DRAFT
Initial Study
and Mitigated Negative Declaration

for

San Diego Gas & Electric Company
Mira Sorrento Distribution Substation Project
(Application No. A 11-10-015)

June 2012

Prepared for:
California Public Utilities Commission
Energy Division
505 Van Ness Avenue
San Francisco, California 94102

Prepared by:
DUDEK

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LIST OF ACRONYMS AND ABBREVIATIONS

$\mu g/m^3$	micrograms per cubic meter
AAQS	ambient air quality standards
AB	Assembly Bill
ACHP	Advisory Council on Historic Preservation
ACOE	U.S. Army Corps of Engineers
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
amsl	above mean sea level
APCD	air pollution control district
APM	applicant proposed measure
APZ	Air Pollution Zone
AQMD	air quality management district
BMP	best management practice
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CAGN	California gnatcatcher
CalEPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CASQA	California Stormwater Quality Association
CBC	California Building Code

LIST OF ACRONYMS AND ABBREVIATIONS

CCA	California Coastal Act
CCC	California Coastal Commission
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CDMG	California Division of Mines and Geology
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2E	carbon dioxide equivalent
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel (adjusted for human frequencies)
db(A)	A-weighted decibel
DEH	Department of Environmental Health
DOC	California Department of Conservation

LIST OF ACRONYMS AND ABBREVIATIONS

DOT	U.S. Department of Transportation
EIR	Environmental Impact Report
EMF	electromagnetic field
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
ESA	environmental site assessment
ESL	environmentally sensitive lands
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FINDS	Facility Index System
GHG	greenhouse gas
GHz	gigahertz
GIS	geographical information system
GPS	Global Positioning System
GWP	global warming potential
H_2O	water vapor
HAZWOPER	Hazardous Waste Operations and Emergency Response
HFC	hydrofluorocarbon
HHC	highly hazardous chemical
HMMD	Hazardous Materials Management Division
HWCL	Hazardous Waste Control Law
Hz	hertz
IS/MND	Initial Study/Mitigated Negative Declaration
kV	kilovolt
kV/m	kilovolt per meter

LIST OF ACRONYMS AND ABBREVIATIONS

KOP	key observation point
kW	kilowatt
KHz	kilohertz
LCFS	Low Carbon Fuel Standard
LOS	level of service
LRA	Local Responsibility Area
MBTA	Migratory Bird Treaty Act
MCAS	Marine Corp Air Station
MHPA	Multihabitat Planning Area
MMCRP	mitigation monitoring, compliance, and reporting program
$MMTCO_2E$	million metric tons of carbon dioxide equivalent
mpg	miles per gallon
MSCP	Multiple Species Conservation Program
MVA	megavolt ampere
MW	megawatt
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	National American Heritage Commission
NCCP	natural community conservation plan
NEPA	National Environmental Policy Act
NF_3	nitrogen trifluoride
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NO	nitric oxide
NO_2	nitrogen dioxide

LIST OF ACRONYMS AND ABBREVIATIONS

NO_x	oxides of nitrogen
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O_3	ozone
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Administration
PEA	Proponent's Environmental Assessment
PFC	perfluorocarbon
PM	particulate matter
$PM_{2.5}$	particulate matter less than 2.5 microns
PM_{10}	particulate matter less than 10 microns
ppm	parts per million
PRC	Public Resources Code
PTC	Permit to Construct
RCP	Regional Comprehensive Plan
RCRA	Resource Conservation and Recovery Act
ROG	reactive organic gas
ROW	right-of-way
RPS	Renewable Portfolio Standard
RWQCB	Regional Water Quality Control Board
SAM	Site Assessment Mitigation
SANDAG	San Diego Association of Governments
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill

LIST OF ACRONYMS AND ABBREVIATIONS

SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SDG&E	San Diego Gas & Electric Company
SDWA	Safe Drinking Water Act
SF_6	sulfur hexafluoride
SMARA	Surface Mining and Reclamation Act
SO_2	sulfur dioxide
SPCC	Spill Prevention Control and Countermeasures
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TCE	trichloroethylene
TDML	total maximum daily loads
TDS	total dissolved solid
TMP	traffic management plan
UBC	Uniform Building Code
USFWS	U.S. Fish and Wildlife Service
VOC	volatile organic compound
WEAP	Worker Environmental Awareness Program

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

MITIGATED NEGATIVE DECLARATION

SAN DIEGO GAS & ELECTRIC COMPANY (SDG&E)
Certificate of Permit to Construct
A.11-10-015
MIRA SORRENTO DISTRIBUTION SUBSTATION PROJECT

INTRODUCTION

Pursuant to the California Public Utilities Commission's (CPUC) General Order 131-D, San Diego Gas and Electric Company (SDG&E) has filed an application with the CPUC for a Permit to Construct for the SDG&E Mira Sorrento Distribution Substation Project (proposed project). The Application was filed October 14, 2011, and includes the Proponent's Environmental Assessment (PEA) prepared by SDG&E. The proposed project includes a new 120 megavolt ampere (MVA), 69/12-kilovolt (kV) distribution substation within the Sorrento Mesa area of the City of San Diego to meet existing and anticipated customer-driven electrical load growth and to improve distribution equipment reliability in the Sorrento Mesa area. Under the CPUC's General Order 131-D, approval of this project must comply with the California Environmental Quality Act (CEQA).

Pursuant to the California Environmental Quality Act (CEQA) (California Public Resources Code, Section 21000 et seq.), the CPUC must prepare an Initial Study/Mitigated Negative Declaration (IS/MND)) for the proposed project to determine if any significant impact on the environment would result from project implementation. The IS/MND uses the significance criteria outlined in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.).

Article 6, Section 15070, Decision to Prepare a Negative Declaration or Mitigated Negative Declaration, of the CEQA Guidelines states the following:

A public agency shall prepare or have prepared a proposed negative declaration or mitigated negative declaration for a project subject to CEQA when:

a) The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or

b) The initial study identifies potentially significant effects, but:

   1) Revisions in the project plans or proposals made by, or agreed to by, the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and

   2) There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

Based on the analysis in the IS/MND, it has been determined that all project-related environmental impacts could be reduced to a less-than-significant level with the incorporation of feasible mitigation measures. Therefore, adoption of an IS/MND will satisfy the requirements of CEQA.

The information contained in the project's PEA and additional information requested by the CPUC during the PEA review were fully considered during the preparation of this Draft IS/MND.

Copies of the project application, PEA, and supporting technical studies are available on the project website at:

http://www.cpuc.ca.gov/environment/info/dudek/MiraSorrento/MiraSorrentoSub.htm.

PROJECT DESCRIPTION

Following is a summary of the project that SDG&E has proposed; the attached IS presents more details on the proposed project under Section 4, Expanded Project Description.

SDG&E is proposing to construct a new 120 MVA, 69/12 kV distribution substation in the vicinity of Vista Sorrento Parkway and Mira Mesa Boulevard in the Sorrento Mesa area within the Mira Mesa Community Plan area of the City of San Diego, California. The proposed 1.4-acre substation would be situated on a 3.7-acre parcel and configured as a 120 MVA, 69/12-kV, low-profile design. A 10-foot-high screening wall would enclose the substation area.

Power would be supplied to the new substation by an existing SDG&E 69 kV transmission line (TL665) that would require installation of underground transmission facilities into the substation site. Initially, six 12 kV underground distribution circuits would be installed and would be routed to Mira Sorrento Place to tie into the existing underground system serving the area.

Project construction is expected to require approximately 18 to 24 months to complete.

PROJECT OBJECTIVE

SDG&E provides electrical power services to the Sorrento Mesa area of the City of San Diego. In providing these services, SDG&E currently operates four substations, referred to as the Eastgate Substation, Mesa Rim Substation, Genesee Substation, and Torrey Pines Substation. All four substations are 69/12 kV distribution substations, and each has been expanded to its ultimate capacity. The proposed project would provide additional capacity to serve existing area load as well as forecasted customer-driven electrical load growth and to prevent potential long outages or disruption of service to existing customers in the SDG&E Sorrento Mesa service territory.

APPLICANT PROPOSED MEASURES

The project includes a number of measures proposed by SDG&E that are designed to reduce or avoid potential environmental impacts associated with project construction and operation. SDG&E's measures are considered part of the proposed project and are listed in Table 1.

Table 1: Applicant Proposed Measures			
APM Number	**Description**	**Proposed Project Component**	
		Mira Sorrento Substation	***TL665 Loop-In***
	Aesthetics		
APM-AES-1	PEA Figure 3-8: Conceptual Landscape Plan (IS/MND, Figure 4-4) provides the conceptual landscape mitigation plan for the Mira Sorrento Substation. The landscape plan would be implemented as part of the proposed project following construction of the substation components. The conceptual landscape plan would provide partial screening of views of the substation site from view locations to the west, south, and east. Landscaping would include plantings within the retaining walls and small, informal groupings of small shrubs and trees on the flatter areas created by the walls. The Conceptual Landscape Plan includes a list of recommended plant species. All suggested trees appear on the City of San Diego Street Tree Selection Guide. Drought-tolerant plants, including California native species, are suggested. Proposed project landscaping would receive regular watering during the initial two years following installation in order to ensure the establishment of the plants. All planting would be consistent with SDG&E operational requirements for landscaping in proximity to electric transmission facilities.	✓	✓
APM-AES-2	The color of the substation perimeter wall would be chosen to blend with the existing site features (i.e., a dull grey, light brown, or dull green) in order to minimize visual contrast with the landscape setting.	✓	✓
	Biological Resources		
APM-BIO-1	SDG&E will conduct activities in accordance with NCCP Operational Protocols to avoid, minimize, or mitigate impacts to biological resources. See APM-BIO-2.	✓	✓
APM-BIO-2	In accordance with the NCCP, SDG&E will conduct the following: • Whenever practicable, all grading or brushing occurring within occupied CAGN habitat shall be conducted from September 1st through February 28, which is outside of the CAGN breeding season. • When conducting all other project construction activities during the CAGN breeding season of March 1 through August 31 within habitat in which CAGN are known to or have a high potential to occur, the following avoidance measures shall apply: o A qualified biologist will conduct a preconstruction survey for CAGN within 1 week prior to initiating project construction activities in an area. If CAGN are present but not nesting, a qualified biologist will survey for nesting CAGN approximately once per week in the vicinity of project activities for the duration of the activity in that area. o If an active CAGN nest is located in the vicinity of project activities, a biologist qualified for CAGN nest monitoring will monitor the nest daily until: (1) Project activities are no longer in the vicinity of the nest, or (2) the fledglings become independent of their nest. o If the CAGN nest monitor determines that the project activities are disturbing or disrupting the nesting activities, the monitor will make practicable recommendations to reduce the noise or disturbance in the vicinity. This may		

Table 1: Applicant Proposed Measures			
APM Number	**Description**	**Proposed Project Component**	
		Mira Sorrento Substation	***TL665 Loop-In***
	include recommendations such as (1) turning off vehicle engines and other equipment whenever possible to reduce noise, and (2) working in other areas until the young have fledged. With these avoidance and minimization measures in place, any incidental take of coastal California gnatcatcher is covered by the SDG&E NCCP.		
	Cultural Resources		
APM-CUL-1	A qualified paleontologist shall attend preconstruction meetings, as needed, to consult with the excavation contractor concerning excavation schedules, paleontological field techniques, and safety issues. A qualified paleontologist is defined as an individual with a Master of Science or Doctor of Philosophy in paleontology or geology who is experienced with paleontological procedures and techniques, who is knowledgeable in the geology and paleontology of Southern California, and who has worked as a paleontological mitigation project supervisor in the region for at least one year. The requirements for paleontological monitoring shall be noted on the construction plans.	✓	✓
APM-CUL-2	A paleontological monitor shall work under the direction of the qualified project paleontologist and shall be on site to observe excavation operations that involve the original cutting of previously undisturbed deposits with high or moderate paleontological resource sensitivity. A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials.	✓	✓
APM-CUL-3	In the event that fossils are encountered, the project paleontologist shall have the authority to divert or temporarily halt construction activities in the area of discovery to allow recovery of fossil remains in a timely fashion. The paleontologist shall contact SDG&E's cultural resource specialist and environmental project manager at the time of discovery. The paleontologist, in consultation with SDG&E's cultural resource specialist, shall determine the significance of the discovered resources. SDG&E's cultural resource specialist and environmental project manager shall concur with the evaluation procedures to be performed before construction activities are allowed to resume. Because of the potential for recovery of small fossil remains, it may be necessary to set up a screen-washing operation on site. When fossils are discovered, the paleontologist (or paleontological monitor) shall recover them along with pertinent stratigraphic data. Because of the potential for recovery of small fossil remains, such as isolated mammal teeth, recovery of bulk-sedimentary-matrix samples for off-site wet screening from specific strata may be necessary, as determined in the field. Fossil remains collected during monitoring and salvage shall be cleaned, repaired, sorted, cataloged, and deposited in a scientific institution with permanent paleontological collections.	✓	✓
	Geology and Soils		
APM-GEO-1	SDG&E will consider the recommendations and findings of the final Geotechnical Investigation Reports prepared by Kleinfelder Inc. and the contractor's geotechnical engineer in the final design of all project components to ensure that the potential for landslides, expansive soils, and slope instability is compensated for in the final design and	✓	✓

