population increased to 21,735 by 1950, likely due to industry and residential development during World War II. Steady population increases occurred through the historic period and today it numbers 61,085 people.
  - **Rosemead:** The first American settlers in Rosemead arrived in 1852. Prior to its development into residential and commercial areas, ranching and agriculture were the chief land uses in the area.
  - **South El Monte:** Farms and ranches were established in the early Anglo-American Period; the area that is now South El Monte remained chiefly rural until after the 1950s when more residential, industrial, and commercial development occurred.
  - **Commerce:** The Atchison, Topeka & Santa Fe Railway built the Railway's main line through the area that is now Commerce in 1887. Most land remained ranch lands for the next several decades. Factories were built along the railroad and land use became more industrial by the 1920s.
  - **Bell Gardens:** The land was used for ranching and agriculture into the 1930s. The area was subdivided in 1900. Firestone Tire Company bought land in the area in 1927, touching off industrialization. In 1930, residential development began in stride. Industrialization continued during World War II.
  - **Pasadena:** Pasadena incorporated as a city in 1886, and its population increased rapidly. The city annexed many areas to increase the city's geographic size. Pasadena was known for wealth and architecture. It also gained a reputation for being a winter resort town. Industrial activities began in the city during World War II. The Arroyo Seco Parkway was constructed between Pasadena and Los Angeles in 1940, and residential development continued after World War II.

Paleontological Resources

The proposed project is located within the Los Angeles Basin, an alluviated lowland coastal plain bounded by mountains and hills that expose Mesozoic or older basement rocks and sedimentary and igneous rocks of Late Cretaceous to Late Pleistocene age. The physiographic basin is underlain by a deep, structural depression. Parts of this depression have been the sites of discontinuous deposition since the Late Cretaceous period as well as continuous subsidence and deposition since

the Middle Miocene period. The Holocene deposits include sediments in modern stream channels; on these channel's alluvial fans and floodplains; and as sediments on beaches, in embayments, and in most dunes. The Los Angeles Basin consists of four primary structural blocks: southwestern, northwestern, central, and northeastern. The surface of the lowland plain of the central block is formed by the coalesced alluvial fans of the Los Angeles River, Rio Hondo, San Gabriel River, and Santa Ana River. From this central block, floodplain deposits extend up the Rio Hondo and San Gabriel River through the Whittier Narrows to form the surficial strata of the San Gabriel Valley in the central part of the northeastern block. Toward the coast, these deposits extend through several narrow gaps in the chain of low hills and mesas along the Newport-Inglewood-Rose Canyon fault zone into estuarine deposits along the shoreline. Except in coastal areas, the deposits contain as much as 200 feet of boulder, cobble, and pebble gravel; coarse- to fine-grained sand; and silt. The coarser sediment is most abundant in the lower part of the deposit. A brief description of the geologic units in the proposed project area is provided below.

Quaternary Wash Deposits

Quaternary wash deposits (Qw) consist primarily of silt and sand with minor amounts of gravel, and are only present within the Goodrich Substation area. Quaternary wash deposits are Holocene in age (11,000 years BP to present time). Quaternary wash deposits within the proposed project area have a very low paleontological potential (Potential Fossil Yield Classification [PFYC] Class 2).

Quaternary Alluvium

Undifferentiated Quaternary alluvial deposits are deposited by fluvial processes (transported by water) and can be further subdivided by age into younger alluvium (Holocene age) and older alluvium (Pleistocene age). Holocene units have low paleontological potential within the initial 5 feet, and increase to moderate/unknown paleontological potential below 5 feet in depth below the ground surface and high potential in areas with previously recorded fossil localities. Pleistocene alluvium exposed at the surface or otherwise has moderate to high potential to produce significant paleontological resources, depending on proximity in relation to known paleontological localities of the same age. These deposits are described in detail below.

Quaternary Young Alluvium

Quaternary young alluvial deposits (Qyf 1, 2, 3, and 4) are present within the proposed project area. These deposits are late Pleistocene to Holocene in age (2.5 million years BP to present). The younger aged deposits have low paleontological potential (PFYC Class 2). Late Pleistocene alluvium, however, is known to yield scientifically important fossils and has moderate paleontological potential (PFYC Class 3).

Quaternary Older Alluvium

Quaternary older alluvium (Qof 1, 2, and 3) is present within the proposed project area. Quaternary older alluvium is Pleistocene age (2.5 million years to 11,000 years BP). Pleistocene geologic units, particularly alluvium, are generally considered to have moderate to high sensitivity because these units have yielded fossils of Ice Age mammals from nearby localities. Numerous other examples exist in the Los Angeles area, including fossil plants, invertebrates, and mammals (e.g., ground sloth, rodents, horse, tapir, camel, deer, llama, mastodon, and mammoth) (Miller et al. 2015). Older alluvium within the proposed project area has a moderate paleontological potential (PFYC Class 3).

Fernando Formation

The Fernando Formation is Pliocene in age (2.5 million years BP to 11,000 years BP). The Fernando Formation contains two sandstone members, both of which are present within the Mesa Substation area and along Telecommunications Routes 1 and 2. The Fernando Formation has yielded marine fossils, including bony fish, sharks, whales, dolphins, and invertebrates (Miller et al. 2015). Specimens of shark teeth—including that of great white sharks, eagle rays, and mako sharks—are the most common fossils (Miller et al. 2015). Additionally, invertebrate shells may be locally abundant (Miller et al. 2015). The Fernando Formation within the proposed project area has a high paleontological potential (PFYC Class 4).

4.4.1.2 Approach to Data Collection

Methods to identify cultural resources within and adjacent to the proposed project included records searches, field surveys and site verification visits, and Native American consultation.

Records Searches and Surveys—Methodology and Previous Survey Efforts

Mesa Substation; Transmission, Subtransmission, and Distribution Rights-of-Way; Staging Yards 1, 2, and 3

Cultural resources records and literature searches of documents and maps on file at the South Central Coastal Information Center (SCCIC) were conducted in June 2014 (Williams et al. 2014) and January 2015 (Williams 2015a) for the proposed project area (shown in Figure 2-3a, excluding areas that only include telecommunications routes) and a 0.5-mile buffer. The area includes Staging Yards 1, 2, and 3.

The majority of the Mesa Substation site and adjacent transmission, subtransmission, and distribution rights-of-way was surveyed for the Tehachapi Renewable Transmission Project (TRTP) for archaeological resources in transects no greater than 40 feet wide and typically at 10 meters wide (Wiliams et al. 2014,2015a). Small portions of the project site had not yet been surveyed. ASM Affiliates (ASM) surveyed these areas for archaeological resources to an intensive level using 10-meter transects on June 19, 2014. Staging Yards 1 and 3 were also partially surveyed as part of a previous SCE project in 10-meter-wide transects. ASM surveyed the unsurveyed portions of Staging Yards 1 and 3, as well as all of Staging Yard 2 for archeological resources to an intensive level using 10-meter transects on August 19, 2014 (Williams et al. 2014).

To determine the potential for built environment historic resources, ASM reviewed current and historic aerial photographs of the substation site. Subsequently, ASM conducted a historical resource field survey of the Mesa Substation area on August 19, 2014. ASM took photographs to document the three buildings located at 440 Potrero Grande Avenue. ASM also conducted archival research at the Monterey Park Public Library, including the Special Collections Room, and the City of Los Angeles Public Library to evaluate the buildings located in aerial imagery on the Mesa Substation site (Williams et al. 2014).

The Mesa substation site itself was assessed in 2010 for eligibility for a previous project; the United States Forest Service and State Historic Preservation Officer (SHPO) concurred with the study's finding that the Mesa Substation complex was not eligible for listing on the CRHR or National Register of Historic Places (NRHP). Therefore, the Mesa Substation complex was not evaluated further fore the proposed project (Williams et al 2014).

Telecommunications Routes

Records searches for the telecommunications routes were conducted in January 2015 and included a 0.5-mile buffer around the telecommunications routes (Williams 2015a). Portions of the telecommunications routes close to the Mesa Substation and that cross over TRTP transmission routes had been surveyed as part of the TRTP. Telecommunication route alignments not surveyed for the TRTP were surveyed in 10-meter-wide transects with a 25-foot buffer on either side of the centerline of the alignment as part of a survey effort in late December 2014 and early January 2015 (Williams 2015a).

Goodrich Substation and Staging Yard 4

Cultural resources records and literature searches of documents and maps on file at the SCCIC were conducted in June 2014 (Williams et al. 2014) for the proposed project area (shown in Figure 2-3e) and an 0.5-mile buffer.

The majority of the Goodrich Substation site (Figure 2-3e), which includes the project construction area and Staging Yard 4, was surveyed for archaeological resources for the TRTP project in 10-meter-wide transects. A small portion of the north central part of the Goodrich Substation site had not been surveyed. ASM surveyed this area to an intensive level for archaeological resources using 10-meter transects on June 19, 2014. No architectural historical resources survey was conducted because no potential built environment historic resources were identified in examination of aerial photographs of the Goodrich Substation area (Williams et al. 2014).

