Laurie Hietter

From: Pierce, Jennifer E
Sent: Friday, April 25, 2014 10:56 AM
To: 'Susanne Heim'; Jason Coontz
Cc: Laurie Hietter; Renger, Andy
Subject: RE: Salt Creek Substation - Data Request #9
Attachments: A13-09-014 ED-SDGE-DR-009_4.8.14_DRAFT.docx

Attached please find SDG&E's Response to your request below, which we have titled "ED-SDGE-DR-009". The attachments will need to be transmitted via Sempra's secure Electronic Data Transfer system due to the size. Please confirm receipt of this email so we have a record that you received it. If you have any questions or require additional information, please feel free to contact me.

A CD of the visual sims (Attachment ED009-1) will be sent to the following:

Jason Coontz
California Public Utilities Commission
Energy Division – Infrastructure Permitting & CEQA
505 Van Ness Avenue | San Francisco, CA 94102

Please note that the Response contains information considered confidential pursuant to PUC Section 583, General Order 66-C and any applicable Non-Disclosure Agreements, Federal and State Laws and Regulations.

Jennifer Pierce
California Regulatory Affairs
San Diego Gas & Electric
(858) 654-1685
jpierce@semprautilities.com

From: Susanne Heim [mailto:susanne.heim@panoramaenv.com]
Sent: Tuesday, April 08, 2014 5:37 PM
To: Pierce, Jennifer E; Renger, Andy
Cc: Jason Coontz; Laurie Hietter
Subject: Salt Creek Substation - Data Request #9

Jennifer,

We request the following additional information for the Salt Creek Substation Project:

1) Provide the existing view from KOP#7 that matches the simulated viewing angle. The simulation for KOP#7 was revised and centered to the east, as requested. We do not have a photo of the existing condition that matches the revised viewing angle.
2) The simulations of the TL6965 shows yellow bands near the cross arms of some of the power poles. These bands have been used on SDG&E's CORTEN monopoles in the fire hardening initiative. The use of yellow bands creates additional contrast, and this perceived visual intrusion was brought up by one of the stakeholders at a recent public meeting for SDG&E's Master Special Use Permit and Permit to Construct in the Cleveland National Forest.

a. Identify the pole locations where this banding technique will be used.
b. Describe where the bands will be located on the power pole
c. Explain the reason this visual warning is needed.

3) Please provide all final photos (existing conditions and simulations) on a CD, DVD, of flash drive, so these products are of their highest possible quality. The existing condition photos and the associated simulations appear blurring. This may be a result of "zipping" the photo.

4) Provide eligibility determinations for cultural resource sites that cannot be fully avoided. Ten of the twelve resources that would be impacted by the project were previously evaluated and determined eligible resources. CA-SDI-7191 and CA-SDI-12909 have not been previously evaluated or tested. The decision in *Madera Oversight Coalition v. County of Madera* clarifies requirements for project level review of impacts on archaeological resources under the California Environmental Quality Act (CEQA). In Madera, the court found that resources need to be evaluated for eligibility prior to certification of the CEQA document. CPUC therefore needs SDG&E to evaluate the eligibility of the remaining resources (i.e., CA-SDI-7191 and CA-SDI-12909) that may be impacted by the project consistent with California Register of Historical Resources (CRHR) guidelines.

5) Provide further documentation of correspondence with Mr. Linton. CPUC spoke with Mr. Linton on March 26, 2014. Mr. Linton stated that he had not been contacted by SDG&E about the project. He also expressed his interest in having Native Americans participate in the archaeological surveys, testing, and monitoring for the project. The 2013 Cultural Resource Survey Report (Bowden-Renna) for the project indicates that SDG&E contacted Mr. Linton in 2012 to discuss the project and that SDG&E provided the survey forms to Mr. Linton and requested his feedback. Was any feedback ever received from Mr. Linton? The report also states that a determination was made that Native American's were not required in the survey effort. Please provide SDG&E's rationale for not including Native American's in the survey effort. Because further testing will be required to evaluate resources CA-SDI-7197 and CA-SDI-12909, please include a Native American monitor in this testing.

6) Please provide the January 2013 Paleontological Resources Report (Bowden-Renna). The PEA references a January 2013 paleontological report and we have only received the version dated November 2012.

7) Provide a corrected spreadsheet for Table A-381 in AD2.12-3A.The summary GHG table in attachment AD2.12-3 A has several cells that may be missing data, as they appear to have broken links (AD32 through AL32, AD33 through AL 33, AV32 through AX 32, AV 33 through AX33, and the grand totals).