Table 1: Applicant Proposed Measures			
		Proposed Project Component	
APM Number	**Description**	***Mira Sorrento Substation***	***TL665 Loop-In***
	construction techniques. In addition, SDG&E will comply with all applicable codes and seismic standards, as appropriate, to minimize the potential for damage from a seismic event. The final project design will be reviewed and approved by a professional engineer registered in the State of California, prior to commencement of construction.		
	Hazards and Hazardous Materials		
APM-HAZ-1	SDG&E would prepare a project-specific Hazardous Substance Management and Emergency Response Plan during the construction period to reduce or avoid potentially hazardous materials, for the purposes of worker safety, protection from groundwater contamination, and proper disposal of hazardous materials.	✓	✓
	Hydrology and Water Quality		
APM-HYD-1	SDG&E will prepare an SWPPP under the State General Construction Permit, and implement BMPs from the SDG&E Water Quality Construction Best Management Practices Manual in order to avoid and minimize potential impacts to water quality.	✓	✓

Source: SDG&E 2011

MITIGATED NEGATIVE DECLARATION MITIGATION MEASURES

The following mitigation measures are recommended to reduce project-related impacts to a less-than-significant level.

PROJECT MITIGATION MEASURES

BIOLOGICAL RESOURCES

Mitigation Measure BIO-1: Prior to construction, SDG&E shall retain a qualified biologist to conduct a focused rare plant survey for the entire proposed impact area within the project area during the time period when the special-status plant species are detectable. Locations of rare/special-status plants shall be identified and inventoried. If special-status plants are identified during surveys, then SDG&E shall retain a qualified biologist to supervise construction activities within the vicinity of the special-status plant species. If impacts to special-status plant species are unavoidable, the biologists shall recommend avoidance or mitigation approaches. Alternatively, if the special-status plant species in question is a covered species within the SDG&E Subregional NCCP, mitigation consistent with measures established in the NCCP shall be provided. The results of the focused plant surveys and measures outlined above that will be implemented by SDG&E in the event special-status plant species are identified on site shall be provided to CPUC prior to any construction activities including clearing, staging, grading, etc.

Mitigation Measure BIO-2: SDG&E shall retain qualified biologists and other qualified resource specialists, as necessary, to monitor project construction. Monitors shall be hired and trained prior to construction and shall be responsible for preconstruction surveys, work area delineations (i.e., staking, flagging, etc.), on-site monitoring, documentation of violations and

compliance, coordination with construction inspectors, and post-construction documentation. The SDG&E on-site biological monitors shall prepare weekly reports during ground-disturbance activities and send them to the CPUC and the CPUC monitors. The SDG&E on-site biological monitors shall prepare a post-construction compliance report within 60 days of the end of ground-disturbance activities and send it to the CPUC.

SDG&E's monitors shall be responsible for obtaining clearance from the CPUC and, if necessary, resource agencies for project modifications. All project modifications variances will be documented and none will be allowed with verbal approval only. Project modifications that are considered minor with little risk to sensitive resources by the SDG&E on-site biological monitors and the CPUC biological monitors may be approved on the site but will be documented. Project modifications that could affect sensitive resources but are required to ensure the health and safety of work crews shall also be documented.

Mitigation Measure BIO-3: SDG&E shall conduct Worker Environmental Awareness Program (WEAP) training for construction crews (primarily crew and construction foremen) before construction activities begin within any of the sensitive habitat areas. The WEAP shall include a brief review of the special-status species and other sensitive resources that could occur in the proposed project area (including their habitat requirements and an identification of portions of the project site and adjacent areas where they might be found) and their legal status and protection. The program shall cover all mitigation measures; environmental permits and proposed project plans, such as best management practices (BMPs); erosion control and sediment plan; reclamation plan; and any other required plans. The designated biological monitor shall be responsible for ensuring that construction personnel adhere to the guidelines and restrictions. WEAP training sessions shall be conducted as needed for new personnel brought onto the job during the construction period. A list of all personnel who have attended the WEAP training shall be kept by the biological monitor and shall be available for CPUC review in the field at all times, and a copy shall be submitted to the CPUC. During WEAP training, construction personnel shall be informed of the importance of avoiding ground-disturbing activities outside of the designated work area.

Mitigation Measure BIO-4: At the end of each workday, any open holes shall be fully covered, after they have been inspected by the on-site biologist, with steel plates or other effective coverings to prevent entrapment of wildlife species. If fully covering the excavations is impractical, ramps will be used to provide a means of escape for wildlife that enter the excavations, or open holes will be securely fenced with exclusion fencing. If common wildlife species are found in a hole, the designated biological monitor shall immediately be informed and the animal(s) shall be removed. If the animal(s) is/are a sensitive species that require(s) special handling authorization, a qualified biologist (agency-permitted or approved to handle a specific species) shall remove the animal before resumption of work in that immediate area. SDG&E shall specify this requirement in its agreements with all construction contractors.

Mitigation Measure BIO-5: If construction activities including but not limited to grading or site disturbance are to occur between February 15 and September 15, a nesting bird survey shall be conducted by a qualified biologist to determine the presence of nests or nesting birds within 200 feet of the construction activities. The nesting bird surveys shall be completed no more than 72

hours prior to any construction activities. The survey will focus on special-status species known to use the area as well as other nesting birds that are protected under the MBTA. No grading or site disturbance shall occur within a 200-foot buffer of an active nest except as provided below. If work cannot be delayed until after the breeding season, a qualified biologist shall monitor the nest daily until project activities are no longer occurring within 200 feet of the nest or until the fledglings become independent of the nest. The monitoring biologist shall halt construction activities if he or she determines that the construction activities are disturbing the nesting activities. The monitor shall make practicable recommendations to reduce the noise or disturbance in the vicinity of the nest. This may include recommendations such as (1) turning off vehicle engines and other equipment whenever possible to reduce noise, (2) working in other areas until the young have fledged, or (3) placing noise barriers to maintain the noise at the nest to 60 dBA leq hourly or less or to the preconstruction ambient noise level if that exceeds 60 dBA leq hourly. The on-site biologist will review and verify compliance with these nesting boundaries and will verify that the nesting effort has finished. Unrestricted construction activities can resume when no other active nests are found. Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to the California Public Utilities Commission.

Mitigation Measure BIO-6: Where impacts to Diegan coastal sage scrub and native grasslands cannot be avoided, SDG&E shall restore temporarily disturbed areas to preconstruction conditions following construction and deduct credits from the SDG&E Mitigation Credits for permanent impacts to sensitive communities, as stated in the SDG&E NCCP. Where on-site restoration is planned for mitigation of temporary impacts to sensitive vegetation communities, the applicant shall identify a habitat restoration specialist to be approved by the CPUC or that the resource agencies have indicated is acceptable to determine the most appropriate method of restoration. Restoration techniques can include hydroseeding, handseeding, imprinting, and soil and plant salvage, as discussed in Section 7.2.1 of the NCCP. Monitoring will include visual inspection of restored areas after 1 year. A second application may be made. If, after the second year, restoration is deemed unsuccessful, the USFWS and CDFG, in cooperation with SDG&E, shall determine whether the remaining loss shall be mitigated through a deduction from the SDG&E Mitigation Credits, or whether a third application would better achieve the intended purpose. The mitigation objective for impacted sensitive vegetation communities shall be restoration to preconstruction conditions as measured by species cover, species diversity, and exotic species cover. The cover of native species should increase while the cover of non-native or invasive species should decrease. Success criteria shall be established by comparison with reference sites. If, however, roots are not grubbed during temporary impacts, restoration/ hydroseeding may not be necessary. This applies to impacts greater than 500 square feet, and only where grubbing occurred. For all temporary impacts greater than 500 square feet, acreage not meeting success criteria shall be deducted from SDG&E's mitigation credits at a 1:1 ratio.

In addition, SDG&E shall mitigate for permanent impacts to Diegan coastal sage scrub (all subtypes) and native grassland at a ratio of 1:1 for all permanent impacts that would result from construction activities. Evidence shall be provided to the CPUC that 0.9 acre of coastal sage scrub and 0.1 acre of native grasslands have been deducted from NCCP credits.

CULTURAL RESOURCES

Mitigation Measure CUL-1: In the event that any prehistoric or historic subsurface cultural resources are discovered during ground-disturbing activities, such as chipped or ground stone, historic debris, building foundation, or human bones, all work within 50 feet of the resources shall be halted, and a qualified archaeologist shall be consulted to assess the significance of the find. If any find is determined to be significant, representatives of SDG&E, California Public Utilities Commission (CPUC), and the qualified archaeologist shall meet to determine the appropriate avoidance measures or other appropriate mitigation, with the ultimate determination to be made by the CPUC. All significant cultural materials recovered shall be subject to scientific analysis; professional museum curation, as necessary; and a report prepared by a specialist according to current professional standards.

In considering any suggested mitigation proposed by the consulting archaeologist to mitigate impacts to historical resources or unique archaeological resources, the CPUC and SDG&E shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while mitigation for historical resources or unique archaeological resources is carried out. If the CPUC, in consultation with the qualified archaeologist, determines that a significant archaeological resource is present and that the resource could be adversely affected by the proposed project, SDG&E will:

- Redesign the project to avoid any adverse effect on the significant archaeological resource
- Implement an archaeological data recovery program (ADRP), unless the qualified archaeologist determines that the archaeological resource is of greater interpretive use than research significance, and that interpretive use of the resource is feasible. If the circumstances warrant an ADRP, such a program shall be conducted. The project archaeologist and the CPUC shall meet and consult to determine the scope of the ADRP. The archaeologist shall prepare a draft ADRP that shall be submitted to the CPUC for review and approval. The ADRP shall identify how the proposed ADRP would preserve the significant information the archaeological resource is expected to contain. That is, the ADRP shall identify the scientific/historical research questions that are applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to portions of the historical property that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practical.

Mitigation Measure CUL-2: If human remains are discovered, there shall be no further excavation or disturbance of the discovery site or any nearby area reasonably suspected to overlie adjacent human remains until the project applicant has immediately notified the county coroner and otherwise complied with the provisions of State CEQA Guidelines, Section 15064.5(e). If the remains are found to be Native American, the county coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours. The most likely descendant of the deceased Native American shall be notified by the NAHC and given the opportunity to make proper disposition of human remains. If the NAHC is unable to identify the most likely descendant, or if no recommendations are made within 24 hours, remains may be reinterred

with appropriate dignity elsewhere on the property in a location not subject to further subsurface disturbance. If recommendations are made and not accepted, the NAHC will mediate.

HAZARDS AND HAZARDOUS MATERIALS

Mitigation Measure HAZ-1a: Prior to construction, all SDG&E, contractor, and subcontractor project personnel would receive training regarding the appropriate work practices necessary to effectively implement hazardous materials procedures and protocols and to comply with the applicable environmental laws and regulations, including, without limitation, hazardous materials spill prevention and response measures. A sign-in sheet of contractor and subcontractor project personnel who have received training shall be provided to California Public Utilities Commission on a regular basis depending on the level of construction activity.