South Area

Records searches for the south area were conducted in January 2015 and included a 0.5-mile buffer around south area project components (Williams 2015a). The survey area in the south area encompassed 25-meter buffers around the two existing streetlights, as well as around the tower to be replaced in Commerce in 10-meter transects as part of a survey effort in late December 2014 and early January 2015 (Williams 2015a). The parcel containing the tower replacement area in Commerce was also surveyed in July or August 2015 as part of the survey for Staging Yard 5 (Williams 2015b).

Other Existing Substations

To evaluate the eligibility of Laguna Bell, Lighthipe, Repetto, San Gabriel Substations, Anita, Fairfax, Garfield, Eagle Rock, and Newmark Substations, Urbana Preservation and Planning, LLC (Urbana) reviewed archival resources such as the Los Angeles Public Library resources, Los Angeles County library resources, historic United States Geological Survey (USGS) Topographic Quadrangle maps, drawings from the SCE Corporate Drawing Management's Hummingbird digital archive, and the Huntington Library SCE historic photograph collection (Chiang and Tinsley Becker 2014a, 2014b; DeBiase and Tinsley Becker 2015; Tinsley Becker et al. 2015). To assess the Laguna Bell and Lighthipe Substations' eligibility for the CRHR and NRHP, Urbana staff also visited and observed the two substation properties on October 23, 2014 (Chiang and Tinsley Becker 2014a). Urbana staff visited the Repetto and San Gabriel Substation Properties on January 2, 2015 (DeBiase and Tinsley Becker 2015). To evaluate the eligibility of the Anita, Fairfax, Garfield, and Newmark Substations, Urbana visited those substations on March 4, 2015 (Tinsley Becker et al. 2015). To evaluate eligibility of the Eagle Rock Substation, Urbana visited the property on May 13, 2014 (Chiang and Tinsley Becker 2014b).

Substation complexes built after 1950 that do not have buildings with architectural significance are generally not eligible for the NRHP or CRHR because they generally have an unmeritorious appearance. The eligibility of 14 substations built between 1957 and 1971 with buildings without architectural significance or without buildings (Center, Eaton, Goodrich, Mira Loma, Narrows, Pardee, Ravendale, Redondo Beach, Rio Hondo, Rosemead, Rush, Vail, Vincent, and Walnut) were evaluated from desktop study. Wabash Substation, which was rebuilt in 1967 and had all original elements removed, was likewise studied from desktop only. The Mesa Substation was formally evaluated as part of another SCE project (Williams 2014).

Staging Yards 5, 6, and 7

Staging Yard 5 was included in the 0.5-mile buffer for the records search for structure replacement work in Commerce (Williams 2015a). A records search was completed for Staging Yard 6 and a 0.25-mile buffer as part of SCE's TRTP Segment 11 (Pacific Legacy 2007). Staging Yard 7 was covered in the 0.5-mile buffer of the records search for Telecommunications Route 3 (Williams 2015a).

ASM surveyed Staging Yards 5 and 7 on July 21 and August 17, 2015, at an intensive level (Williams 2015b). Staging Yard 6 was surveyed as part of TRTP Segment 11 at parallel intervals not more than 40 feet apart (Pacific Legacy 2007).

Native American Consultation[2]

SCE contacted the Native American Heritage Commission (NAHC) on September 8, 2014, to request a Sacred Lands File Search for the Mesa Substation project. The records search covered the proposed project area, as well as areas within 1 mile of the proposed project area. SCE also requested a list of Native American tribal groups and individuals with interests in the proposed project area. NAHC provided a contact list of nine people and organizations that might have information on the proposed project area. Between January 23 and January 29, 2015, SCE sent letters to the nine contacts provided by the NAHC:

- Sam Dunlop, Cultural Resources Director, Gabrielino/Tongva Nation
- John Tommy Rosas, Tribal Administrator, Tongva Ancestral Territorial Tribal Nation
- Anthony Morales, Chairperson, Gabrieleno/Tongva San Gabriel Band of Mission Indians
- Sandonne Goad, Chairperson, Gabrielino/Tongva Nation
- Robert F. Dorame, Tribal Chair, Cultural Resources, Gabrielino Tongva Indians of California Tribal Council
- Bernie Acuna, Co-Chairperson, Gabrielino-Tongva Tribe
- Linda Candelaria, Co-Chairperson, Gabrielino-Tongva Tribe
- Andrew Salas, Chairperson, Gabrieleño Band of Mission Indians/Kizh (Kit'c) Nation

[2] As indicated previously, AB 52 recently amended CEQA through, in relevant part, adding section 21084.2 to the PRC. PRC section 21084.2 establishes that a substantial adverse effect on the significance of a tribal cultural resource may have a significant effect on the environment. The amendment does not apply to projects for which a Notice of Preparation was issued prior to July 1, 2015 (Assembly Bill 54. (Cal. 2014)). The Notice of Preparation for the proposed project was issued on June 5, 2015; therefore, the amendments to CEQA per Assembly Bill 52 do not apply to the proposed project.

- Conrad Acuna, Gabrielino-Tongva Tribe

SCE Archaeologist, Amanda Cannon, held a phone discussion with Anthony Morales of the Gabrieleño/Tongva Band of Mission Indians regarding the proposed project. SCE also requested a second sacred lands file search from the NAHC on March 3, 2015, because Andrew Salas of the Gabrieleño Band of Mission Indians/Kizh (Kit'c) Nation indicated to SCE that the proposed project would be located within sacred lands. A representative of the NAHC responded on June 22, 2015, and indicated that potential Native American Heritage resources exist in the Los Angeles USGS 7.5-minute topographic quadrangle. The letter said that SCE should contact the Tongva Ancestral Territorial Tribal Nation for further information.

California Public Utilities Commission (CPUC) outreach included sending Notices of Preparation to tribes listed on the NAHC contact list as well as reaching out to Andy Salas, Chairman of the Gabrieleño Band of Mission Indians regarding his scoping comment. In addition, the CPUC held a conference call with Mr. Salas, Gary Strickel (Tribal Archaeologist), a tribal member, the CPUC environmental consultant's project manager, and the CPUC environmental consultant's archaeologist on August 25, 2015.

Paleontological Resources

Paleo Solutions, Inc. conducted a paleontological resources study for the proposed project. The study area for the proposed project included the Goodrich Substation area (Figure 2-3e), the Mesa Substation area (Figure 2-3a), the telecommunications routes (with 25-foot buffer), and the south area (streetlight source line plus 25-foot buffer in Bell Gardens; alignment plus 25-foot buffer near structure to be replaced in Commerce). Records searches were conducted on June 30 and December 18, 2014. The survey area excluded the triangle jutting out northwest of the area shown in Figure 2-3a and instead surveyed the linear path of the transmission line in that alignment with a 25-foot buffer. A literature search was also conducted and included published scientific papers from the Biodiversity Research Center of the Californias library, the Journal of Vertebrate Paleontology, online resources such as the USGS and Science Direct, and documents on file at Paleo Solutions. TRTP paleontological resource documents were reviewed to the extent that they pertained to the paleontological resources study area. Paleo Solutions also reviewed published geologic maps of the area, as well as aerial imagery. Parts of the paleontological study area were subject to a pedestrian survey in June 2014; the remainder of the study area was surveyed in December.

This analysis also informed determination of the potential for uncovering an unknown paleontological resource based on a paleontological review conducted by a qualified paleontologist, as documented in the Paleontological Resources Technical Report provided by the applicant, and review of the mapped geological units in the proposed project area. The geologic units in the proposed project area were classified according to the PFYC System, a predictive resource management tool developed by the United States Forest Service and later refined by the Bureau of Land Management.

4.4.1.3 Results of Records Searches, Field Surveys, and Consultation

This section discusses the results of the records searches, field surveys, and Native American consultation.

Cultural Resources

Records Searches and Field Surveys

Records searches identified at least 133 past cultural resource studies that had been conducted within 0.5 mile of the proposed project area, and at least 34 studies that had been conducted for areas directly within the proposed project area (Williams 2015a). These past studies identified a total of at least 44 cultural resources within a 0.5-mile radius of the proposed project area, including the Mesa Substation itself. These resources include at least 40 historic-era resources, one prehistoric resource, and three multi-component resources (both historic and prehistoric). (Williams 2015a). Within the proposed project area, there are 12 previously recorded resources, all of which are characterized as historic era resources.

Field surveys conducted for the proposed project identified four new historic era resources; no new prehistoric era resources were identified (Williams et al. 2014; Williams 2015a, 2015b).

Mesa 500-kV Substation Site Area, including Staging Yards 1, 2, and 3

Records search results indicated seven historic era sites in the proposed Mesa Substation site area, including areas immediately adjacent to the substation where transmission, subtransmission, and distribution line work would occur. The seven sites and their corresponding resource numbers are presented in Table 4.4-1, along with the components of the Mesa Substation complex. Of the seven previously recorded sites, six were re-located during field surveys, but one no longer exists because it was removed during construction of the TRTP. All six existing sites are historic; no prehistoric sites were identified during record searches conducted for the proposed project.

Several distribution circuits that would be reconfigured as part of the proposed project were also identified on the site; all but two are not old enough to be eligible resources. The remaining two (Brookline and Highcliff 16-kV Distribution Lines) were recommended not eligible. The Mesa Substation complex was previously determined ineligible (Williams 2014). Several electrical infrastructure facilities (subtransmission and distribution lines) are also located at the Mesa Substation site. Some were previously studied for another SCE project, and many more were studied for the proposed project. All facilities were all summarized in a 2014 report prepared for the proposed project (Williams 2014). These facilities are listed in Table 4.4-1.