8) Provide quantities of on-site exhaust PM2.5 emissions.

Please let us know if you would like to discuss any of these data requests further.

Susanne Heim, Project Manager/Scientist
Panorama Environmental, Inc.
One Embarcadero Center, Suite 740
San Francisco, CA 94111
o.650.373.1200 • **d.**650.340.4803 • **c.**858.349.8883
www.panoramaenv.com

PANORAMA ENVIRONMENTAL. INC.

A.13-09-014 SDG&E 05/13/14 Response
Salt Creek Substation Project PTC
Energy Division Request for Information on 4/22/14
ED-SDGE-010

Please note that the items highlighted in yellow are confidential pursuant to CPUC Section 583, General Order 66-C and any applicable Non-Disclosure Agreements; Confidential Non-Public Information exempted from disclosure under federal and state law.

#	Request	SDG&E Response
1.	Provide cultural resource survey data for proposed access roads outside of SDG&E right-of-way (ROW). The GIS data for the Salt Creek Substation Project includes an "existing access road" adjacent and parallel to SDG&E's ROW. The existing access road appears to be within San Diego County Water Authority (SDCWA) ROW and is outside of the area that was surveyed for cultural resources by SDG&E in 2011 and 2012 (refer to Figures 1 through 4). This access road is designated in the cultural resource report maps as "Access Roads - Determined Survey Not Needed" and in the GIS data as "Access Road (Does Not Need Survey)." The cultural resource survey reports that were provided to CPUC do not include this access road in the surveyed area. The cultural resource survey for the TL 6910 wood-to-steel project (Clowery 2012) covered the 180-foot-wide SDG&E ROW and did not cover the adjacent access roads. SDG&E may either provide CPUC with a cultural resource survey report(s) covering this access road, or remove the access road from the project area. At a minimum, SDG&E will need to provide cultural resource survey data for a segment of access road from Eastlake Parkway to the transmission corridor and staging yard (shown on Figure 1), even if the remainder of the access road is removed from the project. This segment of access road from Eastlake Parkway was not covered in previous survey reports and is necessary to travel between Eastlake Parkway and SDG&E ROW.	Per your request, a supplemental survey was conducted by AECOM on May 2, 2014 of the SDWCA access road from Hunte Parkway in the south to the SR-125 in the north. This supplemental survey is provided in Confidential Attachment ED-010-1.

Memorandum to Record

4-18-2014

To Whom It May Concern,

This letter is to clarify consultation events and their outcomes between Santa Ysabel Band of Indians and CPUC/SDG&E/AECOM regarding what is now know as the Salt Creek Substation Project, formerly Otay Project.

There was some confusion and probably misunderstanding on my part as happens when projects change Env firms and project names it becomes confusing. For this project; I did respond to AECOM tribal inquiry letter, I did meet Cheryle and Susan on site at the north end of the project, I did request Kumeyaay Native Monitoring.

Further I had a conference call with CPUC representatives to discuss. At that time I was not clear that all these consultation efforts were for the same project, now Salt Creek Substation Project. At this point I understand Kumeyaay Native Monitoring is taking place on the project for the test phase and there will be no resurvey with a Kumeyaay NAM as requested and that is ok. Please continue to have a Kumeyaay NAM on site for Archaeological excavation and further apply NAM services for the construction phase whenever an Archaeological monitor on site.

Please feel free to contact me directly for any further questions or concerns,

Thank you,

Clint Linton
Santa Ysabel Band of the Iipaay Nation
Director of Cultural Resources
CJLinton73@aol.com
(760) 803-5694

TECHNICAL REPORT
PALEONTOLOGICAL RESOURCE ASSESSMENT
SALT CREEK SUBSTATION & TRANSMISSION LINE IMPROVEMENTS
OTAY RANCH
CITY OF CHULA VISTA
SAN DIEGO COUNTY, CALIFORNIA

Prepared for:

SAN DIEGO GAS & ELECTRIC
8315 Century Park Court
San Diego, CA 92123

Under Contract to:

AECOM
1420 Kettner Boulevard, Suite 500
San Diego, CA 92101

Prepared by:

DEPARTMENT OF PALEOSERVICES
SAN DIEGO NATURAL HISTORY MUSEUM
P.O. Box 121390
San Diego, CA 92112

Thomas A. Deméré, Ph.D., Director
Sarah A. Siren, M.S., Paleontological Field Manager