Mitigation Measure HAZ-1b: The hazardous substance management and emergency response plan proposed by APM-HAZ-1 shall be reviewed and approved by the California Public Utilities Commission (CPUC) and San Diego County Department of Environmental Health (DEH), Hazardous Materials Division. The plan shall meet the requirements identified in California Health and Safety Code §25503.4, §25503.5, and §25504 and specifically addressed for the County of San Diego in the County of San Diego DEH, Hazardous Material Division, guidance on Hazardous Materials Business Plans.

Mitigation Measure HAZ-1c: SDG&E shall prepare and submit a copy of the Spill Prevention, Control, and Countermeasure plan, as required by Title 40 CFR Section 112.7, to the California Public Utilities Commission for review and approval at least 60 days before the start of operation of the Mira Sorrento Substation.

Mitigation Measure HAZ-2: Wildfires shall be prevented or minimized by exercising care when operating utility vehicles within the right-of-way and access roads and by parking vehicles away from dry vegetation where hot catalytic converters can ignite a fire. In times of high fire hazard, it may be necessary for construction vehicles to carry water and shovels or fires extinguishers. Fire protective mats or shields would be used during grinding or welding to prevent or minimize the potential for fire.

HYDROLOGY AND WATER QUALITY

Mitigation Measure HY-1: Prior to construction, SDG&E shall consult with the San Diego Regional Water Quality Control Board (RWQCB) to determine whether an individual discharge permit is required for dewatering at any of the project areas anticipated to encounter groundwater. A copy of the permit or a waiver from the RWQCB, if required, shall be provided to the California Public Utilities Commission prior to dewatering activities.

Mitigation Measure HY-2: SDG&E shall submit to California Public Utilities Commission prior to construction a typical dewatering drawing that shall be implemented during dewatering activities. The drawing shall include the location of pumps within secondary containment, fuel storage areas, anticipated discharge point, scour protection measures, intake hose screening, and monitoring procedures to ensure that hazardous materials spills are addressed in a timely manner and discharge hoses are frequently inspected for leaks.

NOISE

Mitigation Measure NOI-1: SDG&E or its construction contractor shall provide advance notice, between 2 and 4 weeks prior to construction, by mail to all property owners within 500 feet of construction. The announcement shall state specifically the construction start date, anticipated completion date, and hours of construction.

Mitigation Measure NOI-2: SDG&E shall identify and provide a public liaison person before and during construction to respond to concerns of neighborhood receptors, including residents about construction noise disturbance. Procedures for reaching the public liaison office via telephone or in person shall be included in notices distributed to the public in accordance with MM NOI-1. SDG&E shall also establish a toll-free telephone number for receiving questions or complaints during construction and develop procedures for responding to callers (procedures to be approved by the California Public Utilities Commission).

TRANSPORTATION AND TRAFFIC

Mitigation Measure TT-1: Prior to the start of construction, SDG&E shall submit traffic management plans (TMPs) to the City of San Diego as part of the required traffic encroachment permits. Input and approval from the City shall be obtained, and copies of an approval letter from the City must be provided to the California Public Utilities Commission (CPUC) prior to the start of construction. The TMPs shall define the use of flag persons, warning signs, lights, barricades, cones, etc., according to standard guidelines outlined in the California Department of Transportation (Caltrans) *Traffic Manual for Construction and Maintenance Work Zones* (Caltrans 1996), the *Standard Specifications for Public Works Construction* (Caltrans 2009a), and the *Work Area Traffic Control Handbook (WATCH)* (Caltrans 2009b). Documentation of the approval of these plans, consistency with SDG&E's utility franchise agreements, and issuance of encroachment permits (if applicable) shall be provided to CPUC prior to the start of construction activities that require temporary closure of a public roadway.

Mitigation Measure TT-2: SDG&E shall stagger work shifts during the peak period of construction activity, and construction shifts shall be staggered to the degree possible, such that employee arrivals and departures from the site will avoid the project area peak hours (7:30–8:30 a.m. and 4:30–5:30 p.m.). Construction-related truck traffic shall also be scheduled to avoid travel during peak periods of traffic on the surrounding roadways.

Mitigation Measure TT-3: Construction workers shall be encouraged to carpool to the job site to the extent feasible.

Environmental Determination

The IS (Section 1) has been prepared to identify the potential effects on the environment from implementation of the proposed project and to evaluate the significance of these effects. The IS is based on SDG&E's PEA filed on October 14, 2011, supplemental information filed by SDG&E January 17, 2012 (SDG&E 2012), site inspections by the CPUC environmental team, and other environmental analysis for the project. Measures addressing potentially significant impacts, proposed by SDG&E in the PEA, are referred to as Applicant Proposed Measures (APMs) and are incorporated into the Expanded Project Description section of the IS. Additional mitigation

measures are provided as a result of the analysis conducted for the IS. SDG&E has agreed to implement these measures as well. Some of the additional mitigation measures are supplemental to the APMs; other measures supersede the APMs.

Based on the IS, the project as proposed by SDG&E would be mitigable to less-than–significant effects or have no impacts in the areas of aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use planning, mineral resources, noise, population and housing, recreation, transportation and traffic, and utilities and service systems. Implementation of APMs and additional mitigation measures would avoid all potential impacts or reduce them to less-than-significant levels.

A Mitigation Implementation and Monitoring Plan (see Section 6 of the IS) has been prepared to ensure that the APMs and the additional mitigation measures are properly implemented. The plan describes specific actions required to implement each measure, including information on the timing of implementation and monitoring requirements.

Electric and Magnetic Fields

Recognizing that there is a great deal of public interest and concern regarding potential health effects from exposure to electromagnetic fields (EMFs) from power lines, this IS/MND provides information regarding EMFs associated with electric utility facilities. The IS/MND does not consider EMFs in the context of CEQA for determination of environmental impact because there is no agreement among scientists that EMFs create a health risk and because there are no defined or adopted CEQA standards for defining health risks from EMFs. As a result, the following EMF information is presented for the benefit of the public and decision makers.

Defining EMF

Electric fields and magnetic fields are distinct phenomena that occur both naturally and as a result of human activity across a broad spectrum. Naturally occurring electric and magnetic fields are caused by atmospheric conditions and earth's geomagnetic field. The fields caused by human activity result from technological application of the electromagnetic spectrum for uses such as communications, appliances, and the generation, transmission, and local distribution of electricity. Electric and magnetic fields are vector quantities that have the properties of direction and amplitude (field strength).

Electric and magnetic fields of power lines have the additional property of frequency, which is determined by the rate at which electric and magnetic fields change their direction each second. The hertz (Hz) is the unit of frequency. For power lines in the United States, the frequency of change is 60 times per second, leading to the designation "60 Hz power." In Europe and many other countries, the frequency of electric power is 50 Hz. Radio and other communications systems operate at much higher frequencies, from approximately 500,000 Hz (500 kilohertz) to over 2,000,000,000 Hz (2 Gigahertz), at which frequencies the fields share a mutual relationship in forming an EMF field.

Electric power flows across transmission systems from generating sources to serve electrical loads within the community. The power flowing over a transmission line is determined by the

transmission line voltage and the current. The higher the voltage level of the transmission line, the lower the amount of current needed to deliver the same amount of power. For example, a 115,000-volt (115 kV) transmission line with 200 amperes of current would transmit approximately 40,000 kilowatts (kW), whereas a 230 kV transmission line requires only 100 amperes of current to deliver the same 40,000 kW.

Electric Fields

Electric fields from power lines are created whenever the lines are energized, with the field strength dependent directly on the voltage of the line creating it. Electric field strength is typically described in units of kilovolt per meter. Electric field strength attenuates (weakens) rapidly as the distance from the source increases. Electric fields are reduced at many receptors because they are effectively shielded by most objects or materials such as trees or houses.

Unlike magnetic fields, which penetrate almost everything and are unaffected by buildings, trees, and other obstacles, electric fields are distorted by any object that is within the electric field, including the human body. Even trying to measure an electric field with electronic instruments is difficult because the devices themselves alter the levels recorded. Determining an individual's exposure to electric fields requires the understanding of many variables, including the electric field itself, how effectively a person is grounded, and a person's body surface area within the electric field.

Electric fields in the vicinity of power lines can cause phenomena similar to the static electricity experienced on a dry winter day, or with clothing just removed from a clothes dryer, and may result in nuisance electric discharges when touching long metal fences, pipelines, or large vehicles. An acknowledged potential impact to public health from electric transmission lines is the hazard of electric shock: electric shocks from transmission lines are generally the result of accidental or unintentional contact by the public with the energized wires.

Magnetic Fields

Magnetic fields from power lines are created whenever current flows through power lines at any voltage. The strength of the field is directly dependent on the current in the line. Magnetic field strength is typically measured in milligauss. Similar to electric field strength, magnetic field strength attenuates rapidly with distance from the source. Unlike electric fields, however, magnetic fields are not shielded by most objects or materials.

Comparison of Electric and Magnetic Fields

The nature of electric and magnetic fields can be illustrated by considering a household appliance. When the appliance is energized by being plugged into an outlet but not turned on, no current flows through it; an electric field is generated around the cord and appliance, but no magnetic field would be present. If the appliance is switched on, the electric field would still be present, and a magnetic field would be created. The electric field strength is directly related to the magnitude of the voltage from the outlet, and the magnetic field strength is directly related to the magnitude of the current flowing in the cord and appliance.

EMF Sources in the Proposed Project Area

EMF exposure to the public in developed areas varies over a range of field intensities and durations due to sources in the home and work environments, electric power distribution, and infrequently, from proximity to transmission lines. An existing 200-foot SDG&E utility corridor, containing TL13810 and TL23013 overhead lines and TL665, is a current source of EMF in the project area. Nearby residences are not in close proximity to the project site.

EMF Associated with the Proposed Project

The specific EMF sources associated with the proposed project consist of looping an existing overhead 69 kV transmission line (TL665) underground into the new substation and the substation itself. The most significant contributors to EMFs outside the substation fence are the associated transmission and distribution lines.

Presently there are no applicable regulations related to EMF levels from power lines; however, the CPUC has implemented a decision requiring utilities to incorporate "low-cost" or "no-cost" measures for managing EMF from power lines (CPUC 2006).

SDG&E's application for a permit to construct (SDG&E 2011) includes a checklist to determine project requirements for a magnetic field management plan that describes techniques that were considered to further reduce magnetic fields associated with the project. Based on the checklist, SDG&E has determined that there are no further measures to be considered for the proposed Mira Sorrento Distribution Substation Project to reduce EMF levels.

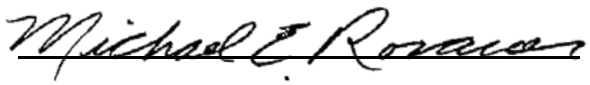
Review Period

All comments regarding the correctness, completeness, or adequacy of this IS/MND must be received by the CPUC by no later than 5:00 p.m. on July 13, 2012.

The Proponent's Environmental Assessment for the Mira Sorrento Distribution Substation Project (October 2011) is available at the project's website:

http://www.cpuc.ca.gov/environment/info/dudek/MiraSorrento/MiraSorrentoSub.htm.

Contact Person



June 8, 2012

Michael Rosauer, Project Manager
Analysis Branch, Energy Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, California 94102
415.703.2579

Date

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1.0 INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

1.1 PROJECT TITLE

San Diego Gas & Electric Company (SDG&E) – Mira Sorrento Distribution Substation
Application No. A 11-10-015

1.2 LEAD AGENCY NAME AND ADDRESS

California Public Utilities Commission (CPUC)
Energy Division
505 Van Ness Avenue
San Francisco, California 94102

1.3 CONTACT PERSON AND PHONE NUMBER

Michael Rosauer, Project Manager
Energy Division
415.703.2579

1.4 PROJECT LOCATION

The Mira Sorrento Distribution Substation Project (proposed project) is located in the Sorrento Mesa area within the Mira Mesa community plan area of the City of San Diego, California (see Section 4, Figure 4-1, Regional Map). The project site consists of undeveloped land bounded by Vista Sorrento Parkway to the south, Mira Sorrento Place to the west, and undeveloped areas on the north and east, as well as a 200-foot SDG&E utility easement to the north (see Section 4, Figure 4-2, Vicinity Map). Access to the site is provided by Mira Sorrento Place.

1.5 PROJECT SPONSOR'S NAME AND ADDRESS

San Diego Gas & Electric Company (SDG&E)
8330 Century Park Court
San Diego, California 92123
Kevin O'Beirne
858.654.1765

1.6 GENERAL PLAN DESIGNATION

According to the City of San Diego General Plan (2008), the proposed substation site and lands affected by the TL665 components have a General Plan designation of Industrial Employment.