Three additional historic era resources were newly identified during field surveys of the Mesa Substation site area for the proposed project. These historic era resources include three buildings located at 440 Potrero Grande Drive that were constructed more than 45 years ago. The buildings' plans, architectural features, conditions, and historical integrity were noted, and California Department of Parks and Recreation (DPR) 523 site records were prepared to document the survey. None of the buildings were recommended as eligible for listing on CRHR or the NRHP (Williams et al. 2014) and the CPUC has no evidence to conclude that they are otherwise considered historic resources under CEQA.

Table 4.4-1 Historic Resources Located within the Mesa Substation Site Area

Resource	Description	NRHP/CRHR Eligibility
P-19-186876	Antelope–Mesa 220-kV Transmission Line*	Not eligible; removed during construction of TRTP
P-19-190502	Mesa–Anita–Eaton 66-kV Subtransmission Line* (portions rebuilt for TRTP)	Not eligible
P-19-190503	Mesa–Ravendale–Rush 66-kV Subtransmission Line* (portions rebuilt for TRTP)	Not eligible
P-19-190504	Rio Hondo–Amador–Jose–Mesa 66-kV Subtransmission Line* (portions rebuilt for TRTP)	Not eligible
P-19-190505	Walnut–Mesa 220-kV Transmission Line*	Not eligible
P-10-190508	Walnut–Hillgen–Industry–Mesa–Reno 66-kV Subtransmission Line* (portions rebuilt under TRTP)	Not eligible
-	Mesa–Rush No. 2 66 kV Subtransmission Line* (portions rebuilt under TRTP)	Not eligible
-	Mesa–Narrows 66-kV Subtransmission Line* (portions rebuilt under TRTP)	Not eligible
-	Center–Mesa 220-kV Subtransmission Line*	Not eligible
-	Eagle Rock–Mesa 220-kV Subtransmission Line	Recommended not eligible
-	Mesa–Laguna Bell–Narrows 66-kV Subtransmission Line	Recommended not eligible
-	Mesa–Newmark–Ramona 66-kV Subtransmission Line	Recommended not eligible
-	Mesa–Repetto–Wabash 66-kV Subtransmission Line	Recommended not eligible
-	Mesa–Newmark No. 1 66-kV Subtransmission Line	Recommended not eligible
-	Mesa–Newmark No. 2 66-kV Subtransmission Line	Recommended not eligible
-	Mesa–Rosemead No. 1 66-kV Subtransmission Line	Recommended not eligible
-	Mesa–Rosemead No. 2 66-kV Subtransmission Line	Recommended not eligible
-	Mesa–Rush No. 3 66-kV Subtransmission Line	Recommended not eligible
-	Mesa–San Gabriel 66-kV Subtransmission Line	Recommended not eligible
-	Goodrich–Laguna Bell 220-kV Subtransmission Line	Recommended not eligible
-	Laguna Bell–Rio Hondo 220-kV Subtransmission Line	Recommended not eligible
-	Lighthipe–Mesa 220-kV Subtransmission Line	Recommended not eligible
-	Mesa–Redondo 220-kV Subtransmission Line	Recommended not eligible
-	Mesa–Vincent 220-kV Subtransmission Line	Recommended not eligible
-	Brookline 16-kV Distribution Line	Recommended not eligible
-	Highcliff 16-kV Distribution Line	Recommended not eligible
-	Mesa Substation Complex*	Not eligible
-	440 Potrero Grande Drive Building A	Recommended not eligible
-	440 Potrero Grande Drive Building B	Recommended not eligible
-	440 Potrero Grande Drive Building C	Recommended not eligible

Source: Williams et al. 2014, Williams 2014.
Key:
CRHR California Register of Historic Resources
kV kilovolt
NRHP National Register of Historic Places
TRTP Tehachapi Renewable Transmission Project
* Evaluated for previous SCE project

Telecommunications Routes

Records search and past survey results indicated 12 sites within the proposed project area for the Telecommunications Routes, as detailed in Table 4.4-2. Six of these sites had been identified during past cultural resources inventories conducted for the TRTP (P-19-186876, P-19-190502, P-19-190503, P-19-190504, P-19-190505, and P-19-190508). One resource—the Antelope-Mesa 220-kV

Transmission Line (P-19-186876)—was removed during construction of the TRTP and therefore is not considered further in this analysis. The other six previously documented sites fell within the proposed project area for Telecommunication Route 3 that was not surveyed during the cultural resource inventories conducted for the TRTP. These sites include the Montebello Oil Field, the San Juan Matias Sanchez Adobe, the Mission Vieja Plaque, the Whittier Narrows Dam Recreation Area, the Temple School, and one of six Siphon Road Towers.

Table 4.4-2 Historic Resources Located within the Proposed Project Area of the Telecommunications Routes

Resource	Description	Telecommunication Route	NRHP/CRHR Eligibility
P-19-003813	Montebello Oil Field	3	Not evaluated
P-19-178617	Juan Matias Sanchez Adobe	3	Listed in CRHR
P-19-186540	Mission Vieja Plaque	3	Listed in CRHR
P-19-186889	Whittier Narrows Dam Recreation Area	3	Not evaluated
P-19-186876	Antelope–Mesa 220-kV Transmission Line*	1	Not eligible; removed during construction of TRTP
P-19-190334	Temple School	3	Recommended NRHP eligible as local landmark
P-19-190502	Mesa–Anita–Eaton 66-kV Subtransmission Line* (portions rebuilt under TRTP)	1	Not eligible
P-19-190503	Mesa–Ravendale–Rush 66-kV Subtransmission Line* (portions rebuilt under TRTP)	1	Not eligible
P-19-190504	Rio Hondo–Amador–Jose-Mesa 66-kV Subtransmission Line* (portions rebuilt under TRTP)	1	Not eligible
P-19-190505	Walnut–Mesa–220-kV Transmission Line*	3	Not eligible
P-19-190507	SCE Siphon Road Towers	3	Not eligible; tower previously reported in proposed project area has been removed.
P-10-190508	Walnut–Hillgen–Industry–Mesa-Reno 66-kV Subtransmission Line* (portions rebuilt under TRTP)	2b and 3	Not eligible

Source: Williams 2015a
Key:
CRHR California Register of Historic Resources
kV kilovolt
NRHP National Register of Historic Places
TRTP Tehachapi Renewable Transmission Project
* Evaluated for previous SCE project

During surveys conducted January 5 and 6, 2015, for the proposed project, elements of four of the six previously recorded sites were encountered in the proposed project area for Telecommunication Route 3 (Williams 2015a). No evidence of the Montebello Oil Field (P-19-003813) was observed in the proposed project area, and the Siphon Road Tower (P-19-19057) previously reported in the proposed project area has been removed; therefore these two sites are

not considered further in this analysis. All previously recorded sites from the results of the record search and revisited during pedestrian surveys are historic; no prehistoric sites were identified during surveys or in the record search conducted for the proposed project.

Telecommunications Route 1 is located on land that was part of Rancho Potrero Grande. The Gabrieleño Band of Mission Indians/Kizh (Kit'c) Nation identified this area as culturally sensitive.

North Area and Staging Yard 4

Records search and past survey results indicate that there is one historic site located at Goodrich Substation in Pasadena, as listed in Table 4.4-3. No prehistoric sites are known to occur within the proposed project area at Goodrich Substation based on the survey and record searches that were conducted in the Goodrich Substation survey area. The Goodrich Substation itself is not of sufficient age to be eligible for the NRHP or CRHR.

Table 4.4-3 Historic Resources Located within Goodrich Substation Site Area

Resource	Description	NRHP/CRHP Eligibility
P-19-190502	Mesa–Anita–Eaton 66 kV Subtransmission Line* (portions rebuilt under TRTP)	Not eligible

Source: Williams et al. 2014
Key:
CRHR California Register of Historic Resources
kV kilovolt
NRHP National Register of Historic Places
TRTP Tehachapi Renewable Transmission Project
* Evaluated for previous SCE project

Existing Substation Modifications

The proposed project would require equipment replacements and upgrades within the perimeters of several existing substations[3] in addition to the Mesa and Goodrich Substations. The applicant conducted a review of each of these substations and assessed whether they had been evaluated for NRHP/CRHR eligibility (Williams 2014). Additionally, Historic Resource Analysis Reports/Historic Property Survey Reports were prepared to evaluate NRHP/CRHR eligibility for the Laguna Bell and Lighthipe Substation Properties (Chiang and Tinsley Becker 2014a); the Repetto and San Gabriel Substation Properties (DeBiase and Tinsley Becker 2015); and the Anita, Fairfax, Garfield, and Newmark Substation Properties (Tinsley Becker et al. 2015). The Amador, Hillgen, Industry, and Jose Substations have not been evaluated. Table 4.4-4 lists each substation property where equipment replacements and/or upgrades would occur and its NRHP/CRHR eligibility status. The Mira Loma Substation is not of sufficient age to be eligible for the NRHP or CRHR.