2 November 2012
(*revised 15 January 2013*)

TECHNICAL REPORT
PALEONTOLOGICAL RESOURCE ASSESSMENT
SALT CREEK SUBSTATION & 69KV TRANSMISSION LINE IMPROVEMENTS
OTAY RANCH
CITY OF CHULA VISTA
SAN DIEGO COUNTY, CALIFORNIA

INTRODUCTION

The San Diego Gas & Electric Company (SDG&E) proposes to construct the Salt Creek Substation on an approximately 12-acre site within the community of Otay Ranch in the City of Chula Vista, San Diego County, California. Also proposed are construction of the TL 6956 69kV transmission line, which will connect the new substation with the existing Miguel Substation, the TL 6910 loop-in to the new Salt Creek Substation, modifications to the Miguel Substation, as well as improvements to selected staging yards (Hunte Parkway, Olympic Training Facility, and Miguel). The proposed Salt Creek Substation project site is located east of State Route (SR) 125 and northeast of the intersection of Hunte Parkway and Exploration Falls Drive (Figures 1 and 2). TL 6965 will extend northwest from the new substation site to the Miguel Substation located southeast of the intersection of SR 125 and San Miguel Road (Figure 1).

This technical report provides an assessment of issues related to paleontological resources within the project area. The purpose of this report is to assist SDG&E in planning and design efforts for the purposed project as related to paleontological resource issues. Specifically, this report is intended to summarize existing paleontological resource data in the project area and vicinity; assess potential impacts to paleontological resources from construction of the project; and identify mitigation measures to avoid or reduce project-related impacts to fossils wherever feasible. Additional discussion of report methodology is provided below. This report was prepared by Sarah A. Siren and Thomas A. Deméré of the Department of PaleoServices, San Diego Natural History Museum (SDNHM), San Diego, California.

As defined here, paleontological resources (i.e., fossils) are the remains and/or traces of prehistoric (i.e., 10,000 years or older) plant and animal life. Fossil remains such as bones, teeth, shells, leaves, and wood are found in the geologic deposits (rock formations) within which they were originally buried. For the purposes of this report, paleontological resources can be thought of as including not only the actual fossil remains but also the collecting localities and the geologic formations containing those localities.

METHODOLOGY

A review was conducted of relevant published and unpublished geologic reports (Kennedy and Tan, 1977; Tan and Kennedy, 2002; Todd, 2004, Kleinfelder West, Inc., 2007), published and unpublished paleontological reports (Deméré, 1988; Deméré and Walsh, 1993), and museum paleontological locality data (SDNHM). This approach was followed in recognition of the direct relationship between paleontological resources and the geologic formations within which they are found. Knowing the geology of a particular area and the fossil productivity of formations that occur in that area, it is possible to predict where fossils will, or will not, be encountered.

Figure 1. Project location map showing the proposed construction project elements in blue, with specific pole locations for the proposed TL 6956 shown as blue and purple dots, respectively, between the Miguel Staging Yard to the north and the proposed Salt Creek Substation to the south (courtesy of SDG&E, 2012).