1.7 ZONING

According to the City's zoning designations, the existing zoning classifications on the project site are a residential (RS-1-8) and industrial (IL-2-1) (City of San Diego 2011).

1.8 DESCRIPTION OF PROJECT

The Permit to Construct (PTC) application and accompanying Proponent's Environmental Assessment (PEA) identifies the proposed project, including the construction of a new 120 MVA distribution substation and transmission line loop-in (TL665). The proposed 1.4-acre substation would be situated on a 3.7-acre parcel and configured as a 120 MVA, 69/12-kV, low-profile design. A 10-foot-high screening wall would enclose the substation area.

Power would be supplied to the new substation by an existing SDG&E 69 kV transmission line (TL665) that would require installation of underground transmission facilities off the substation site. Initially, six 12 kV underground distribution circuits would be installed and would be routed to Mira Sorrento Place to tie into the existing underground system serving the area.

For further discussion, see Section 4, Project Description.

1.9 SURROUNDING LAND USES AND SETTING

The project site consists of undeveloped land bounded by Vista Sorrento Parkway to the south, Mira Sorrento Place to the west, an existing SDG&E electrical transmission corridor to the east as well as undeveloped areas on the north and east. Other surrounding land uses include office and retail commercial uses to the east and undeveloped and landscaped areas and an office industrial complex as well as I-805 to the west. The closest residences to the site are located approximately 800 feet north of the site.

Most of the site is covered in non-native grassland, with some isolated patches of disturbed coastal sage scrub. A narrow band of riparian habitat exists along the existing drainage located just to the east of the proposed development area.

1.10 OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED

In addition to the PTC required by the CPUC for overall project approval and California Environmental Quality Act (CEQA) review, Table 1-1 describes additional permits that SDG&E will likely be required to obtain for project construction.

Table 1-1: Required Permits and Approvals

Regulatory Authority	Agency	Jurisdiction/Purpose
Federal Agencies		
Implementation of SDG&E's Subregional Natural Community Conservation Plan (NCCP)	U.S. Fish and Wildlife Service (USFWS)	Activities within NCCP coverage areas that impact biological resources (required only for review of the proposed project; no approval or permit is involved)
State Agencies		
Natural Pollutant Discharge Elimination System	California State Water Resources Control Board	Stormwater discharge

Table 1-1: Required Permits and Approvals		
Regulatory Authority	Agency	Jurisdiction/Purpose
National Pollutant Discharge Elimination System (NPDES) General Construction Permit	State Water Resources Control Board (SWRCB)	Stormwater discharges associated with construction activities disturbing more than 1 acre of land
Utility Vault Dewatering NPDES	SWRCB	Used to discharge water from utility vaults
Waiver or Waste Discharge Requirement Permit	Regional Water Quality Control Board (RWQCB)	Discharge of groundwater from excavations
Section 401 Water Quality Certification	RWQCB	Certification of water quality for waters of the United States
Implementation of SDG&E's NCCP	CDFG	Activities within NCCP coverage areas (required only for review of proposed project; no approval or permit is involved)
Local Agencies		
Road Encroachment Permit	City of San Diego	Construction, operation, and maintenance within, under, or over city road ROW
Grading and Structural Wall Permits	City of San Diego	On-site grading and wall construction activities

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2.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agricultural and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology/Soils
☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials	☐ Hydrology/Water Quality
☐ Land Use/Planning	☐ Mineral Resources	☐ Noise
☐ Population/Housing	☐ Public Services	☐ Recreation
☐ Transportation/Traffic	☐ Utilities/Service Systems	☐ Mandatory Findings of Significance

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3.0 ENVIRONMENTAL DETERMINATION

On the basis of this initial evaluation:

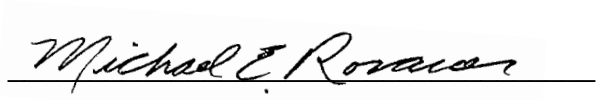
I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION (ND) will be prepared. ☐

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. ☒

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT (EIR) is required. ☐

I find that the proposed project MAY have a "potentially significant impact" or "potentially significant impact unless mitigated" on the environment, but a least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An EIR is required, but it must analyze only the effects that remain to be addressed. ☐

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or ND pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or ND, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required. ☐



June 8, 2012

Michael Rosauer, Project Manager
Analysis Branch, Energy Division
California Public Utilities Commission

Date

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4.0 EXPANDED PROJECT DESCRIPTION

4.1 INTRODUCTION

San Diego Gas and Electric Company (SDG&E) has filed an application with the CPUC for a Permit to Construct (PTC) for the SDG&E Mira Sorrento Substation Project (proposed project). The application was filed October 14, 2011, and includes the Proponent's Environmental Assessment (PEA) prepared by SDG&E. The application and PEA describes the proposed project.

The proposed project includes a new 120-megavolt ampere (MVA), 69/12-kilovolt (kV) distribution substation within the Sorrento Mesa area of the City of San Diego to meet existing and anticipated customer-driven electrical load growth and to improve distribution equipment reliability in the Sorrento Mesa area. The substation is located in the vicinity of Vista Sorrento Parkway and Mira Mesa Boulevard in the Sorrento Mesa area within the Mira Mesa Community Plan area of the City of San Diego, California. The proposed 1.4-acre substation would be situated on a 3.7-acre parcel and configured as a 120 MVA, 69/12-kV, low-profile design. A 10-foot-high screening wall would enclose the substation area.

Power would be supplied to the new substation by an existing SDG&E 69 kV transmission line (TL665) that would require installation of underground transmission facilities off the substation site. Initially, six 12 kV underground distribution circuits would be installed and would be routed to Mira Sorrento Place to tie into the existing underground system serving the area.

4.2 PROJECT OBJECTIVES

SDG&E provides electrical power services to the Sorrento Mesa area of the City of San Diego. In providing these services, SDG&E currently operates four substations, referred to as the Eastgate Substation, Mesa Rim Substation, Genesee Substation, and Torrey Pines Substation. All four substations are 69/12 kV distribution substations, and each has been expanded to its ultimate capacity. The proposed project would provide additional capacity to serve existing area load as well as forecasted customer-driven electrical load growth and to prevent potential long outages or disruption of service to existing customers in the SDG&E Sorrento Mesa service territory.

4.3 PROJECT LOCATION

The proposed 3.7 acre Mira Sorrento substation site is located in the Sorrento Mesa area within the Mira Mesa community plan area of the City of San Diego, California (see Figure 4-1, Regional Map, and Figure 4-2, Vicinity Map). The Sorrento Mesa subarea has been designated an industrial park area to accommodate research and development, office, and manufacturing uses. The project site consists of undeveloped land bounded by Vista Sorrento Parkway to the south, Mira Sorrento Place to the west, and undeveloped areas on the north and east, as well as a 200-foot SDG&E utility easement to the north. Other surrounding land uses include office and retail commercial uses to the east, and undeveloped and landscaped areas and an office industrial complex as well as I-805 to the west. The closest residences to the proposed substation site are located approximately 800 feet north of the site. Access to the site is provided by Mira Sorrento Place.

4.4 PROJECT DESCRIPTION

The proposed project is planned to be a 120-megavolt ampere (MVA), 69/12-kilovolt (kV) distribution substation with the loop-in of an existing 69 kV transmission line (see Figure 4-3, Site Plan). Major project components include development of the substation and loop-in of the existing 69 kV transmission line.

4.4.1 Mira Sorrento Distribution Substation

The proposed substation at full buildout is planned to have 120 MVA capacity with four 30 MVA transformer banks, four 69 kV tie lines, sixteen 12 kV circuits, four 12 kV capacitors and four bays of standard steel rack approximately 30 feet tall of 69 kV bus, 69 kV transformer. Access to the substation will be via two 30-foot-wide driveways from Mira Sorrento Place to the west of the substation.

The substation will require construction of retaining walls and screening walls around the perimeter of the building pad. The retaining walls will range from 4 feet in height along Mira Sorrento Place to a maximum of 52 feet along the southeast side. The screening walls will be 10 feet in height, around the perimeter of the substation, and constructed of concrete masonry units. The retaining walls will be constructed of a concrete keystone or verdura block to blend better with the surrounding area. Landscaping will be installed with the initial development, and plants would be similar to the native and non-native plants, trees, and bushes already in the area. The landscaping plan is shown on Figure 4-4.

4.4.2 Transmission

As illustrated in Figure 4-5, the existing 69 kV Line (TL665) will be routed in and out of the proposed substation underground. Installation will require two new parallel trench alignments along Vista Sorrento Parkway across Mira Sorrento Place for a distance of 600 feet each of single-circuit 69 kV duct package.

4.4.3 Distribution

The initial substation construction will include installation of six 12 kV distribution circuits. All six distribution circuits would be brought out underground to Mira Sorrento Place and extend northeast and southwest. The circuits will tie into the existing underground circuitry from the four existing substations feeding the area, and the circuitry will be rearranged as necessary. Circuit ties will be constructed to provide distribution reliability between circuits out of different substations.

4.5 PROJECT LAND REQUIREMENTS

Table 4-1 provides the estimated permanent and temporary acreage area required for the proposed project.

Table 4-1: Permanent and Temporary Acreages Required to Construct and Operate the Project

Component	Permanent (Acres)	Temporary (Acres)
Substation pad retaining walls and access driveways	1.4-acre substation pad only; 2.7 acres total	0.0
TL665 Loop-In	0.09	0.10
Distribution	--	0.25

4.6 CONSTRUCTION ACTIVITIES

Following site development, actual construction of the substation equipment foundations will commence. Once the enclosure and foundations are completed, the major equipment is placed on their foundation, and structures are anchored in their final position. The grounding grid installation follows, and wiring the equipment controls and protection device is performed concurrently. Testing on all equipment will be done prior to the substation becoming operational. No electric service interruptions to customers in the area are expected as a result of the construction of the substation.

All construction equipment, vehicles, personnel and materials staging areas will be accommodated within the property lines of the proposed substation property, at existing SDG&E storage and operation yards, or (in the case of soil stockpiling) may occur at approved commercial aggregate or similarly zoned commercial sites. Additional work areas will be required along the proposed TL665 Loop-in underground trench alignment.

Construction equipment would include bulldozers, excavators, loaders, graders, and trucks for excavating, compacting, and hauling. The project requires approximately 67,000 cubic yards of cut to fill earthwork. Of this total, approximately 42,000 cubic yards are estimated for remedial grading of unsuitable in-situ soils, retaining wall backcut, and retaining wall backfill. Due to restrictive site conditions, it is estimated that up to 36,000 cubic yards of the remedial grading quantity may be exported from the site to facilitate construction phasing. The exported material may be reimported or replaced with other import soils from a legal facility. All soil export and import will be accomplished using street-legal dump trucks. Crew trucks, boom trucks, and pickup trucks would be going to and from the site daily for the balance of the construction activities, testing and checkout, final transmission tie-ins, and 12 kV circuit cabling until the station is energized. Table 4-2 provides an estimate of the number of vehicle types required during construction and the duration of use.