Table 4.4-4 Historic Resources at Existing Substations

Description	NRHP/CRHP Eligibility
Anita Substation	Recommended Not Eligible
Center Substation	Recommended Not Eligible
Eagle Rock Substation	Recommended Eligible (main substation building and entry pillars individually eligible and eligible as contributing elements to Big Creek Hydroelectric District)
Eaton Substation	Recommended Not Eligible

[3] Work at Hillgen, Industry, Jose, and Amador Substations would be limited to conducting in-service testing, and these substations were therefore not evaluated for eligibility.

Table 4.4-4 Historic Resources at Existing Substations

Description	NRHP/CRHP Eligibility
Fairfax Substation	Recommended Eligible (main substation building)
Garfield Substation	Recommended Not Eligible
Laguna Bell Substation	Recommended Eligible (substation building and warehouse building)
Lighthipe Substation	Recommended Eligible (substation property entrance pillars, main substation building, pump house and paint and oil storage house, water supply pump house)
Narrows Substation	Recommended Not Eligible
Newmark Substation	Recommended Eligible (substation building)
Pardee Substation	Recommended Not Eligible
Ravendale Substation	Recommended Not Eligible
Redondo Substation	Recommended Not Eligible
Repetto Substation	Recommended Not Eligible
Rio Hondo Substation	Recommended Not Eligible
Rosemead Substation	Recommended Not Eligible
Rush Substation	Recommended Not Eligible
San Gabriel Substation	Recommended Eligible (substation building)
Vail Substation	Recommended Not Eligible
Vincent Substation	Recommended Not Eligible
Wabash Substation	Recommended Not Eligible
Walnut Substation	Recommended Not Eligible

Sources: Williams 2014; Chiang and Tinsley Becker 2014a, 2014b; DeBiase and Tinsley Becker 2015, Tinsley Becker et al. 2015
Key:
CRHR California Register of Historic Resources
NRHP National Register of Historic Places

South Area

No historic or archaeological sites were located in a records search or during surveys where the streetlight source conversion would occur in Bell Gardens or where a transmission structure would be replaced in the City of Commerce (Williams 2015a).

Staging Yards 5, 6, and 7

There are no resources at Staging Yard 5, two historic-era resources at Staging Yard 6, and one historic-era site at Staging Yard 7, as listed in Table 4.4-5. These sites were identified during surveys. The site at Staging Yard 7 was newly documented during a survey for the proposed project. Sites found in records searched that are outside the staging yards are not included since all staging activities would take place inside the staging yards. No prehistoric sites were located in surveys or in record searches.

Table 4.4-5 Historic Resources Located at Proposed Staging Yards

Resource	Description	Staging Yard	Eligibility
-	Eagle Rock–Mesa 220-kV Subtransmission Line	6	Recommended not eligible
P-19-190503	Mesa-Ravendale-Rush 66-kV Subtransmission Line* (portions rebuilt under TRTP)	6	Not eligible
SAY-S-1	Footings for the KRLA radio station antenna tower; tower not present. Shack with engine and water heater.	7	Not evaluated

Source: Williams 2015b, 2014.
Key:
kV kilovolt
TRTP Tehachapi Renewable Transmission Project
* Evaluated for previous SCE project

Native American Consultation

This section details results of Native American consultation, which included consultation with the NAHC and outreach to individual tribes.

Sacred Lands File Searches. The NAHC responded to SCE's first request for a Sacred Lands File search on October 7, 2014 and reported that that no resources were recorded in the NAHC Sacred Lands Inventory File in proximity to components of the proposed project. However, in response to SCE's second request for a Sacred Lands File search, the NAHC on June 22, 2015, indicated that potential Native American Heritage resources exist in the Los Angeles United States Geological Survey quadrangle. The letter said SCE should contact the Tongva Ancestral Territorial Tribal Nation for further information.

Tongva Ancestral Territorial Tribal Nation. In an e-mail dated January 28, 2015, John Tommy Rosas, Tribal Administrator for the Tongva Ancestral Territorial Tribal Nation asked whether Federal Communication Commission permits were required for the project and requested that a specific firm provide monitors for any excavation. SCE responded that a Federal Communication Commission permit was not required for the project.

Gabrielino/Tongva San Gabriel Band of Mission Indians. SCE Archaeologist Amanda Cannon held a phone discussion with Anthony Morales of the Gabrielino/Tongva Band of Mission Indians regarding the project. Mr. Morales expressed concerns that the cultural resource surveys for the Tehachapi Renewable Transmission Project were too old to be used for the proposed project and that they were conducted without the participation of the Gabrielino/Tongava Band. In addition, he indicated the Montebello area is culturally sensitive, containing remains of past villages and mission remains.

Gabrieleño Band of Mission Indians/Kizh (Kit'c) Nation. On January 26, 2015, Andrew Salas, Chairman of the Gabrieleño Band of Mission Indians/Kizh (Kit'c) Nation, replied to SCE's outreach letter in an e-mail listing four sacred sites—Siba, Houtnga, Isankanga, and Ouiichi—and stated that they believe the project would impact the sites.

Mr. Salas also responded to the CPUC's Notice of Preparation for the proposed project. He stated that the area is sensitive in that it is a traditional Gabrieleño territory. Mr. Salas requested that a Native American monitor be on site during ground disturbing activities. In a subsequent email, Mr.

Salas provided a map of Rancho Potrero Grande, which was owned by Manuel Perez, a Gabrieleño native. Mr. Salas stated the area was a village site.

During the CPUC's conference call with Mr. Salas, the Tribal Archaeologist, and a member of the tribe, the Tribal Archeologist discussed areas of known and potential resources within the general location of the proposed project. In addition, the archeologist noted that the tribe had submitted a request to the NAHC to document an area within the vicinity of the proposed project as Sacred Land and indicated that the request also included areas of known and potential resources. The CPUC requested that the tribe provide this information to its qualified archeologist, Dr. G. T. Gross, for review as part of the EIR preparation.

The information provided by the Tribe identified a proposed Sacred Land area in the vicinity of the proposed Mesa Substation site and proposed Telecommunications Routes 1 and 3. In addition, one archaeological resource that was not identified in record searches and surveys was identified within the proposed Sacred Land area in the materials provided by the Tribe. The resource is located over one mile away from the nearest project component and therefore was outside of the proposed project's records search area. The remainder of the identified archaeological resources were identified during project records searches.

Paleontological Resources

Record Searches

As noted above, a record search was conducted at the Natural History Museum of Los Angeles County. The search included a review of mapped resources known to exist in the study area and an analysis of proposed project maps, engineering drawings, and technical data. The potential for paleontological resources to occur within the proposed project was determined on the basis of a paleontological review of the proposed project area and mapped geological units that underlie the proposed project components As part of the analysis, the geologic units in the proposed project vicinity were classified according to the PFYC System which ranks potential to uncover resources on a scale of 1-5 (1 being lowest potential and 5 being highest potential) (BLM 2007). The PFYC System ranking is explained in Table 4.4-6.

Table 4.4-6 Potential Fossil Yield Classification (PFYC) System Classes

Class	Potential
Class 1	Very Low. Not likely to contain recognizable fossil remains.
Class 2	Low. Not likely to contain vertebrate fossils or scientifically significant nonvertebrate fossils.
Class 3	Moderate or unknown. Infrequent or unknown occurrence of fossils.
Class 4	High. Contain a high occurrence of significant fossils.
Class 5	Very High. Consistently and predictably produce vertebrate fossils or scientifically significant fossils.

Source: BLM 2007

Survey Results

On June 12, 2014, a pedestrian survey was conducted within the proposed project area in the vicinity of Mesa and Goodrich substations where ground-disturbing activities may occur. In December 2014, pedestrian surveys were conducted for accessible areas in the vicinity of the additional transmission, subtransmission, distribution, and telecommunications work associated with the proposed project. The surveys included a thorough examination of the ground surface to

determine the presence of surface fossils and to evaluate the potential for occurrences of subsurface fossils that could be unearthed during construction.

According to the geologic maps of the Los Angeles and Pasadena quadrangles, four mapped geologic units that range in age from early Pliocene to Holocene are present in the vicinity of the proposed project. Of these, one geologic unit (Quaternary surficial deposits of Holocene age) has a very low paleontological sensitivity (PFYC Class 2); one geologic unit (Quaternary surficial deposits of Pliocene age) has moderate paleontological sensitivity (PFYC Class 3); and two geologic units (Fernando Formation upper and lower member of Pliocene age) have high paleontological sensitivity (PFYC Class 4). Geologic sensitivity by project component is shown in Table 4.4-7. Characteristics of the formations identified within the proposed project area are discussed in detail in Section 4.4.1.3, "Regional Setting."