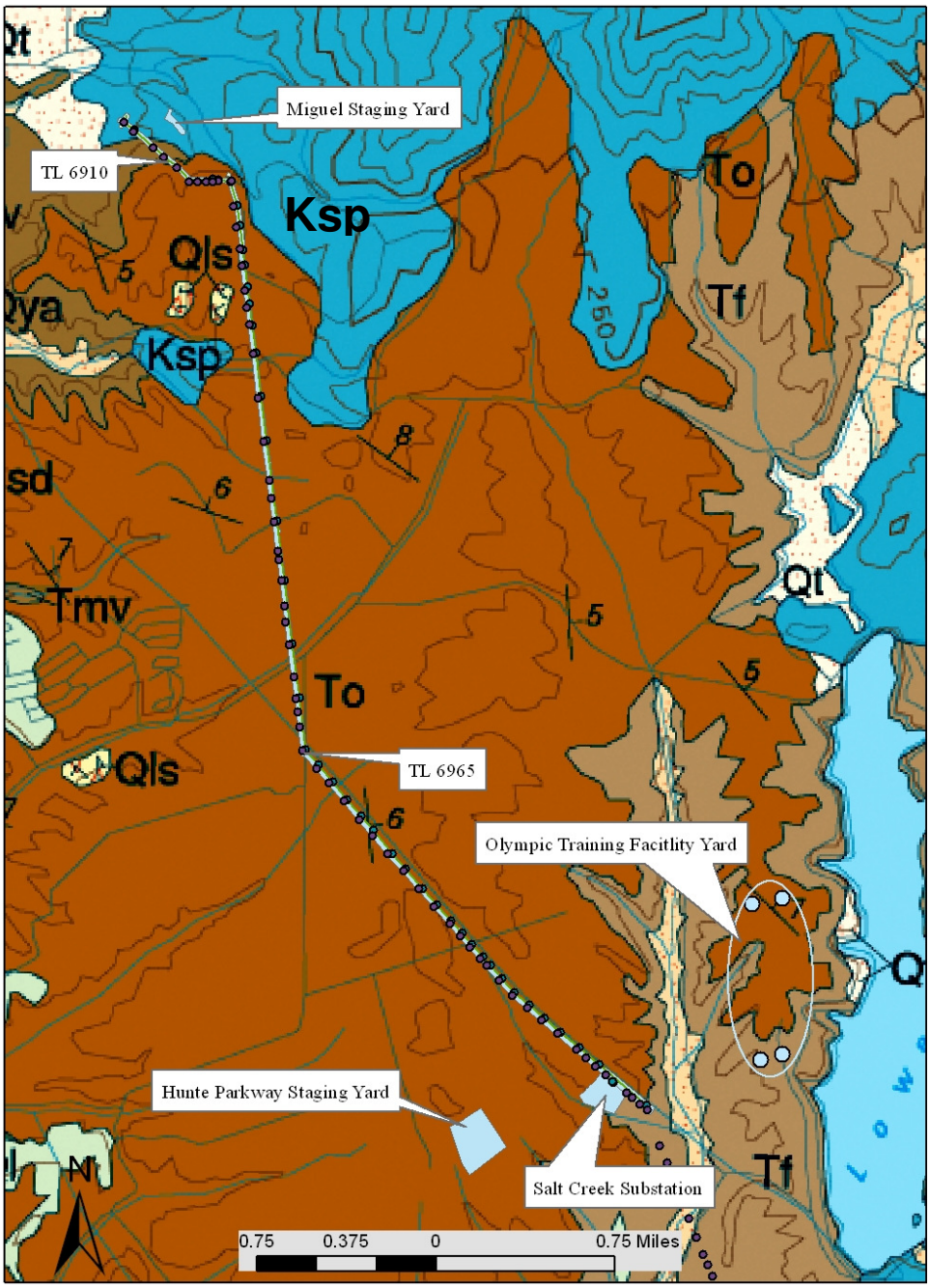

Figure 2. Portion of the El Cajon, CA geologic map (Todd, 2004) showing the geologic setting of the proposed Salt Creek Substation, staging yards, TL 6965 (dots along transmission line). The majority of the project area is underlain by sandstone-mudstone strata of the Oligocene Otay Formation (To), with the fanglomerate facies occurring to the southeast (Tf). Other rock units identified on the map include: Quaternary landslide deposits (Qls), Quaternary terrace deposits (Qt), Eocene Mission Valley Formation (Tmv), and Jurassic-Cretaceous Santiago Peak Volcanics (Ksp). Base map; El Cajon, CA 30' x 60' USGS topographic quadrangle, scale 1:100,000.

EXISTING CONDITIONS

GEOLOGICAL SETTING

The proposed Salt Creek Substation site, TL 6965, and related project elements are located within the southern portion of the Peninsular Ranges Geomorphic Province, which is dominated by plutonic igneous rocks of late Mesozoic age (~125 to 90 million years old [Ma]) and pre-batholithic metamorphic rocks of middle Mesozoic age (~200 to 140 Ma). Along the coastal plain of San Diego County these crystalline basement rocks are overlain by younger sedimentary deposits of Cenozoic age (~45 Ma to 10,000 years old) (Walawender, 2000).

The majority of the Salt Creek Substation project site, as well as the TL 6965 alignment are underlain by sedimentary rocks of the Oligocene-age (~29 Ma) Otay Formation (Artim and Pickney, 1973; Deméré, 1988; Walsh and Deméré, 1991). Minor occurrences of the Cretaceous-age (~120-130 Ma) Santiago Peak Volcanics are exposed at the northern extent of TL 6965, with a small portion to the south overlain by Eocene-age (~42 Ma) sedimentary rocks of the Mission Valley Formation (Figure 2).