Table 4-2: Construction Equipment and Duration of Use

Activity	Duration	Equipment	Approximate Quantity	Hours Operating on Site per Day*	Daily Worst Case Vehicle Use
Site Development and Grading Construction / Paving – Above Grade	6 months	Scraper	4	28	4
		Front End Loader	2	12	2
		Dump Trucks (12 cubic yards)	25	175	25
		Dozer (D6 or D8 or D9)	2	12	2
		Excavator	1	8	1
		Water Truck	1	2	1
		Compactor (824 or 834)	2	14	2
		Skid Steer Loader	2	8	2
		Backhoe	2	12	2
		Ditch Witch	1	7	1
		Maintenance Truck	2	1	2
		Paver	1	8	1
		Asphalt trucks	8	4	8
		Drum Roller Compacter	2	12	2
		Cars/Pickup trucks	33	—	—
Building Construction (Verdura Retaining Wall – concurrent with grading]	1.5 months	Front End Loader IT28	3	18	3
		Excavator	1	8	1
		Water truck	1	2	1
		Concrete Pump	1	6	1
CMU Retaining Wall, CMU Screen Wall, and Gate Construction	1.5 months	Spray Pump	1	6	1
		Forklift	2	12	2
		Back Hoe	1	6	1
		Delivery Truck	2	1	2
		Mobile Cement Mixer	2	12	2
		Concrete Trucks	6	3	6
		Mobile Generator	1	4	1
		Cars/Pickup Trucks	22	33	—
Substation Below Grade	6 months	Backhoe	2	12	1
		Loader	2	12	2
		Truck (20 cubic-yard end dump)	2	12	2
		Skid Steer Loaders	2	8	1
		Water truck	1	2	1
		Concrete trucks	15	7 (2 days/week for 4 months)	—

Table 4-2: Construction Equipment and Duration of Use

Activity	Duration	Equipment	Approximate Quantity	Hours Operating on Site per Day*	Daily Worst Case Vehicle Use
		Ditch witch	1	6	—
		Generator sets	3	36	—
		Cars/pickup trucks	12	18	—
Substation Equipment Construction	13 months	Substation Crew	5	—	4
		Boom truck	2	12	2
		Man lift	1	6	1
		Bucket trucks	4	24	2
		Underground line	2	12	—
		Cable dolly (trailer)	1	—	1
		Stringing rigs (trailer)	2	—	2
		Oil rig (trailer w/ generator)	1	24 (10 days for xmfr setup)	—
		Water truck	1	2	1
		Cars/pickup trucks	22	33	—
		Generator sets	3	36	—
Transmission Construction	2 to 4 months	Backhoe	1	6	1
		Truck (20 cubic-yard end dump)	1	4	1
		Skid Steer Loaders	1	4	1
		Concrete trucks	4	16 (2 days/week for 1 month)	2
		Ditch witch	1	2	1
		Cars/pickup trucks	25	37.5	3
		Underground line trucks	2	4	2
		Cable reel trailer	1	2	1
		Crane	1	.5	1
		Drill rig	1	.5	1
		Generator sets	3	36	—

Source: SDG&E 2012

Note: *Number of vehicles or pieces of equipment operating concurrently under the worst-case scenario.

It is anticipated that up to 35 workers will be employed during different construction phases of the project.

4.6.1 Construction Schedule

The proposed construction will commence after securing all required approvals and permits. The construction of all project components is expected to require approximately 18 to 24 months to complete and will require using several crews working simultaneously on different project components. Table 4-3 provides SDG&E's proposed schedule for the proposed project. While the schedule will be modified to begin after CPUC approval, this table illustrates the approximate length of each construction phase.

Construction of the proposed substation is anticipated to take approximately 10 months, beginning with site development activities, and would end with substation equipment construction.

Construction activities would generally be limited to no more than 12 hours per 24-hour period (some activities such as transformer oil processing would require continuous work 24 hours per day for 3 to 5 days per transformer). Transmission splicing may be performed at night to limit the number of customers potentially affected by an unintentional outage. On occasion, nighttime and/or weekend construction activities may also be required in order to minimize impacts on schedules, facilitate cutover work, and as required by other property owners or agencies.

Table 4-3: Proposed Construction Schedule

Project Activity		Approximate Number of Months
Mira Sorrento Substation	Substation Grading and Site Development	6
	Substation Below Grade Components	6
	Substation Above Grade Components	6
	Substation Equipment Construction	10
TL 665 Loop-in	Transmission Construction	2 to 4
Energization	Testing and Commissioning	5
	Energization	1

Source: SDG&E 2012

4.7 OPERATION AND MAINTENANCE

The substation will be unmanned, and electric equipment within the substation also will be controlled automatically. The equipment can be controlled remotely from SDG&E's central operations facilities. The substation wall will be of sufficient height and texture to prevent unassisted and unauthorized entrance. The entrance gate will be locked and warning signage will be posted on the perimeter wall. Entry to an operational substation will be restricted to authorized SDG&E personnel. Maintenance will include equipment testing, equipment monitoring and repair, as well as emergency and routine procedures for service continuity and preventive maintenance. It is anticipated that maintenance will require about six trips per year with a two- to four-person crew. One pickup truck with one trouble-man could visit the station once per day.

SDG&E would implement its existing sulfur hexafluoride (SF_6) mitigation strategies during the operation and maintenance of SF_6-containing equipment installed as part of the proposed

project. These standard practices would include, but are not limited to, recording companywide SF_6 purchases for use in reporting annual GHG emissions as a member of the Environmental Protection Agency's SF_6 Partnership, implementing its SF_6 leak detection and repair program, implementing an SF_6 recycling program, and training employees on the safety and proper handling of SF_6.

Substation lighting will be designed to provide safety lighting inside the station during emergency only when a trouble-man may require night lighting. It is anticipated that substation lights would not be used more than once a year. Otherwise, the only night lighting will consist of one outside floodlight installed at the entry. The lamp housing will be adjusted to shine out and down. The light will be controlled by a dusk to dawn timer and would remain on during the night hours.

4.8 APPLICANT PROPOSED MEASURES

Section 3.11 of the SDG&E PEA details the project protocols that will be followed during all project-related activities (SDG&E 2011). Project protocols are specific to environmental issue areas, such as air quality, biological resources, cultural resources, or traffic impacts. SDG&E's protocols are herein termed Applicant Proposed Measures (APMs). Table 4-4 lists which APMs are applicable to each environmental issue area; Table 4-5 lists the APMs as proposed in the PEA.

Table 4-4: Applicant Proposed Measures for Each Issue Area

Issue Area	APMs
Aesthetics	AES-1 and 2
Biological Resources	BIO-1 and 2
Cultural Resources	CUL- 1, 2, and 3
Geology and Soils	GEO-1
Hazardous Materials	HAZ-1
Hydrology and Water Quality	HYD-1

Table 4-5: Applicant Proposed Measures

APM Number	Description	Proposed Project Component	
		Mira Sorrento Substation	***TL665 Loop-in***
	Aesthetics		
APM-AES-1	PEA Figure 3-8: Conceptual Landscape Plan (IS/MND, Figure 4-4) provides the conceptual landscape mitigation plan for the Mira Sorrento Substation. The landscape plan would be implemented as part of the proposed project following construction of the Substation components. The conceptual landscape plan would provide partial screening of views of the Substation site from view locations to the west, south, and east. Landscaping would include plantings within the retaining walls and small, informal groupings of small shrubs and trees on the flatter areas created by the walls. The	✓	✓

Table 4-5: Applicant Proposed Measures

APM Number	Description	Proposed Project Component	
		Mira Sorrento Substation	*TL665 Loop-in*
	Conceptual Landscape Plan includes a list of recommended plant species. All suggested trees appear on the City of San Diego Street Tree Selection Guide. Drought-tolerant plants, including California native species, are suggested. Proposed project landscaping would receive regular watering during the initial two years following installation in order to ensure the establishment of the plants. All planting would be consistent with SDG&E operational requirements for landscaping in proximity to electric transmission facilities.		
APM-AES-2	The color of the substation perimeter wall would be chosen to blend with the existing site features (i.e., a dull grey, light brown, or dull green) in order to minimize visual contrast with the landscape setting.	✓	✓
	Biological Resources		
APM-BIO-1	SDG&E will conduct activities in accordance with NCCP Operational Protocols to avoid, minimize, or mitigate impacts to biological resources. See APM BIO-2.	✓	✓
APM-BIO-2	In accordance with the NCCP, SDG&E will conduct the following: • Whenever practicable, all grading or brushing occurring within occupied CAGN habitat shall be conducted from September 1st through February 28th, which is outside of the CAGN breeding season. • When conducting all other project construction activities during the CAGN breeding season of March 1 through August 31 within habitat in which CAGN are known to or have a high potential to occur, the following avoidance measures shall apply: o A qualified biologist will conduct a preconstruction survey for CAGN within 1 week prior to initiating project construction activities in an area. If CAGN are present but not nesting, a qualified biologist will survey for nesting CAGN approximately once per week in the vicinity of project activities for the duration of the activity in that area. o If an active CAGN nest is located in the vicinity of project activities, a biologist qualified for CAGN nest monitoring will monitor the nest daily until: (1) Project activities are no longer in the vicinity of the nest, or (2) the fledglings become independent of their nest. • If the CAGN nest monitor determines that the project activities are disturbing or disrupting the nesting activities, the monitor will make practicable recommendations to reduce the noise or disturbance in the vicinity. This may include recommendations such as (1) turning off vehicle engines and other equipment whenever possible to reduce noise, and (2) working in other areas until the young have fledged. With these avoidance and minimization measures in place, any incidental take of coastal California gnatcatcher is covered by the SDG&E NCCP.		

Table 4-5: Applicant Proposed Measures

APM Number	Description	Proposed Project Component	
		Mira Sorrento Substation	*TL665 Loop-in*
	Cultural Resources		
APM-CUL-1	A qualified paleontologist shall attend preconstruction meetings, as needed, to consult with the excavation contractor concerning excavation schedules, paleontological field techniques, and safety issues. A qualified paleontologist is defined as an individual with a Master of Science or Doctor of Philosophy in paleontology or geology who is experienced with paleontological procedures and techniques, who is knowledgeable in the geology and paleontology of Southern California, and who has worked as a paleontological mitigation project supervisor in the region for at least one year. The requirements for paleontological monitoring shall be noted on the construction plans.	✓	✓
APM-CUL-2	A paleontological monitor shall work under the direction of the qualified project paleontologist and shall be on site to observe excavation operations that involve the original cutting of previously undisturbed deposits with high or moderate paleontological resource sensitivity. A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials.	✓	✓
APM-CUL-3	In the event that fossils are encountered, the project paleontologist shall have the authority to divert or temporarily halt construction activities in the area of discovery to allow recovery of fossil remains in a timely fashion. The paleontologist shall contact SDG&E's cultural resource specialist and environmental project manager at the time of discovery. The paleontologist, in consultation with SDG&E's cultural resource specialist, shall determine the significance of the discovered resources. SDG&E's cultural resource specialist and environmental project manager shall concur with the evaluation procedures to be performed before construction activities are allowed to resume. Because of the potential for recovery of small fossil remains, it may be necessary to set up a screen-washing operation on site. When fossils are discovered, the paleontologist (or paleontological monitor) shall recover them along with pertinent stratigraphic data. Because of the potential for recovery of small fossil remains, such as isolated mammal teeth, recovery of bulk-sedimentary-matrix samples for off-site wet screening from specific strata may be necessary, as determined in the field. Fossil remains collected during monitoring and salvage shall be cleaned, repaired, sorted, cataloged, and deposited in a scientific institution with permanent paleontological collections.	✓	✓
	Geology and Soils		
APM-GEO-1	SDG&E will consider the recommendations and findings of the final Geotechnical Investigation Reports prepared by Kleinfelder Inc. and the contractor's Geotechnical Engineer in the final design of all project components to ensure that the potential for landslides, expansive soils, and slope instability is compensated for in the final design and construction techniques. In addition, SDG&E will comply with all applicable codes and seismic standards, as	✓	✓

Table 4-5: Applicant Proposed Measures

APM Number	Description	Proposed Project Component	
		Mira Sorrento Substation	*TL665 Loop-in*
	appropriate, to minimize the potential for damage from a seismic event. The final project design will be reviewed and approved by a professional engineer registered in the State of California, prior to commencement of construction.		
	Hazards and Hazardous Materials		
APM-HAZ-1	SDG&E would prepare a project-specific Hazardous Substance Management and Emergency Response Plan during the construction period to reduce or avoid potentially hazardous materials, for the purposes of worker safety, protection from groundwater contamination, and proper disposal of hazardous materials.	✓	✓
	Hydrology and Water Quality		
APM-HYD-1	SDG&E will prepare a SWPPP under the State General Construction Permit, and implement BMPs from the SDG&E Water Quality Construction Best Management Practices Manual in order to avoid and minimize potential impacts to water quality.	✓	✓