Table 4.4-7 Paleontological Resource Potential by Project Feature

Project Components	Formation Name (age)	Paleontological Potential (PFYC Class)
Proposed Main Project Area		
Mesa 500-kv Substation	Young Alluvial Fan Deposits, undivided (Holocene to late Pleistocene), Old Alluvial Fan Deposits Unit 2 (late Pleistocene)	2 & 3 (low-moderate)
	Fernando Formation (Pliocene)	4 (high)
500-kV Transmission Lines	Old Alluvial Fan Deposits Unit 2 (late Pleistocene)	3 (moderate)
	Fernando Formation (Pliocene)	4 (high)
220-kV Transmission Lines	Young Alluvial Fan Deposits, undivided (Holocene to late Pleistocene)	2 & 3 (low-moderate)
	Old Alluvial Fan Deposits Unit 1 (middle Pleistocene), Old Alluvial Fan Deposits Unit 2 (late Pleistocene)	3 (moderate)
	Fernando Formation (Pliocene)	4 (high)
66-kV Subtransmission Lines	Young Alluvial Fan Deposits, undivided (Holocene to late Pleistocene),	2 & 3 (low-moderate)
	Old Alluvial Fan Deposits Unit 2 (late Pleistocene)	3 (moderate)
	Fernando Formation (Pliocene)	4 (high)
16-kV Distribution Lines	Young Alluvial Fan Deposits, undivided (Holocene to late Pleistocene)	2 & 3 (low-moderate)
	Fernando Formation (Pliocene)	4 (high)
Telecommunications Route 1	Young Alluvial Fan Deposits, undivided (Holocene to late Pleistocene),	2 & 3 (low-moderate)
	Old Alluvial Fan Deposits Unit 2 (late Pleistocene), Old Alluvial Fan Deposits Unit 3 (late Pleistocene)	3 (moderate)
	Fernando Formation (Pliocene)	4 (high)
Telecommunications Route 2	Old Alluvial Fan Deposits Unit 1 (middle Pleistocene), Old Alluvial Fan Deposits Unit 2 (late Pleistocene), Old Alluvial Fan Deposits Unit 3 (late Pleistocene)	3 (moderate)

Table 4.4-7 Paleontological Resource Potential by Project Feature

Project Components	Formation Name (age)	Paleontological Potential (PFYC Class)
	Fernando Formation (Pliocene)	4 (high)
Telecommunications Route 3	Alluvium and Marine Deposits (Quaternary–Holocene and Pleistocene),	2 & 3 (low-moderate)
	Old Alluvial Fan Deposits Unit 2 (late Pleistocene), Old Alluvial Fan Deposits Unit 3 (late Pleistocene)	3 (moderate)
North Area		
Temporary 220-kV Transmission Structure (Line loop-in at Goodrich Substation)	Young Alluvial Fan Deposits Unit 3 (Quaternary)	2 (low)
Goodrich Substation	Young Alluvial Fan Deposits Unit 3 (Quaternary)	2 (low)
South Area		
220-kV Transmission Structure (Replacement Tower on Goodrich-Laguna Bell 220-kV Transmission Line)	Old Alluvial Fan Deposits Unit 4 (Quaternary)	3 (moderate)
Street Light Source Line Conversion in Loveland Street	Young Alluvial Fan and Valley Deposits, Sand	2 (low)
Minor Modifications at Existing Substations[(1)]		
Vincent Substation	Permian to Tertiary; mostly Mesozoic intrusive rocks	1 (Very Low)
Walnut Substation	Pliocene to Holocene terrace deposits	2 & 3 (low-moderate)
Pardee Substation	Pliocene to Holocene terrace deposits, Miocene to Pleistocene sedimentary rocks	2 & 3 (low-moderate)

Sources: CGS 2007, USGS 2005, BLM 2007.
Note:
(1) Construction proposed at substations not included in this table will not require grading or excavation and will have no effect on paleontological resources. Therefore, they are not included in the above table or following analysis.
Key:
kV kilovolt
PFYC Potential Fossil Yield Classification

4.4.2 Regulatory Setting

4.4.2.1 Federal

National Historic Preservation Act (Section 106)

The National Historic Preservation Act (NHPA) set historic preservation as a national policy and also began a multifaceted program to encourage the achievement of preservation goals at the federal, state, and local levels. The NHPA established the National Register, defined the positon of SHPO and a system of state-level review boards, provided assistance to Native American Tribes in preserving their cultural resources, and established the Advisory Council on Historic Preservation. Each State Office of Historic Preservation together with the SHPO implements the policies of the NHPA at the state level.

Section 106 of the NHPA is the basis for determining significance of impacts to cultural resources for projects with a federal nexus. Sections of the proposed project would require a permit from the United States Army Corps of Engineers under Section 408 of the Rivers and Harbors Act and Section 404 of the Clean Water Act (see also section 4.3, "Biological Resources") for potential impacts to Waters of the United States. Issuance of such a permit would require federal agency compliance with provisions of Section 106 of the NHPA. To comply with Section 106, the federal agency must consider effects of the proposed project on historic properties that are on, or eligible for listing on, the National Register. In addition, the Advisory Council on Historic Preservation must be given the opportunity to comment on the proposed project and its potential effects on historic properties. Section 106 requires public input in the decision making process. Section 106 compliance would be triggered during the federal permitting process, and the federal permitting agency would be responsible for SHPO and Native American consultation pursuant to Section 106. Because Section 106 compliance is a federal requirement and would be conducted separately from the CEQA environmental review documented in this EIR, compliance with Section 106 is not discussed further in this document.

National Register of Historic Places

The NHPA established the National Register as "an authoritative guide to be used by Federal, State, and local governments, private groups and citizens to identify the Nation's cultural resources and indicate what properties should be considered for protection from destruction or impairment" (36 Code of Federal Regulations § 60.2). The National Register recognizes both historic period and prehistoric archaeological properties that are significant at the national, state, and local levels. To be eligible for listing on the National Register, a resource must be considered significant according to the National Register listing criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of our history.
2. It is associated with the lives of persons who are significant in our past.
3. It embodies the distinctive characteristics of a type, period, or method of construction; represents the work of a master; possesses high artistic values; or represents a significant and distinguishable entity whose components may lack individual distinction.
4. It has yielded, or may be likely to yield, information important in prehistory or history.

Unless the property possesses exceptional significance, it must be at least 50 years old to be eligible for listing. In addition to meeting the significance criteria, a property must have integrity. The National Register recognizes seven qualities that, in various combinations, define integrity. To retain historic integrity, a property must possess several, and usually most, of these seven aspects. The seven factors that define integrity are location, design, setting, materials, workmanship, feeling, and association. Cemeteries, birthplaces, or graves of historic figures; properties owned by religious institutions or used for religious purposes; structures that have been moved from their original locations; reconstructed historic buildings; and properties that are primarily commemorative in nature are not considered eligible for the National Register unless they satisfy certain conditions.

4.4.2.2 State

California Office of Historic Preservation and State Historic Preservation Officer

The State of California implements the NHPA through its statewide comprehensive cultural resources surveys and preservation programs. The California Office of Historic Preservation implements the policies of the NHPA on a statewide level. The Office of Historic Preservation also maintains the California Historic Resources Inventory. The SHPO is an appointed official who implements historic preservation programs within the state's jurisdictions. The California Office of Historic Preservation maintains the CRHR under the direction of the SHPO and the State Historical Resources Commission.

California Register of Historical Resources

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

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. Is associated with the lives of persons important in our past.
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Has yielded, or may be likely to yield, information important in prehistory or history.

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

California Environmental Quality Act and Guidelines

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

Archaeological resources may also be historical resources. Under CEQA Guidelines section 15064.5(c), if an archaeological resource does not meet the criteria for a historical resource, then the resource may be treated in accordance with the provisions of PRC section 21083.2 if it is a

"unique" archaeological resource. PRC section 21083.2 provides for the protection of "unique archaeological resources" as defined in subsection (g) of section 21083.2. If it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to preserve in place or avoid the resources. This section also establishes mitigation requirements for the excavation (data recovery) of unique archaeological resources.

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

Additional State Laws Regarding Archaeological and Native American Cultural Resources

California law extends additional protections to Native American cultural resources:

- California PRC sections 5097.91 through 5097.991 pertain to the establishment and authorities of the NAHC. These sections also prohibit the acquisition or possession of Native American artifacts or human remains taken from a Native American grave or cairn, except in accordance with an agreement reached with the NAHC, and provide for Native American remains and associated grave artifacts to be repatriated. Subsections 5097.98(b) and (e) require a landowner on whose property Native American human remains are found to limit further development activity in the vicinity until conferring with the most likely descendants (as identified by the NAHC) to consider treatment options. Because of the importance of human remains to the Native American community, Health and Safety Code sections 7050 through 7054 make the disturbance and removal of human remains felony offenses. PRC section 65092 provides for the notification of California Native American tribes who are on the contact list maintained by the NAHC about construction projects.
- California PRC sections 5097.993 through 5097.994 make it a misdemeanor crime for the unlawful and malicious excavation, removal, or destruction of Native American archaeological or historical sites on public or private lands.
- Penal Code section 622 establishes as a misdemeanor the willful injury, disfiguration, defacement, or destruction of any object or thing of archaeological or historical interest or value, whether situated on private or public lands.
- California PRC section 6254(r) protects Native American graves, cemeteries, and sacred places maintained by the NAHC by protecting records of such resources from public disclosure under the California Public Records Act.