The site-specific geotechnical report prepared by Kleinfelder West, Inc. (2007) for the Salt Creek Substation site provides detailed information about subsurface conditions and indicates that fine-grained, stratified deposits of clayey sandstone and silty sandstones underlie major portions of the area. Minor occurrences of coarser-grained pebble and cobble conglomerate layers were also noted in the geotechnical reports. These lithologies are typical of the sandstone-mudstone member of the Otay Formation as defined by Walsh and Deméré (1991). The geotechnical reports also indicate that up to 90 feet of artificial fill material underlies the extreme southwestern portion of the project site, immediately adjacent to Hunte Parkway. This engineered fill material was placed in here as part of the construction of Hunte Parkway and does not extend into the main area of the proposed substation site. The geotechnical report prepared by Geosyntec Consultants (2012) for the TL 6965 alignment notes that similar conditions exist along the majority of the transmission line, with the exception of the northern area in the vicinity of the Miguel Substation. This area is underlain by older, metavolcanic rocks of the Santiago Peak Volcanics capped in places by Eocene sedimentary rocks of the Mission Valley Formation (Figure 2).

PALEONTOLOGICAL RESOURCES

The following section provides a general overview of the types of geologic deposits located within the project area (in order from oldest to youngest).

Stratigraphic Rock Units

Santiago Peak Volcanics (Ksp)

Description: Metavolcanic rocks mapped by Todd (2004) as the late Jurassic to early Cretaceous Santiago Peak Volcanics occur in the northernmost portion of the project site, underlying the northern terminus of TL 6965 and the Miguel Staging Yard (Figure 2). The Santiago Peak Volcanics is mainly composed of volcanic breccias, with lesser amounts of volcanic tuffs and flows. In some areas, slightly-to-moderately metamorphosed marine mudstones and sandstones appear to be interbedded with the volcanic rocks (Fife et al., 1967). Radiometric dates on the

volcanic flow-rocks of the Santiago Peak Volcanics have yielded earliest Cretaceous ages, approximately 120-130 Ma (Herzig and Kimbrough, 1991). The Santiago Peak Volcanics were altered during emplacement of the vast volumes of magma generated by early Cretaceous subduction of a large lithospheric plate. These magmas subsequently cooled to form the plutonic ("granitic") rocks of the Peninsular Ranges Batholith.

Paleontology: In general, the molten origin of the Santiago Peak Volcanics precludes the possible discovery of fossil remains. However, some of the volcanic breccias contain petrified wood, as in Mira Mesa and near Rancho Santa Fe (D'Vincent, 1967). In addition, certain exposures of the metasedimentary portion of this formation have produced important remains of siliceous microfossils (e.g., radiolarians: Jones and Miller 1982) and marine macroinvertebrates including belemnites and clams (Jones and Miller, 1982). There are currently no records of any paleontological collecting sites in these rocks as exposed south of San Clemente Canyon in the City of San Diego.

Site Specific Assessment: Metavolcanic rocks of the Santiago Peak Volcanics occur only at the northern terminus of TL 6965 and the Miguel Staging Yard, and have been assigned a zero paleontological resource sensitivity.

Mission Valley (Tmv)

Description: Sedimentary rocks of the Mission Valley Formation directly overlie metavolcanic rocks of the Santiago Peak Volcanics in the northern northernmost portion of the project site, underlying the northern terminus of TL 6965 and the Miguel Staging Yard (Figure 2). The Mission Valley Formation consists of fine- to very fine-grained marine sandstone in its type area along SR-163 on the south side of Mission Valley. Eastern and southern exposures of the formation consist of fine- to medium-grained, fluvial sandstones, as well as green and brown non-marine siltstone and mudstone. The maximum thickness of the formation is 200 feet near its type location in Mission Valley, although it only reaches a thickness of 60 feet at Scripps Ranch and 45 feet in Tierrasanta (Deméré and Walsh, 1993). Strata of the Mission Valley Formation have been dated at 42.83 million years, using the Ar-Ar radiometric dating method, placing the formation within the Middle Eocene Epoch (Walsh, 1996). In fact, this formation is the only Eocene rock unit in southern California to contain fossil mammal localities that are directly associated with a radiometric date (Deméré and Walsh, 1993).