Source: SDG&E 2011

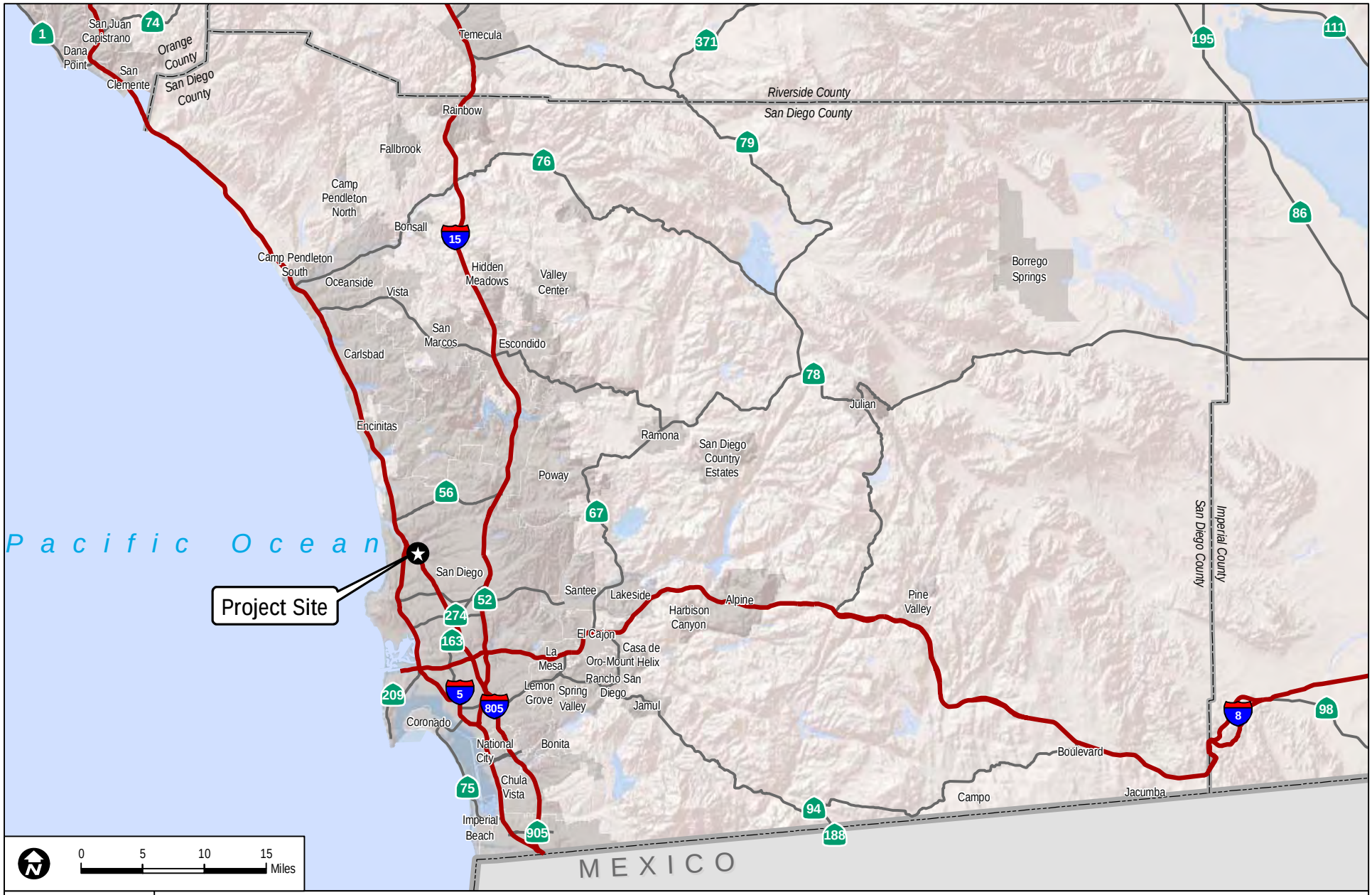

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FIGURE 4-1

Regional Map

Mira Sorrento Distribution Substation Project

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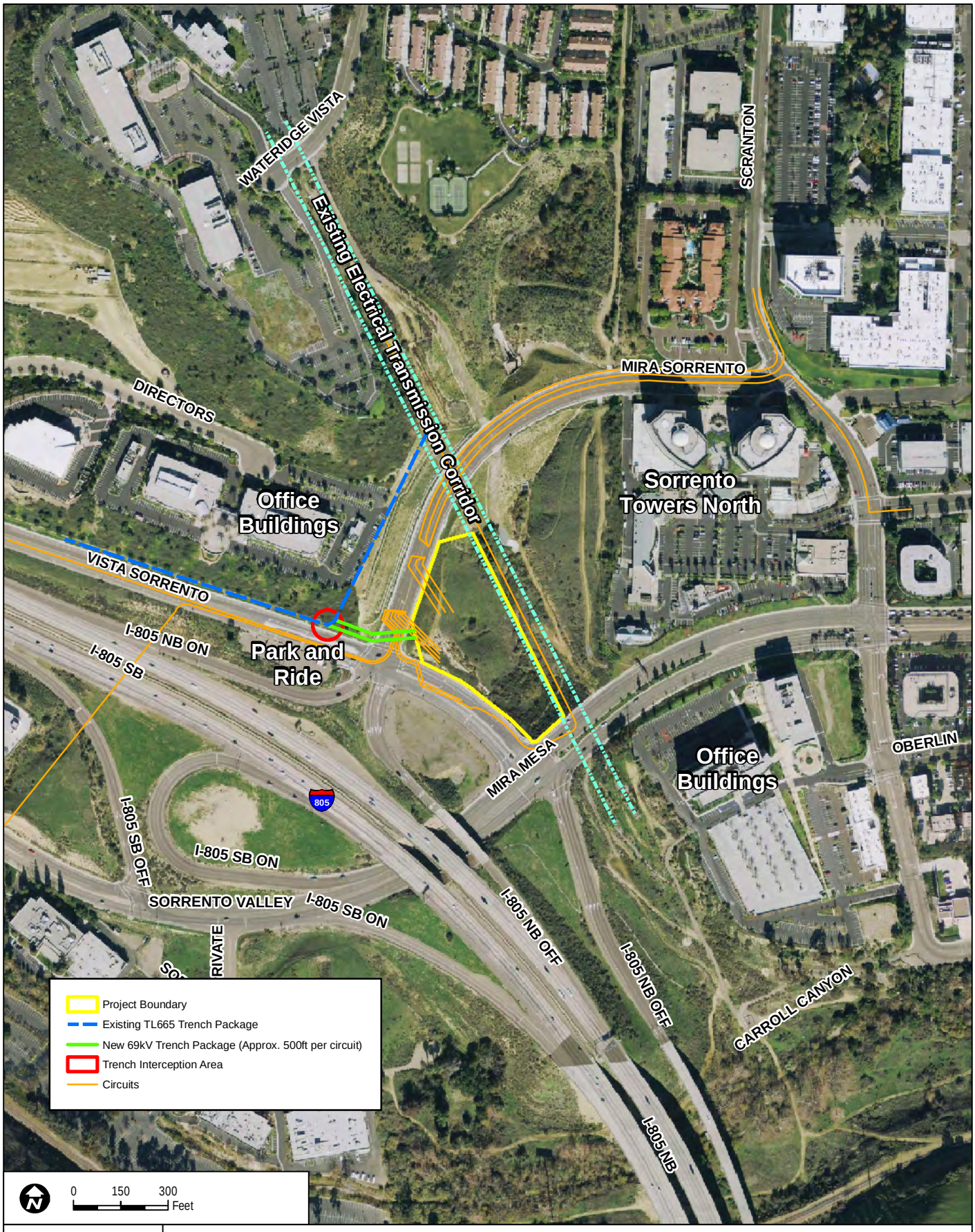

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SOURCE: SDGE 2011

FIGURE 4-2

Project Vicinity Map

4134-01

Mira Sorrento Distribution Substation Project

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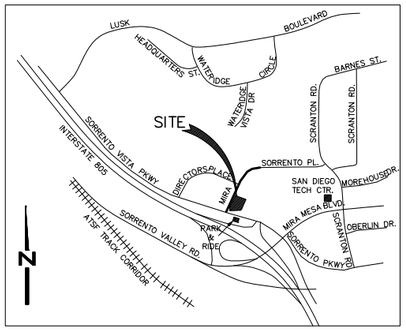


VICINITY MAP
NO SCALE

SITE SUMMARY

APN: 340-090-65, 340-090-67
PORTION OF 304-090-64

GROSS AREA: 3.74 AC

SUBSTATION AREA: 1.43 AC
(WITHIN SCREEN WALL)

PRESENT USE: VACANT

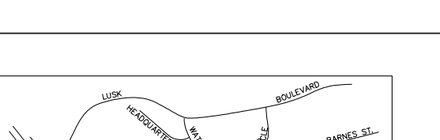
EXISTING ZONING: IP-1-1

FOR EASEMENTS AND PROPERTY LINE DATA, SEE: MTO-S-905

FOR DETAILED GRADING & DRAINAGE, SEE: MTO-S-901

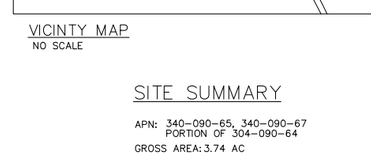
NOTE: ALL PROPERTY LINE AND AREA DATA TO BE VERIFIED BY BOUNDARY SURVEY.

TYPICAL SECTIONS:

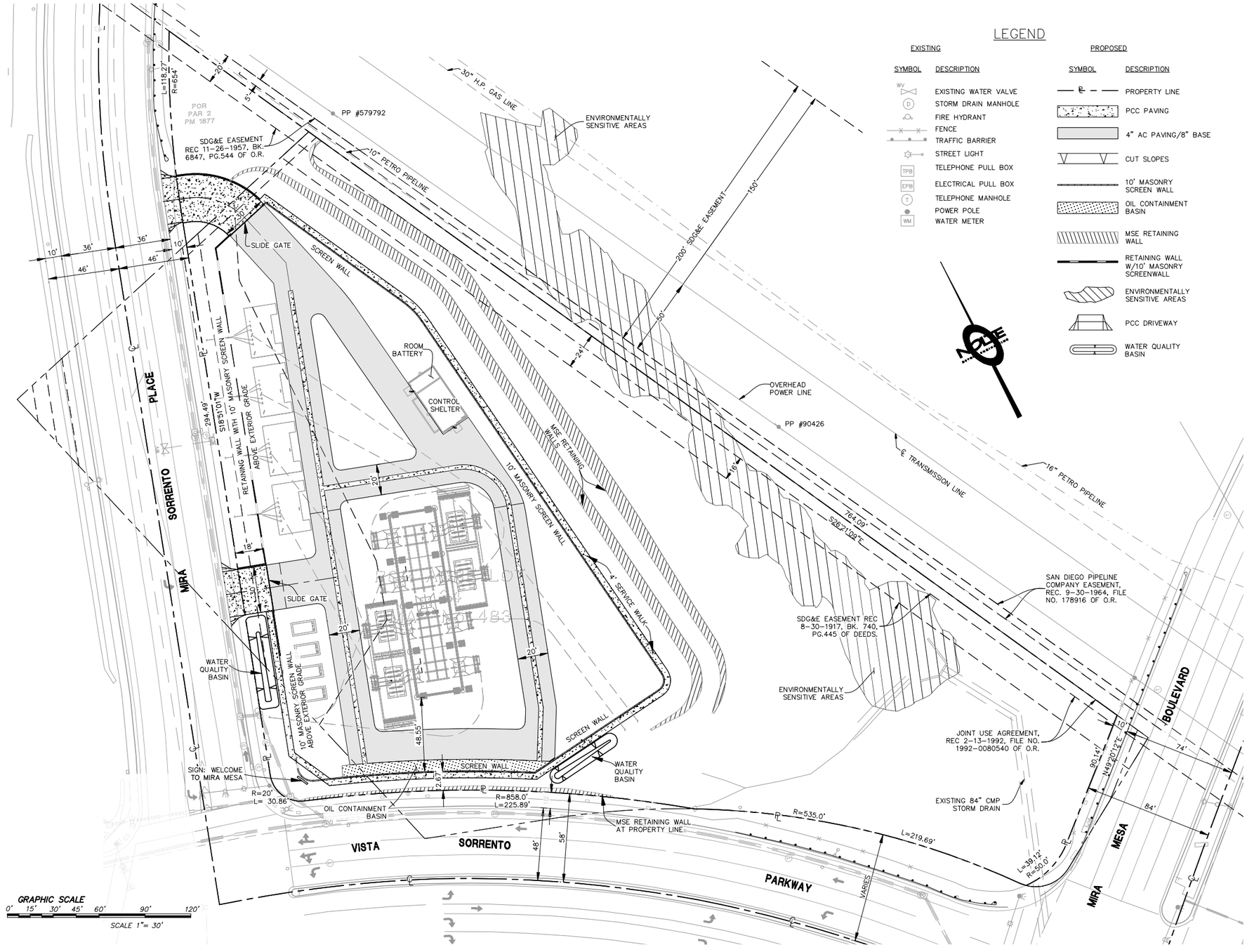


MIRA SORRENTO PLACE
NO SCALE

HALF SECTION
VISTA SORRENTO PARKWAY
NO SCALE



HALF SECTION
MIRA MESA BOULEVARD
NO SCALE



SOURCE: SDG&E 2011

FIGURE 4-3
Site Plan

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4134-01

Mira Sorrento Distribution Substation Project

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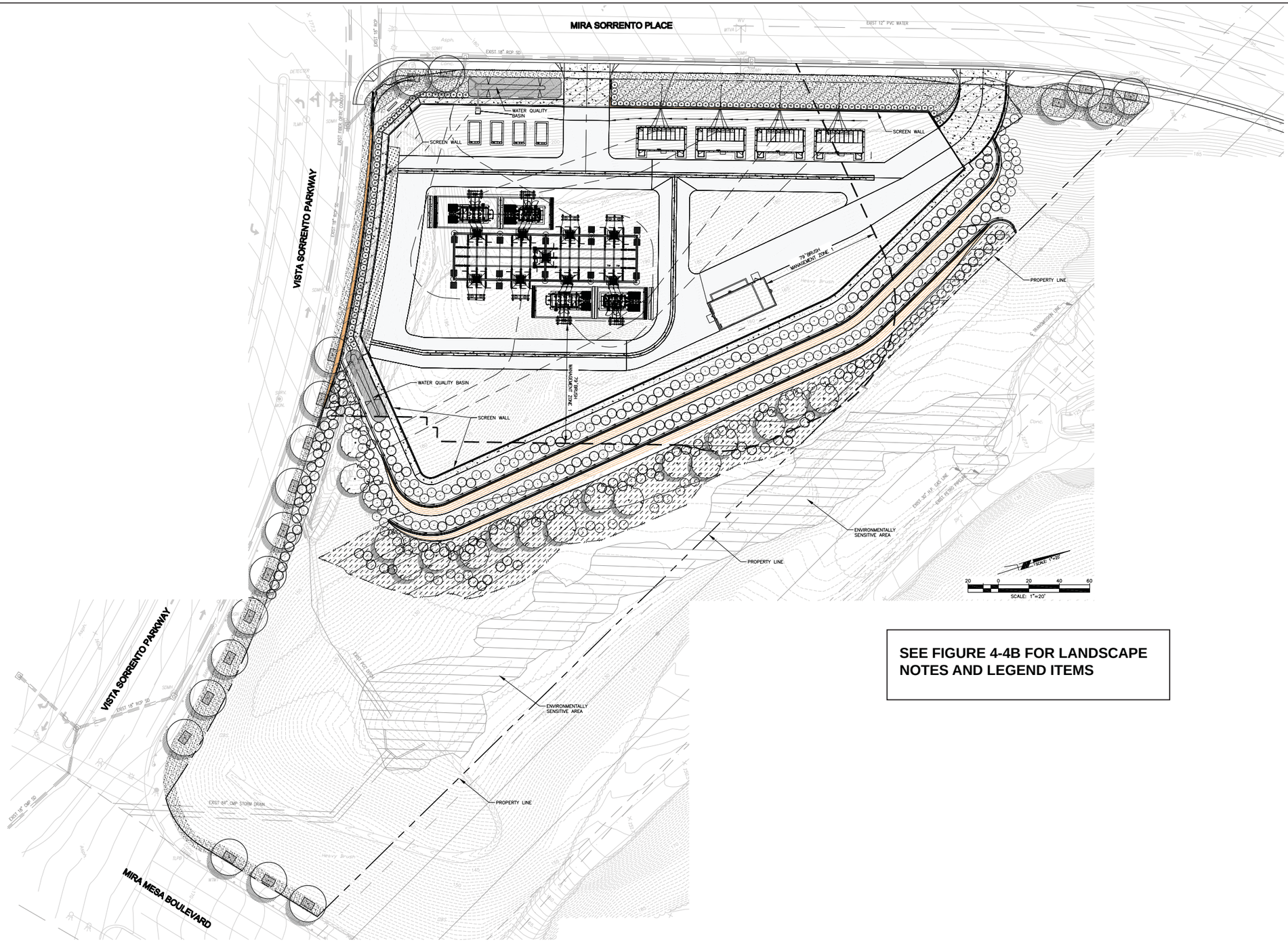

SEE FIGURE 4-4B FOR LANDSCAPE NOTES AND LEGEND ITEMS

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SOURCE: SDG&E 2011

FIGURE 4-4A
Landscape Plan

4134-01

Mira Sorrento Distribution Substation Project

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LANDSCAPE DESIGN STATEMENT

THE INTENT OF THE LANDSCAPE DESIGN IS TO BLEND THE PROJECT LANDSCAPING WITH THE SURROUNDING, NATURAL VEGETATION AND SCREEN THE PERIMETER WALLS AND RETAINING WALLS.

PLANTING NOTES

1. ALL LANDSCAPED AREAS AND IRRIGATION WILL CONFORM TO THE STANDARDS OF THE CITY-WIDE LANDSCAPE REGULATIONS, THE CITY OF SAN DIEGO LAND DEVELOPMENT MANUAL LANDSCAPE STANDARDS, THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK), THE CITY OF SAN DIEGO SUPPLEMENTAL AMENDMENTS, AND OTHER LANDSCAPE RELATED CITY AND REGIONAL STANDARDS.

2. THE EXISTING PLANT HABITAT OF THE SURROUNDING VEGETATION GENERALLY CONSISTS OF COASTAL SAGE SCRUB BRUSH ON STEEP SLOPES AND VALLEYS.

3. CONTAINER STOCK PLANT MATERIAL AND HYDROSEED MAY BE INSTALLED AT ANY TIME DURING THE YEAR UNDER THE CONDITIONS OUTLINED IN THE GREENBOOK.

4. ALL PLANTING AREAS, EXCLUDING SLOPES, SHALL BE COVERED WITH BARK MULCH TO A 2" DEPTH.

5. ALL PLANT MATERIAL SHALL BE ESTABLISHED FOR A MINIMUM OF 90 CALENDAR DAYS.

6. TREE ROOT BARRIERS SHALL BE INSTALLED WHERE TREES ARE PLACED WITHIN 5 FEET OF PUBLIC IMPROVEMENTS INCLUDING WALKS, CURBS, OR STREET PAVEMENT. ROOT BARRIERS WILL NOT BE WRAPPED AROUND THE ROOTBALL.

IRRIGATION NOTE

1. THE IRRIGATION SHALL BE A FULLY AUTOMATIC, ELECTRICALLY CONTROLLED SYSTEM THAT USES A COMBINATION OF OVERHEAD SPRAY AND BUBBLERS. LOW PRECIPITATION RATE SPRAY AND BUBBLER HEADS, ACCURATELY PROGRAMMABLE CONTROLLERS, AND A RAIN SENSING DEVICE WILL BE UTILIZED TO PROMOTE CONSERVATIVE WATER USE.

MAINTENANCE NOTE

1. ALL LANDSCAPED AREAS SHALL BE MAINTAINED BY SAN DIEGO GAS & ELECTRIC IN A HEALTHY AND VIGOROUS CONDITION. THE MAINTENANCE SHALL INCLUDE A PROGRAM OF REGULAR IRRIGATION, FERTILIZATION, PRUNING, WEEDING, AND LITTER REMOVAL.

MINIMUM TREE SEPARATION DISTANCE

IMPROVEMENT	MINIMUM DISTANCE TO STREET TREE
TRAFFIC SIGNAL, STOP SIGN	20 FEET
UNDERGROUND UTILITY LINES	5 FEET (SEWER 10 FEET)
ABOVE GROUND UTILITY STRUCTURES (TRANSFORMERS, HYDRANTS, UTILITY POLES, ETC.)	10 FEET
DRIVEWAYS	10 FEET
INTERSECTIONS (INTERSECTING CURB LINES OF TWO STREETS)	25 FEET

WATER BUDGET CALCULATION

WATER BUDGET = 47(0.62)(0.7)(40,600)
= 828,159 GAL/YR

BRUSH MANAGEMENT PROGRAM

BRUSH MANAGEMENT IS A COMPREHENSIVE PROGRAM THAT REDUCES FIRE HAZARDS AROUND STRUCTURES BY PROVIDING AN EFFECTIVE FIRE BREAK BETWEEN ALL STRUCTURES AND CONTIGUOUS AREAS OF NATIVE OR NATURALIZED VEGETATION. THIS FIRE BREAK SHALL CONSIST OF TWO DISTINCT BRUSH MANAGEMENT AREAS CALLED "ZONE ONE" AND "ZONE TWO".

BRUSH MANAGEMENT ZONE ONE IS THE AREA ADJACENT TO THE STRUCTURE, SHALL BE LEAST FLAMMABLE, AND SHALL TYPICALLY CONSIST OF PAVEMENT AND PERMANENTLY IRRIGATED ORNAMENTAL PLANTING. BRUSH MANAGEMENT ZONE TWO IS THE AREA BETWEEN ZONE ONE AND ANY AREA OF NATIVE OR NATURALIZED VEGETATION AND TYPICALLY CONSISTS OF THINNED, NATIVE OR NATURALIZED NON-IRRIGATED VEGETATION.

ZONE ONE REQUIREMENTS

(1) THE REQUIRED ZONE ONE WIDTH SHALL BE PROVIDED BETWEEN NATIVE OR NATURALIZED VEGETATION AND ANY STRUCTURE AND SHALL BE MEASURED FROM THE EXTERIOR OF THE STRUCTURE TO THE VEGETATION.

(2) ZONE ONE SHALL CONTAIN NO HABITABLE STRUCTURES, STRUCTURES THAT ARE DIRECTLY ATTACHED TO HABITABLE STRUCTURES, OR OTHER COMBUSTIBLE CONSTRUCTION THAT PROVIDES A MEANS FOR TRANSMITTING FIRE TO THE HABITABLE STRUCTURES. STRUCTURES SUCH AS FENCES, WALLS, PALAPAS, PLAY STRUCTURES, AND NONHABITABLE GAZEBOS THAT ARE LOCATED WITHIN BRUSH MANAGEMENT ZONE ONE SHALL BE OF NONCOMBUSTIBLE CONSTRUCTION.

(3) PLANTS WITHIN ZONE ONE SHALL BE PRIMARILY LOW-GROWING AND LESS THAN 4 FEET IN HEIGHT WITH THE EXCEPTION OF TREES. PLANTS SHALL BE LOW-FUEL AND FIRE-RESISTIVE.

(4) TREES WITHIN ZONE ONE SHALL BE LOCATED AWAY FROM STRUCTURES TO A MINIMUM DISTANCE OF 10 FEET AS MEASURED FROM THE STRUCTURES TO THE DRIP LINE OF THE TREE AT MATURITY IN ACCORDANCE WITH THE LANDSCAPE STANDARDS OF THE LAND DEVELOPMENT MANUAL.

(5) PERMANENT IRRIGATION IS REQUIRED FOR ALL PLANTING AREAS WITHIN ZONE ONE EXCEPT AS FOLLOWS:

(A) WHEN PLANTING AREAS CONTAIN ONLY SPECIES THAT DO NOT GROW TALLER THAN 24 INCHES IN HEIGHT, OR
(B) WHEN PLANTING AREAS CONTAIN ONLY NATIVE OR NATURALIZED SPECIES THAT ARE NOT SUMMER-DORMANT AND HAVE A MAXIMUM HEIGHT AT PLANT MATURITY OF LESS THAN 24 INCHES.

(6) ZONE ONE IRRIGATION OVERSPRAY AND RUNOFF SHALL NOT BE ALLOWED INTO ADJACENT AREAS OF NATIVE OR NATURALIZED VEGETATION THROUGH THE USE RADIUS CONTROL NOZZLES AND IRRIGATION CHECK VALVES.