4.4.2.3 Regional and Local

County of Los Angeles General Plan

The Conservation and Natural Resources Element of the County of Los Angeles General Plan (County of Los Angeles 2015) contains the following goal pertaining to cultural resources:

- ***Goal C/NR 14 -*** *Protected historic, cultural, and paleontological resources.*

City of Monterey Park General Plan

The Resources Element of the City of Monterey Park General Plan (City of Monterey Park 2001) contains the following goal pertaining to cultural resources:

- ***Goal 3 -*** *Preserve the historical resources in Monterey Park.*

City of Commerce General Plan

The following implementation program from the Resource Management Element of the City of Commerce General Plan (City of Commerce 2008) pertains to cultural resources:

> ***Cultural Resource Management.*** *Should archaeological or paleontological resources be encountered during excavation and grading activities, all work would cease until appropriate salvage measures are established. Appendix K[4] of the CEQA Guidelines shall be followed for excavation monitoring and salvage work that may be necessary. Salvage and preservation efforts will be undertaken pursuant to Appendix K requirements outlined in CEQA.*

City of Bell Gardens General Plan

The Conservation Element of the City of Bell Gardens General Plan (City of Bell Gardens 1995) contains one program relevant to cultural resources:

> *The City shall stipulate in all major project approvals, that should archaeological or paleontological resources be uncovered during excavation and grading activities, all work would cease until appropriate salvage measures are established. Appendix K of the CEQA Guidelines shall be followed for excavation monitoring and salvage work that may be necessary.*

City of Pasadena General Plan

The following goal from the Historical/Cultural Element of the City of Pasadena General Plan (City of Pasadena not dated) is relevant to cultural resources:

> *Preservation and enhancement of the city's cultural and historic buildings, streets, and districts, not merely as gentle reminders of a pleasant past, but also as relevant and unique alternatives for the present and future—a source of community identity, social, ecological, and economic vitality.*

City of Industry General Plan

The following policy from the Resource Management Element of the City of Industry General Plan (City of Industry 2014) pertain to cultural resources:

- ***Policy RM5-2 -*** *Support the proper handling and documentation of historically or archeologically significant sites, burial sites, and objects that may be discovered.*

[4] Appendix K was removed from the CEQA Guidelines effective January 1, 1999. Guidance is now contained in CEQA Guidelines sections 15064.5 and 15126.4.

City of Santa Clarita General Plan

The following goal and objective from the Conservation and Open Space Element of the City of Santa Clarita General Plan (City of Santa Clarita 2011) pertain to cultural resources:

- ***Goal CO 5 -*** *Protection of historical and culturally significant resources that contribute to community identity and a sense of history.*
- ***Objective CO 5.1 -*** *Protect sites identified as having local, state, or national significance as a cultural or historical resource.*

Other General Plans

The following general plans were reviewed; no cultural resources policies, goals, or objectives were found that are relevant to the proposed project:

- City of Bell Gardens General Plan (1995)
- City of Montebello General Plan (1973)

4.4.3 Impact Analysis

4.4.3.1 Significance Criteria

Impacts on cultural and paleontological resources were evaluated according to the following significance criteria. The criteria are based on Appendix G of the CEQA Guidelines. The proposed project would cause a significant impact on cultural resources if it would:

a) Cause a substantial adverse change in the significance of a known historical resource as defined in § 15064.5 or a known archaeological resource pursuant to § 15064.5.

b) Cause a substantial adverse change in the significance of a previously undiscovered historical resource as defined in § 15064.5 or a previously undiscovered 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.

4.4.3.2 Applicant Proposed Measures

The applicant has committed to the following applicant proposed measure (APM) as part of the design of the proposed project:

- **APM-CUL-01: Paleontological Resources Management Plan.** A Paleontological Resources Management Plan would be developed for construction within areas that have been identified as having a moderate and high sensitivity for paleontological resources. The Paleontological Resources Management Plan would be prepared by a professional paleontologist in accordance with the recommendations of the Society of Vertebrate Paleontology.

4.4.3.3 Environmental Impacts

Impact CR-1: Cause a substantial adverse change in the significance of a known historical resource as defined in §15064.5 or a known archaeological resource pursuant to § 15064.5.
LESS THAN SIGNIFICANT WITH MITIGATION

Construction

Mesa 500-kV Substation Site Area

None of the previously recorded historic era resources documented in this area were determined to be eligible for the NRHP or CRHR. The records search conducted for the Mesa Substation site indicated that there are seven historic resources at the site, including the Mesa Substation itself and six historic-era transmission lines. One of the previously recorded historic era transmission lines—the Antelope–Mesa 220-kV Transmission Line—was removed during construction of the TRTP. The remainder of the sites were deemed ineligible for the NRHP and CRHR. The cultural resources field survey conducted for the proposed project identified three previously unrecorded historic resources at the substation site, which were all buildings constructed more than 45 years ago. None of these three newly identified historic era resources were recommended as eligible for listing on the NRHP or CRHR (Williams et al. 2014). No pre-historic resources were identified at the substation site during previous studies or field surveys conducted for the proposed project. Construction activities in the Mesa Substation site and nearby transmission line, subtransmission line, and distribution line construction areas would not cause a substantial adverse change in the significance of a known historical or archeological resource. There would be no impact.

Telecommunications Routes

A records search conducted for the proposed project area of the telecommunications routes indicated that there are 12 previously recorded historic resources within the proposed project area of the telecommunications routes. Of the 12 previously recorded resources, six were the same historic era transmission lines discussed above for the Mesa Substation site, including the Antelope-Mesa 220-kV Transmission Line, which was removed during construction of the TRTP. The other six previously recorded historic era resources all fall within the proposed project area of Telecommunication Route 3 and include: the Montebello Oil Field, the San Juan Matias Sanchez Adobe, the Mission Vieja Plaque, the Whittier Narrows Dam Recreation Area, the Temple School, and one of six Siphon Road Towers. Elements of four of these resources were encountered during pedestrian surveys; however, no evidence of the Montebello Oil Field was observed and the Siphon Road Tower previously reported in the proposed project area of the telecommunications routes has been removed (Williams 2015a). The proposed project would not affect the Montebello Oil Field or Siphon Road Tower. Work adjacent to the Juan Matias Adobe, the Mission Vieja Plaque, and the Temple School would consist of stringing telecommunications lines on existing poles. This would not affect the significance of these two NRHP-listed and one recommended NRHP-eligible resources, and there would be no impact.

Several elements of the Whittier Narrows Dam Recreation Area were observed during pedestrian surveys, including a highly fragmented scatter of historic/modern debris and a single concrete enclosure that was not previously reported on in the DPR record (Williams 2015a). The historic-era debris and concrete enclosure found at the Whittier Narrows Dam Recreation Area site were not evaluated for NRHP or CRHR eligibility. Installation of the telecommunications cables are not anticipated to impact this resource because the cables would be installed on existing poles, no ground disturbance is anticipated, and the resource boundary extends well outside of the proposed

project area. However, if this resource could not be avoided impacts could be significant if it is found to be NRHP or CRHR eligible.

Mitigation Measure (MM) CR-1 requires a qualified archeologist, approved by the CPUC, to erect flagging to create a 10-foot buffer around the historic era debris and concrete enclosure. MM CR-1 also requires signs to be erected indicating that construction equipment, materials, and personnel shall stay out of the flagged area. Therefore, impacts resulting from installation of the telecommunications lines would be less than significant with mitigation.

Existing Substation Modifications

The proposed project would involve equipment replacements and upgrades within the perimeter of several existing substation properties other than Mesa Substation and Goodrich Substation. Six of the substations where equipment replacements and/or upgrades would occur were determined to be eligible for inclusion on the NRHP and the CRHR including: Laguna Bell Substation, Lighthipe Substation, Eagle Rock Substation, Fairfax Substation, Newmark Substation, and San Gabriel Substation (Williams 2014; Chiang and Tinsley Becker 2014a; DeBiase and Tinsley Becker 2015; Tinsley Becker et al. 2015).

The San Gabriel, Fairfax, and Newmark Substations are potentially eligible due to the architectural style of the buildings at the sites (DeBiase and Tinsley Becker 2015; Williams 2014). These substations have been found eligible mainly because of their architectural and aesthetic components. Work at these substations would involve equipment upgrades within buildings and would not affect their exterior appearance, which is representative of key architectural styles or periods. Work also would not materially change their association with the SCE transmission system. There would be no impact.

The Laguna Bell and Lighthipe Substations are potentially eligible due to the architecture of the buildings at the sites (Chiang and Tinsley Becker 2014a). Work at the Laguna Bell and Lighthipe Substations would involve replacement of circuit breakers and upgrading equipment within the buildings and would not affect the exterior appearance of the buildings and would not affect their eligibility based on being examples of certain architectural styles or periods. The proposed project would also not affect their eligibility based on association with certain elements of the SCE transmission system. There would be no impact.

The main substation building and the entry pillars at Eagle Rock Substation have been found potentially eligible, both individually (due to architecture) and as a contributing element to the Big Creek Hydroelectric System Historic District (due to its role as a terminus of the Big Creek Hydroelectric System). Work at the Eagle Rock substation would be confined to upgrading equipment in the substation building and would not affect the appearance of the building or its association with the Big Creek Hydroelectric System. There would be no impact.

North Area

A records search for the Goodrich Substation site area indicated that there is one historic resource at the site, the Mesa–Anita–Eaton 66-kV Subtransmission Line. However, this site was previously determined to be ineligible for the NRHP or CRHR. No additional historic or prehistoric resources were identified during pedestrian surveys conducted at the Goodrich Substation site area (Williams et al. 2014). Therefore, there would be no impact related to the installation of the temporary 220-kV transmission structure at the Goodrich Substation site.