Paleontology: Well-preserved fossils of microorganisms (e.g., foraminiferans), clams, snails, crabs, sea urchins, sharks, rays, and bony fish have been collected from the marine strata of the Mission Valley Formation (Kern, 1978; Givens and Kennedy, 1979; Deméré et al., 1979; Roeder, 1991). In addition, fluvial deposits of the formation have produced well-preserved fossil remains of wood, as well as a diverse assemblage of terrestrial mammals, including opossums, insectivores, bats, rodents, primates, artiodactyls, and perissodactyls (Golz and Lillegraven, 1977; Walsh, 1996). The combined marine and non-marine fossil assemblages that have been recovered from the formation allow for direct correlation of marine and terrestrial faunas of the Eocene of southern California. In this respect, the Mission Valley Formation is scientifically important, and it serves as one of a few instances within North America from which such correlations can be ascertained (Golz and Lillegraven, 1977; Flynn, 1986; Walsh, 1996). The Mission Valley Formation is discontinuously exposed between Otay Valley in the south, Scripps Ranch in the north, Old Town in the west, and Spring Valley, Fletcher Hills, and Santee in the

east (Deméré and Walsh, 1993). Several distinctive sandstone out crops in the regions of Rancho Bernardo, Rancho Peñasquitos, and Carmel Mountain Ranch that contain vertebrate fossil remains that have been mapped as the Mission Valley Formation more likely belong to the upper sandstone tongue of the Friars Formation, based on paleontology (Walsh, 1996; Walsh et al., 1996).

Site Specific Assessment: Because diverse fossil assemblages of marine invertebrates and non-marine vertebrates have been recovered from the Mission Valley Formation, this rock unit is assigned a high paleontological resource sensitivity.

Otay Formation (To)

Description: The majority of the project area, including the Salt Creek Substation, Hunte Parkway Staging Yard, Olympic Center Facility Yard, and most of TL 6965, is underlain by sedimentary rocks underlying mapped by Todd (2004) as fluvial and alluvial fan strata of the Oligocene-age Otay Formation (Figure 2). The Otay Formation in this area is correlative with the Arikareean North American Land Mammal Age and has been radiometrically dated at approximately 29 Ma. The formation has been divided into three members by Walsh and Deméré (1991) who recognize a basal angular conglomerate (fanglomerate) unit, a middle gritstone unit, and an upper sandstone-mudstone unit. Typical exposures of the upper member consist of gray-white, medium-grained, tuffaceous sandstone, with interbeds of brown and red-brown claystones and white bentonite layers (Walsh and Deméré, 1991). The middle member consists of interbedded coarse-grained sandstones and angular gravels (gritstone). The lower member is a poorly-sorted, cobble to boulder fanglomerate, largely composed of angular blocks of locally-derived metavolcanic and plutonic igneous rock (Walsh and Deméré, 1991; Tan and Kennedy, 2002; Todd, 2004). In general the formation becomes finer grained from bottom to top with the basal angular conglomerate unit grading upward and westward into the gritstone member, which in turn grades upward and westward into the sandstone-mudstone member. Taken together, the Otay Formation may be as much as 400 feet thick, but at any one location the formation is typically less than 120 feet thick.

Paleontology: Numerous fossil localities have been discovered in the Otay Formation in the EastLake, Otay Ranch, and Otay Mesa areas of southwestern San Diego County (Appendix). These localities have produced well-preserved remains of a diverse assemblage of terrestrial vertebrates which includes tortoises, lizards, snakes, birds, shrews, rodents, rabbits, dogs, foxes, cat-like nimravids, rhinoceros, camels, mouse-deer, and oreodonts. Based on these fossil discoveries, the Otay Formation is considered to be the richest source of late Oligocene terrestrial vertebrates in California (Deméré, 1988; Walsh and Deméré, 1991).

Site Specific Assessment: Because of its proven paleontological richness, the sandstone-mudstone member of the Otay Formation is assigned a high paleontological resource sensitivity.

Results of Record Search

Numerous, previously recorded fossil collecting localities are documented in paleontological records housed at SDNHM. Over 20 recorded fossil collecting localities occur within the project area, including the proposed TL 6965 alignment, the proposed Salt Creek Substation site, and associated yards (Figure 3 and Appendix). All of these localities were discovered in sedimentary deposits of the sandstone-mudstone member of the Oligocene-age Otay Formation, during mass

grading of the EastLake and Winding Walk developments. Fossils recovered from the localities mentioned above include impressions of aquatic plants; shells of freshwater invertebrates, and isolated bones and teeth as well as whole and partial skeletons of terrestrial vertebrates, including lizards (iguanid), opossums (cf. *Nanodelphys* sp.), insectivore (cf. *Centetodon* sp.), hedgehog (cf. *Ocajila* sp.), early rodents (*Heliscomys* sp., *Leidymys* sp., *Pleurolicus* sp., *Protospermophilus* sp., and *Meniscomys* sp.), rhinoceros (cf. *Subhyracodon* sp.), mouse deer (*Hypertragulus* sp.), and oreodont (*Sespia californica*). As subsurface excavation is not anticipated within the proposed yards (e.g. Hunte Parkway, Miguel, and Olympic Training Facility), paleontological monitoring is not recommended for these areas.

IMPACT ANALYSIS

INTRODUCTION

Direct impacts to paleontological resources occur when earthwork activities, such as mass grading, drilling, or trenching activities, cut into the geological deposits (formations) within which fossils are buried. These direct impacts have the potential to destroy fossilized remains. Since fossils are the remains of prehistoric animal and plant life they are considered to be nonrenewable. Such impacts can be significant and, under California Environmental Quality Act (CEQA) guidelines, require mitigation.

Impacts to paleontological resources are typically rated from high to zero depending upon the resource sensitivity of impacted formations.

High significance
Impacts to high sensitivity formations (Mission Valley Formation and Otay Formation).

Moderate significance
Impacts to moderate sensitivity formations (none within the project site).

Low significance
Impacts to low sensitivity formations (none within the project site).

Zero significance
Impacts to formations with no fossil potential (Santiago Peak Volcanics).

SITE SPECIFIC IMPACTS

Mission Valley Formation
Only a small portion of the northern extent of TL 6965 is underlain by the Mission Valley Formation. However, the paleontological sensitivity of this formation is high due to the number of fossil-bearing localities in this region of San Diego County. Because Eocene-age bedrock occurs at the surface in the northern portion of TL 6965, even shallow excavations and minor grading activities in this area could adversely impact paleontological resources.

Otay Formation
Preliminary grading plans for the Salt Creek Substation indicate that excavations into the Otay Formation will likely occur over the majority of the project site. In certain areas these cuts will result in removal of up to 30 feet of previously undisturbed Otay Formation strata. Additionally,

improvements to TL 6965 may encounter Otay Formation during subsurface operations (e.g. drilling and trenching). These potential negative impacts to paleontological resources can be reduced to below the level of significance through implementation of the mitigation plan as outlined below.

MITIGATION MEASURES

1. Prior to the issuance of grading permits, a qualified paleontologist has been retained to carry out an appropriate mitigation program. (A qualified paleontologist is defined as an individual with an M.S. or Ph.D. in paleontology or geology who is familiar with paleontological procedures and techniques). A preconstruction meeting shall be held among the paleontologist and the grading and excavation contractors.
2. A paleontological monitor shall be onsite at all times during the original cutting of previously undisturbed sediments of highly sensitive geologic formations (i.e., Mission Valley and Otay formations) to inspect cuts for contained fossils. (A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials.) Areas to be monitored include the proposed transmission alignment for TL 6956, the proposed Salt Creek Substation, and modifications to the Miguel Substation. As subsurface excavation is not anticipated within the proposed yards (e.g., Hunte Parkway, Miguel, and Olympic Training Facilities), these areas will not require paleontological monitoring. The paleontological monitor shall work under the direction of a qualified paleontologist.
3. In the event that fossils are discovered, the qualified paleontologist (or paleontological monitor) shall recover them. In most cases, this fossil salvage can be completed in a short period of time. However, some fossil specimens (such as a complete rhinoceros skeleton) may require an extended salvage time. In these instances, the qualified paleontologist (or paleontological monitor) shall be allowed to temporarily direct, divert, or halt grading to allow recovery of fossil remains in a timely manner. Because of the potential for the recovery of small fossil remains such as isolated mammal teeth, it may be necessary in certain instances and at the discretion of the qualified paleontological monitor to set up a screen-washing operation on the site.
4. Prepared fossils along with copies of all pertinent field notes, photos, and maps shall be deposited in a scientific institution with paleontological collections such as the San Diego Natural History Museum. A final summary report shall be completed. This report shall include discussions of the methods used, stratigraphy exposed, fossils collected, and significance of recovered fossils. The report shall also include an itemized inventory of all collected, prepared, and catalogued fossil specimens.