South Area

No historic or archeological sites were identified during a record search or pedestrian surveys at the proposed project area for proposed transmission structure replacement in the City of Commerce or at the proposed conversion of the street light conductors from overhead to underground within the City of Bell Gardens. Therefore, impacts related from construction of the transmission structure or conversation of the street light conductors would be less than significant under this criterion.

Staging Yards

Records searches for the seven potential staging yards proposed for use during project construction did not identify any previously recorded historic or archeological sites at any of the staging yards. However, one previously unrecorded historic resource was identified at Staging Yard 7 during pedestrian surveys (Williams 2015b). Site SAY-S-1 consists of the footings for the KRLA radio station, including three concrete slabs and four foundations that formed the foundation for the antenna tower. A shack containing a Fairbanks Morse engine and a water heater is also associated with site SAY-S-1. The concrete footings and shack were constructed in 1959 and were not evaluated for NRHP or CRHR eligibility. Therefore, impacts on the elements of this site during use of the staging yard during construction could be significant if the resource is found eligible for listing on the NRHP or CRHR.

MM CR-1 requires a qualified archeologist, approved by the CPUC, to erect flagging to create a 10-foot buffer around the historic-era concrete footings and shack. MM CR-1 also requires signs to be erected indicating that construction equipment, materials, and personnel shall stay out of the flagged area. Therefore, impacts resulting from the use of Staging Yard 7 during construction under this criterion would be less than significant with mitigation.

Operation and Maintenance

NO IMPACT

Operations and maintenance activities would occur near several eligible and listed resources. The Juan Matias Sanchez Adobe and Mission Vieja Plaque are listed on the CRHR. Six of the substation sites have been recommended as eligible for listing on the NRHP and CRHR: the Laguna Bell, Lighthipe, Eagle Rock, Fairfax, Newmark, and San Gabriel substations. The Temple School has also been recommended as eligible for inclusion on the NRHP and CRHR. The Whittier Narrows Dam Recreation Area site has not been evaluated for NRHP and CRHR eligibility.

Routine operations and maintenance activities would not require ground disturbing activities. However, maintenance of access roads may include occasional removal of vegetation or other activities to address washouts or eroded areas, as needed. In addition, wood pole testing and treating is a necessary maintenance activity conducted to evaluate the condition of wood structures both above and below ground level. Intrusive inspections require the temporary removal of soil around the base of the pole, usually to a depth of approximately 12 to 18 inches, to check for signs of deterioration. These would require ground disturbing activities in previously disturbed areas of the proposed project and would not result in material or physical changes to the known eligible and listed resources or to undiscovered resources. Therefore, there would be no potential to directly or indirectly impact a historic resource. Therefore, operations and maintenance-related activities would have no impact under this criterion.

Impact CR-2: Cause a substantial adverse change in the significance of a previously undiscovered historical resource as defined in § 15064.5 or a previously undiscovered archaeological resource pursuant to § 15064.5.
LESS THAN SIGNIFICANT WITH MITIGATION

Construction

Ground Disturbing Activities

Several project elements require ground disturbance, which has the potential to uncover undiscovered cultural resources. Elements with ground disturbance include:

- Mesa Substation, including the Metropolitan Water District of Southern California pipeline relocation
- 500-kV Transmission Line
- 220-kV Transmission Lines
- 66-kV Subtransmission Lines
- 16-kV Distribution Lines
- Goodrich Substation Temporary Structure
- Goodrich Substation Telecommunications
- 220-kV Structure Replacement (in Commerce)
- Streetlight Source Conversion (in Bell Gardens)
- Vincent Substation
- Pardee Substation
- Walnut Substation
- Telecommunications Route 1
- Telecommunications Route 3

Excavation and ground disturbance in previously undisturbed soils may result in discovery and damage to a previously undiscovered cultural resource. This would be a significant impact.

MM CR-2 would require training workers regarding the potential for discovering cultural resources and the procedure to follow if such a discovery occurs during construction. MM CR-3 outlines the procedure to follow in the case of an unanticipated discovery. Implementation of MM CR-2 and MM CR-3 would reduce impacts to less than significant.

Activities that Would not Result in Ground Disturbance

The remainder of activities would not result in ground disturbance and would not have the potential of damaging an undiscovered resource unless it was on the ground surface. Damage to a previously undiscovered surface resource would be a significant impact. MM CR-3 would be implemented to protect previously undiscovered resources. Impacts would be less than significant with mitigation.

Operation and Maintenance

Routine operations and maintenance activities would not require ground disturbing activities and would occur only in previously disturbed areas. However, maintenance of access roads may include occasional removal of vegetation or other activities to address washouts or eroded areas, as needed. In addition, wood pole testing and treating is a necessary maintenance activity conducted to evaluate the condition of wood structures both above and below ground level. Intrusive inspections require the temporary removal of soil around the base of the pole, usually to

a depth of approximately 12 to 18 inches, to check for signs of deterioration. These would require ground disturbing activities in previously disturbed areas of the proposed project. Therefore, there would be no potential to directly or indirectly impact an undiscovered historic or archaeological resource.

Impact CR-3: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Construction

LESS THAN SIGNIFICANT WITH MITIGATION

There are no known unique paleontological resources or unique geological features within the proposed project area. The proposed project would include ground disturbance in geologic units with moderate and high potential to contain paleontological resources as identified in Table 4.4-7, and therefore impacts would be significant. The applicant would implement APM-CUL-1, which commits to preparing a Paleontological Resources Management Plan and implementing it in areas with moderate to high sensitivity. However, APM-CUL-1 does not include specific performance criteria to reduce the significant impact.

MM CR-4 would require the applicant to include a provision in the PRMP requiring a qualified paleontologist to monitor ground-disturbing activities in areas with moderate to high potential to contain paleontological resources. In addition, MM CR-4 would require that the applicant submit the plan to the CPUC for review and approval prior to construction. MM CR-2 would require all site personnel involved in ground-disturbing activities to be trained on all applicable local, State, and federal laws and regulations pertaining to paleontological resources, prior to being allowed on-site. Workers shall be given a brief overview of paleontological resources in the vicinity of the proposed project, instruction on what typical paleontological resources look like, and instruction that if paleontological resources are discovered during construction, work shall be suspended in the vicinity of any find and the site foreman and paleontological monitor are to be alerted immediately. MM CR-5 would require following specific procedures in the event of a previously undiscovered paleontological resource find. Impacts to paleontological resources would be reduced to less than significant with mitigation.

Operation and Maintenance

NO IMPACT

Routine operation and maintenance activities would not require ground disturbing activities and would occur in areas already disturbed during construction of the proposed project. However, maintenance of access roads may include occasional removal of vegetation or other activities to address washouts or eroded areas, as needed. In addition, wood pole testing and treating is a necessary maintenance activity conducted to evaluate the condition of wood structures both above and below ground level. Intrusive inspections require the temporary removal of soil around the base of the pole, usually to a depth of approximately 12 to 18 inches, to check for signs of deterioration. These would require ground disturbing activities in previously disturbed areas of the proposed project. Therefore, there would be no potential to directly or indirectly impact a unique paleontological resource.

Impact CR-4: Disturb any human remains, including those interred outside of formal cemeteries.
LESS THAN SIGNIFICANT WITH MITIGATION

Construction

Records searches and field surveys of the proposed project area did not identify any known Native American or other human remains in the project area. Given the Native American history in the general region, there is a possibility that previously unknown human remains could be encountered during construction activities. This would be a significant impact.

MM CR-6 would require adherence to applicable laws as well as training of workers on the appropriate procedures to follow if human remains are encountered. Impacts would be less than significant with mitigation.

Operation and Maintenance

Routine operations and maintenance activities would not require ground disturbing activities. However, maintenance of access roads may include occasional removal of vegetation or other activities to address washouts or eroded areas, as needed. In addition, wood pole testing and treating is a necessary maintenance activity conducted to evaluate the condition of wood structures both above and below ground level. Intrusive inspections require the temporary removal of soil around the base of the pole, usually to a depth of approximately 12 to 18 inches, to check for signs of deterioration, but these inspections would only take place in previously disturbed soil. Therefore, there would be no potential for an unanticipated discovery of human remains. Records searches and surveys conducted for the proposed project have not identified any known human remains, Native American or otherwise, in the proposed project area. Therefore, there would be no potential to disturb human remains directly or indirectly during operations.

4.4.4 Mitigation Measures

MM CR-1: Flag and Avoid Known Unevaluated Historic Sites. Prior to commencement of any construction or construction-related activities within 50 feet of the mapped boundaries of (1) the historic-era debris and concrete structure at site P-19-186889 and (2) the concrete footings and shack at site SAY-S-1, a qualified CPUC-approved archaeologist shall erect flagging to create a 50-foot buffer around these resources. Flagging shall be in a bright, easily visible color, and signs shall be posted at the perimeter of the flagged areas on all sides to indicate that construction equipment, materials, and personnel shall stay out of the flagged areas. Flagging and signage shall stay in place until all construction activities within 50 feet of the resources has been completed.

MM CR-2. Worker Training for Cultural and Paleontological Resources. Prior to commencement of any project-related construction activities, all SCE, contractor, and subcontractor project personnel shall receive training regarding:

- Appropriate work practices necessary to effectively implement the APMs and mitigation measures and to comply with the applicable environmental laws and regulations.
- The potential for exposing subsurface cultural resources and paleontological resources .
- How to recognize possible buried resources.

This training shall include a presentation of:

- Procedures to be followed upon discovery or suspected discovery of historic or archaeological materials, including Native American remains and their treatment.
- Procedures to be followed upon discovery or suspected discovery of paleontological resources.
- Actions that may be taken in the case of violation of applicable laws.

MM CR-3: Previously Unidentified Cultural Resources. If a previously unknown cultural resource is discovered during project construction activities, work shall be halted within 100 feet of the resource, and protective barriers shall be installed along with signage identifying the area as an "environmentally sensitive area." Entry into the area shall be limited to authorized personnel, and the CPUC-approved cultural resources specialist/archaeologist qualified archaeologist and the CPUC shall be notified immediately.

Preservation in place (i.e., avoidance) is the preferred method of mitigation for impacts on cultural resources and shall be required to mitigate impacts to previously undiscovered resources unless the CPUC-approved cultural resources specialist/qualified archeologist determines that another method would provide superior mitigation of impacts to the resource. If the resource can be completely avoided, no additional mitigation is necessary. If the resource cannot be completely avoided, the CPUC-approved cultural resources specialist/qualified archaeologist shall follow the procedures delineated below for resources where it is not known whether the resource is historical. If an unanticipated resource is avoided, it shall nonetheless be recorded on DPR 523 forms, which shall be filed at the Eastern Information Center.

- **Determination if a resource is an historical resource.** The CPUC-approved cultural resources specialist/qualified archaeologist, in consultation with the CPUC, shall determine if there is a potential for the resource to be a historical resource. If there is no potential for the resource to qualify as a historical resource, work shall resume after CPUC concurrence. If there is a potential for the resource to be a historic resource, the qualified archaeologist shall prepare an Evaluation Plan.
- **Evaluation Plan.** The resource-specific Evaluation Plan shall detail the procedures to be used to determine if the discovery is an historical resource. The Evaluation Plan shall include sufficient discussion of background and context to allow the evaluation of the resource against the historic resource criteria. It shall include a description of procedures to be used in the gathering of information to allow the evaluation. These techniques may include (but are not limited to): excavation, written documentation, interviews, and/or photography. For archaeological resource testing, the Evaluation Plan shall describe the archaeological testing procedures, including, but not limited to: surface collection (if surface artifacts are discovered), test excavations (including type, number, and location of test pits and/or trenches), analysis methods, and reporting procedure. The Evaluation Plan shall be submitted to CPUC for review. Once approved, the Evaluation Plan shall be implemented in the field. The report resulting from this work shall include evaluation of the discovery, based on the significance criteria set forth in the Evaluation Plan, indicating if it is an historic resource. If the discovery is not found to be an historic resource, and CPUC concurs with that determination, protective barriers may be removed, and work may proceed in the area of the discovery. If the discovery is determined to be an historic resource, SCE shall prepare a Data Recovery Plan.

- **Data Recovery Plan.** Data Recovery Plans for historic resources that cannot be fully avoided shall be prepared in accordance with CEQA Guidelines section 15126.4(b)(3)(C) and PRC section 21083.2, as applicable. The Data Recovery Plan shall outline how the recovery of data from the resource will mitigate impacts to that resource to below a level of significance. The Data Recovery Plan shall describe the level of effort, including numbers and kinds of excavation units to be dug, excavation procedures, laboratory methods, samples (e.g., pollen, sediment, as appropriate) to be collected and analyzed, analysis techniques that will yield information relevant to the aspects of the site that make it an historic resource, and reporting procedure. This plan shall be submitted to the CPUC for review and approval. Once approved, the applicant shall implement the approved plan. Once the data recovery field work is complete, a Data Recovery Field Memo shall be prepared.
- **Data Recovery Field Memo.** Following implementation of the Data Recovery Plan, the Data Recovery Field Memo shall be prepared. The Data Recovery Field Memo shall briefly describe the data recovery procedures in the field and summarize (at a field catalog level) the materials recovery. The Data Recovery Field Memo shall also identify the number and kind of samples recovered that are appropriate for special analyses, including radiocarbon dating, obsidian sourcing, pollen analysis, microbotanical analysis, and others, as applicable. The Data Recovery Field Memo shall be submitted to CPUC for review and approval. Once the Data Recovery Field Memo has been approved, protective barriers may be removed, and work may proceed in the area of the discovery. A Data Recovery Report shall then be prepared.
- **Data Recovery Report.** Within 90 days of submittal of the Data Recovery Field Memo, a Data Recovery Report shall be prepared presenting the results of the data recovery program, including a description of field methods, location and size of excavation units, analysis of materials recovered (including results of any special analyses conducted), and conclusions drawn from the work. The Data Recovery Report shall also indicate where artifacts, samples, and documentation resulting from the data recovery program will be curated. The curation facility shall meet the requirements of 36 Code of Federal Regulations 79. The Data Recovery Report shall be submitted to the CPUC for review and approval. Once approved, the Data Recovery Report shall be filed with the Eastern Information Center. All impacted known resources and all unanticipated resources shall be recorded on DPR 523 forms that shall be filed at the Eastern Information Center with the Data Recovery Report.

MM CR-4: Paleontological Resources Monitoring. Prior to the start of construction, the applicant shall retain a qualified paleontologist. The qualified paleontologist shall be approved by the CPUC and shall monitor all ground-disturbing activities that take place within areas that have a moderate to high potential to contain paleontological resources. The paleontological monitor shall have the authority to halt construction in the vicinity of any potential paleontological resource finds to begin implementation of MM CR-7.

MM CR-5: Follow Paleontological Resource Discovery Protocol. In the case that a previously unknown paleontological resource is discovered during construction activities, all work within 15 meters of the resource shall be stopped, and the CPUC-approved paleontologist shall determine whether the resource can be avoided. If the discovery can be avoided and no further impacts will occur, no further effort shall be required. If the resource cannot be avoided and may be subject to further impact, the paleontologist shall determine whether the resource is unique under Part V of CEQA Guidelines Appendix G. A paleontological resource shall be considered unique if it meets the

definition of a significant paleontological resource under the 2010 Society of Vertebrate Paleontology *Standard Procedures for the Assessment of Adverse Impacts to Paleontological Resources* definition:

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

Substantiation of the uniqueness conclusion shall be provided to the CPUC for review and approval. If the resource is determined not to be unique, work may commence in the area.

If the resource is unique, then work shall remain stopped, and the approved paleontologist shall consult with the applicant and the CPUC regarding methods to ensure that no substantial adverse change would occur to the significance of the resource pursuant to CEQA. Preservation in place, i.e., avoidance, is the preferred method of mitigation for impacts to paleontological resources and shall be required to mitigate impacts to previously undiscovered resources unless the CPUC-approved cultural resources specialist/qualified archeologist determines that another method would provide superior mitigation of impacts to the resource. Other methods include ensuring that the fossils are recovered, prepared, identified, catalogued, and analyzed according to current professional standards under the direction of a qualified paleontologist. Methods of recovery, testing, and evaluation shall adhere to current professional standards for recovery, preparation, identification, analysis, and curation, such as the 2010 Society of Vertebrate Paleontology *Standard Procedures for the Assessment of Adverse Impacts to Paleontological Resources*. Work can commence following recovery and CPUC approval.

MM CR-6: Unanticipated Discovery of Human Remains. In the event that human remains or suspected human remains are identified, SCE shall comply with California law, including, but not limited to, the following provisions: CEQA Guidelines section 15064.5(e); PRC sections 5097.94, 5097.98, and 5097.99; and California Health and Safety Code section 7050.5. These laws require Native American consultation for Native American burial sites.

The area where the remains are identified shall be flagged off, and all construction activities within 165 feet (50 meters) of the find shall immediately cease. The CPUC, the CPUC-approved cultural resources specialist/archaeologist, SCE, and any other appropriate agency shall be immediately notified, and the cultural resources specialist/archaeologist shall examine the find. If the cultural resources specialist/archaeologist determines that there may be human remains, SCE shall immediately contact the Medical Examiner at the Los Angeles County Coroner's office. The Medical Examiner has two working days to examine the remains after being notified by SCE. If the Medical Examiner believes the remains are Native American, he/she shall notify the NAHC within 24 hours.

The NAHC will immediately notify the person it believes to be the most likely descendant (MLD) of the remains, and the MLD has 48 hours to make recommendations to the landowner or representative for the respectful treatment or disposition of the human remains and any associated grave goods. If the MLD does not make recommendations within 48 hours, the area of the property shall be secured from further disturbance. If there are disputes between the landowners and the MLD, the NAHC shall mediate the dispute and attempt to find a solution. If the mediation fails to provide measures acceptable to the landowner, the landowner or their representative shall reinter

the remains and associated grave goods and funerary objects in an area of the property secure from further disturbance. The location of any reburial of Native American human remains shall not be disclosed to the public and shall not be governed by public disclosure requirements of the California Public Records Act, California Government Code § 6250 et seq., unless otherwise required by law. The Medical Examiner shall withhold public disclosure of information related to such reburial pursuant to the specific exemption set forth in California Government Code Section 6254(r).

This page intentionally left blank.