REFERENCES

Artim, E.R., and C.J. Pinckney. 1973. La Nacion fault system, San Diego, California. Geological Society of America, Bulletin 84:1075-1080.

Deméré, T.A. 1988. Early Arikareean (late Oligocene) vertebrate fossils and biostratigraphic correlations of the Otay Formation at EastLake, San Diego County, California. In, M.V. Filewicz and R.L. Squires (eds.), Paleogene Stratigraphy, West Coast of North America. Society of Economic Paleontologists and Mineralogists, Pacific Section 58:35-43.

Deméré, T.A., and S.L. Walsh. 1993. Paleontological Resources, County of San Diego: Prepared for the Department of Public Works, County of San Diego, p. 1-60.

D'Vincent, S., 1967, Primitive Sequoia not previously identified. California Garden, August-September 1967:14-15.

Fife, D.L., J.A. Minch, and P.J. Crampton, 1967, Late Jurassic Age of the Santiago Peak Volcanics, California: Geol. Soc. America Bull., v.78, p.299-304.

Flynn, J.J. 1986. Correlation and geochronology of middle Eocene strata from the western United States. Palaeogeography, Palaeoclimatology, Palaeoecology 55:335-406.

Geosyntec Consultants, 2012. Geotechnical Investigation, 69kV Transmission Line TL 6965, Salt Creek Substation to Miguel Substation, Chula Vista, California. Unpublished technical report prepared for SDG&E, dated August 22, 2012.

Givens, C.R., and M.P. Kennedy, 1979. Eocene molluscan stages and their correlation, San Diego area, California. In, P.L. Abbott (ed.), Eocene Depositional Systems, San Diego. Geological Society of America, fieldtrip guidebook: 81-95.

Golz, D.J, and J.A. Lillegraven, 1977. Summary of known occurrences of terrestrial vertebrates from Eocene strata of southern California. University of Wyoming, Contributions to Geology, vol. 15: 43-65.

Herzig, C.T., and D.J. Kimbrough, 1991, Early Cretaceous zircon ages prove a non-accretionary origin for the Santiago Peak Volcanics, northern Santa Ana Mountains, California. Geological Society of America, Cordilleran Section, Abstracts with Programs 23:35.

Jones, D.A., and R.H. Miller, 1982, Jurassic fossils from the Santiago Peak Volcanics, San Diego County, California. In, P.L. Abbott (ed.). Geologic Studies in San Diego. Field Trip Guidebook, San Diego Association of Geologists, San Diego 93-103.

Kennedy, M.P., and S.S. Tan. 1977. Geology of National City, Imperial Beach, and Otay Mesa quadrangle, southern San Diego metropolitan area, California Division of Mines and Geology. Map Sheet 29, scale 1:24,000.

Kleinfelder West, Inc. 2007. Geotechnical Investigation, Proposed SDG&E Substation, Chula Vista, California. Unpublished technical report prepared for SDG&E, dated March 7, 2007.

Todd, V.R., 2004. Preliminary geologic map of the El Cajon 30' x 60' quadrangle, southern California, http://pubs.usgs.gov/of/2004/1361: U.S. Geological Survey, Open-File Report 2004-1361, scale 1:100,000.

Walawender, M.J. 2000. The Peninsular Ranges: A Geological Guide to San Diego's Back Country. Kendall/Hunt Publishing Company, Dubuque, Iowa.

Walsh, S.L. 1996. Middle Eocene mammal faunas of San Diego County, California. In, D.R. Prothero and R.J. Emery (eds.), The Terrestrial Eocene-Oligocene Transition in North America. Cambridge University Press, Cambridge, England, pp. 75-119.

Walsh, S.L., and T.A. Deméré. 1991. Age and stratigraphy of the Sweetwater and Otay formations, San Diego County, California. In, P.L. Abbott and J.A. May (eds.), Eocene Geologic History San Diego Region. Society of Economic Paleontologists and Mineralogists, Pacific section, Vol. 68:131-148.

Walsh, S.L., Prothero, D.R., and Lundquist, D.J., 1996. Stratigraphy and paleomagnetism of the middle Eocene Friars Formation and Poway Group, southwestern San Diego County, California. In: D.R. Prothero and R.J. Emry (eds.). The Terrestrial Eocene-Oligocene Transition in North America. Cambridge University Press, Cambridge England, pp. 120-154.