(7) ZONE ONE SHALL BE MAINTAINED ON A REGULAR BASIS BY PRUNING AND THINNING PLANTS, CONTROLLING WEEDS, AND MAINTAINING IRRIGATION SYSTEMS.

ZONE TWO REQUIREMENTS

(1) THE REQUIRED ZONE TWO WIDTH SHALL BE PROVIDED BETWEEN ZONE ONE AND THE UNDISTURBED, NATIVE OR NATURALIZED VEGETATION, AND SHALL BE MEASURED FROM THE EDGE OF ZONE ONE THAT IS FARTHEST FROM THE HABITABLE STRUCTURE, TO THE EDGE OF UNDISTURBED VEGETATION.

(2) NO STRUCTURES SHALL BE CONSTRUCTED IN ZONE TWO.

(3) WITHIN ZONE TWO, 50 PERCENT OF THE PLANTS OVER 24 INCHES IN HEIGHT SHALL BE CUT AND CLEARED TO A HEIGHT OF 6 INCHES.

(4) WITHIN ZONE TWO, ALL PLANTS REMAINING AFTER 50 PERCENT ARE REDUCED IN HEIGHT, SHALL BE PRUNED TO REDUCE FUEL LOADING IN ACCORDANCE WITH THE LANDSCAPE STANDARDS IN THE LAND DEVELOPMENT MANUAL. NON-NATIVE PLANTS SHALL BE PRUNED BEFORE NATIVE PLANTS ARE PRUNED.

BRUSH MANAGEMENT PROGRAM CONTINUED

(5) ZONE TWO SHALL BE MAINTAINED ON A REGULAR BASIS BY PRUNING AND THINNING PLANTS, REMOVING INVASIVE SPECIES, AND CONTROLLING WEEDS.

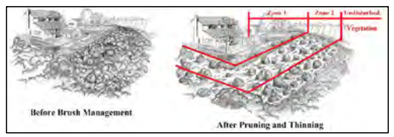
(A) SEASONAL MAINTENANCE IN THIS ZONE SHOULD INCLUDE REMOVAL OF DEAD WOODY PLANTS, ERADICATION OF WEEDY SPECIES, AND PERIODIC PRUNING AND THINNING OF TREES AND SHRUBS. REMOVAL OF WEEDS SHOULD NOT BE DONE WITH HAND TOOLS SUCH AS HOES, AS THIS REMOVES VALUABLE SOIL. THE USE OF WEED TRIMMERS OR OTHER TOOLS WHICH RETAIN SHORT STUBBLE THAT PROTECTS THE SOIL IS RECOMMENDED. NATIVE SHRUBS SHOULD BE PRUNED IN THE SUMMER AFTER THE MAJOR PLANT GROWTH OCCURS. WELL PRUNED, HEALTHY SHRUBS SHOULD TYPICALLY REQUIRE SEVERAL YEARS TO BUILD UP EXCESSIVE LIVE AND DEAD FUEL.

(B) ON SLOPES, ALL DRAINAGE DEVICES MUST BE KEPT CLEAR. RE-INSPECT AFTER EACH MAJOR STORM SINCE MINOR SOIL SLIPS CAN BLOCK DRAINS. VARIOUS GROUNDCOVERS SHOULD BE PERIODICALLY SHEARED AND THATCH REMOVED. DISEASED AND DEAD WOOD SHOULD BE PRUNED FROM TREES. FERTILIZING TREES AND SHRUBS IS NOT TYPICALLY RECOMMENDED AS THIS MAY STIMULATE EXCESSIVE GROWTH.

BRUSH MANAGEMENT ZONE WIDTH

CRITERIA	ZONE WIDTH
ZONE ONE WIDTH	35 FEET
ZONE TWO WIDTH	65 FEET

BRUSH MANAGEMENT MAINTENANCE DIAGRAMS



PLANT LEGEND

SYMBOL | CATEGORY/DESCRIPTION

TREES - ROUND HEADED CANOPY, EVERGREEN STREET TREES WITH AUTOMATIC, BELOW GRADE, PERMANENT IRRIGATION

BOTANICAL NAME	COMMON NAME	MATURE HT. & SP. 100% TO BE 24" BOX
GEIJERA PARVIFLORA	AUSTRALIAN WILLOW	25' X 20'
MAGNOLIA GRANDIFLORA 'MAJESTIC BEAUTY'	MAJESTIC BEAUTY SOUTHERN MAGNOLIA	35' X 20'
METROSIDEROS EXCELSUS	NEW ZEALAND CHRISTMAS TREE	30' X 25'
PRUNUS ILICIFOLIA	HOLLYLEAF CHERRY	20' X 20'
RHUS LANCEA	AFRICAN SUMAC	25' X 25'
STENOCARPUS SINUATUS	FIREWHEEL TREE	30' X 15'

NOTE: ALL TREES SHALL BE PROVIDED WITH A 40 SQ. FT. ROOT ZONE AND PLANTED IN AN AIR AND WATER PERMEABLE LANDSCAPE AREA. THE MINIMUM DIMENSION (WIDTH) SHALL BE 5 FEET.

TREES - SLOPE EROSION CONTROL TREES TREES WITH AUTOMATIC, BELOW GRADE, PERMAENT IRRIGATION

BOTANICAL NAME	COMMON NAME	MATURE HT. & SP. 100% TO BE 15 GAL
CERCIS OCCIDENTALIS	WESTERN REDBUD	15' X 10'
MYRICA CALIFORNICA	PACIFIC WAX MYRTLE	10' X 10'
PRUNUS ILICIFOLIA	HOLLYLEAF CHERRY	20' X 20'
QUERCUS AGRIFOLIA	COAST LIVE OAK	40' X 50'
RHUS LANCEA	AFRICAN SUMAC	25' X 25'
RHUS LAURINA	LAUREL SUMAC	15' X 15'

SHRUBS - SCREENING FOR PERIMETER WALL WITH AUTOMATIC, BELOW GRADE, PERMANENT IRRIGATION

BOTANICAL NAME	COMMON NAME	MATURE HT. & SP. 100% TO BE 5 GAL
ESCALLONIA FRADESII	ESCALLONIA	6' X 6'
GREVILLEA 'NOELLII'	GREVILLEA	4' X 5'
MYRTUS COMMUNIS 'COMPACTA'	DWARF MYRTLE	4' X 5'
RHAMNUS CALIFORNICA 'EVE CASE'	EVE CASE COFFEEBERRY	6' X 6'
RHAPHIOLEPIS INDICA	INDIAN HAWTHORN	4' X 4'
ROSMARINUS OFFICINALIS	ROSEMARY	5' X 5'
WESTRINGIA FRUTICOSA	COAST ROSEMARY	4' X 5'

SHRUBS - SCREENING FOR RETAINING WALLS WITH AUTOMATIC, BELOW GRADE, PERMANENT IRRIGATION

BOTANICAL NAME	COMMON NAME	MATURE HT. & SP. 100% TO BE 5 GAL
BACCAHRIS SALICIFOLIA	MULEFAT	8' X 12'
CEANOTHUS SPECIES	WILD LILAC	8' X 12'
HETEROMELES ARBUTIFOLIA	TOYON	8' X 10'
LAVATERA ASSURGENTIFLORA	TREE MALLOW	12' X 12'
MYRICA CALIFORNICA	PACIFIC WAX MYRTLE	10' X 10'
RHAMNUS CALIFORNICA	COFFEEBERRY	12' X 8'
RHAMNUS CROCEA	REDBERRY	3' X 6'
RHUS INTEGRIFOLIA	LEMONADE BERRY	10' X 10'

SMALL SHRUBS AND GROUNDCOVERS - STREET FRONTAGE WITH AUTOMATIC, BELOW GRADE, PERMANENT IRRIGATION

BOTANICAL NAME	COMMON NAME	MATURE HT. & SP. 100% TO BE 1 GAL
AGAVE SHAWII	SHAW AGAVE	2' X 2' @ APPROX. 30" O.C.
BACCHARIS PILULARIS 'TWIN PEAKS'	TWIN PEAKS COYOTE BRUSH	2' X 8'
COTONEASTER DAMMERI	BEARBERRY COTONEASTER	1' X 6'
CISTUS PURPUREUS	ORCHID ROCKROSE	4' X 4'
LANTANA SPECIES	LANTANA	3' X 6'
MUHLENBERGIA RIGENS	DEER GRASS	3' X 3'
MYOPORUM 'PACIFICUM'	PACIFIC MYOPORUM	2' X 15'
PYRACANTHA COCCINEA 'LOW BOY'	LOW BOY FIRETHORN	3' X 6'
SALVIA SPECIES	SAGE	4' X 4'
SENECIO MANDRALISCAE	BLUE CHALK STICKS	1' X 3'

NATIVE GRASSES/RUSHES/SEDGES - WATER QUALITY BASIN WITH AUTOMATIC, BELOW GRADE, PERMANENT IRRIGATION

BOTANICAL NAME	COMMON NAME	MATURE HT. & SP. 100% TO BE 1 GAL
CAREX SPISSA	SAN DIEGO SEDGE	3' X 4' @24" O.C.
FESTUCA CALIFORNICA	CALIFORNIA FESCUE	3' X 3'
JUNCUS PATENS	CALIFORNIA GREY RUSH	2' X 3'
LEYMUS CONDENSATUS	GIANT WILD RYE	3' X 5'
LEYMUS TRITICOIDES	CREEPING WILD RYE	2' X 3'

HYDROSEED - EROSION CONTROL FOR GRADED SLOPES WITH AUTOMATIC, ABOVE GRADE PERMANENT IRRIGATION

BOTANICAL NAME	COMMON NAME	PURE LIVE SEED LBS/ACRE
CASTILLEJA EXSERTA	PURPLE OWL	0.50
DICHELOSTEMMA CAPITATUM	BLUE DICKS	0.50
ENCELIA CALIFORNICA	BUSH SUNFLOWER	1.00
ERIOPHYLLUM CONFERTIFLORUM	GOLDEN YARROW	1.00
ESCHSCHOLZIA CALIFORNICA	CALIFORNIA POPPY	1.50
ISOCOMA MENZIESII	COAST GOLDENBUSH	1.00
IVA HAYESIANA	SAN DIEGO POVERTY WEED	0.20
LASTHENIA CALIFORNICA	DWARF GOLDFIELDS	0.50
LOTOS SCOPARIUS SCOPARIUS	DEERWEED	4.00
LUPINUS TRUNCATUS	NUTTALL	1.00
MELICA IMPERFECTA	COAST RANGE MELIC	1.00
MIMULUS AURANTIACUS PUNICEUS	STICKY MONKEYFLOWER	0.10
MUHLENBERGIA MICROSPERMA	LITTLESEED MUHLY	2.00
NASSELLA PULCHRA	PURPLE NEEDLEGRASS	6.00
VULPIA MICROSTACHYS	SMALL FESCUE	8.00
		28.3

*NOTE PURE LIVE SEED = PURITY X GERMINATION

LANDSCAPE CALCULATIONS

STREET YARD

PLANTING AREA REQUIRED	PLANTING AREA PROVIDED	EXCESS AREA PROVIDED
12,680 SQ. FT. X 25% = 3,170 SQ. FT.	7,200 SQ. FT.	4,030 SQ. FT.

PLANT POINTS REQUIRED	PLANT POINTS PROVIDED	EXCESS POINTS PROVIDED
12,680 SQ. FT. X 0.05 = 634 POINTS	1,452 POINTS	818 POINTS

PERIMETER PLANTING AREA (WITHIN STREET YARD)

NOT APPLICABLE - CORNER LOT ADJACENT TO UNDEVELOPED LAND ZONED AS AR-1-1

FACADE PLANTING AREA (ALTERNATE COMPLIANCE 142.0405 (D)(2)(A)

PLANT POINTS REQUIRED	PLANT POINTS PROVIDED	EXCESS POINTS PROVIDED
12,680 SQ. FT. X 0.1 = 1,268 POINTS	1,452 POINTS	184 POINTS

REMAINING YARD

NOT APPLICABLE - CORNER LOT ADJACENT TO UNDEVELOPED LAND ZONED AS AR-1-1

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SOURCE: SDG&E 2011

FIGURE 4-4B
Landscape Plan Legend and Notes

Mira Sorrento Distribution Substation Project

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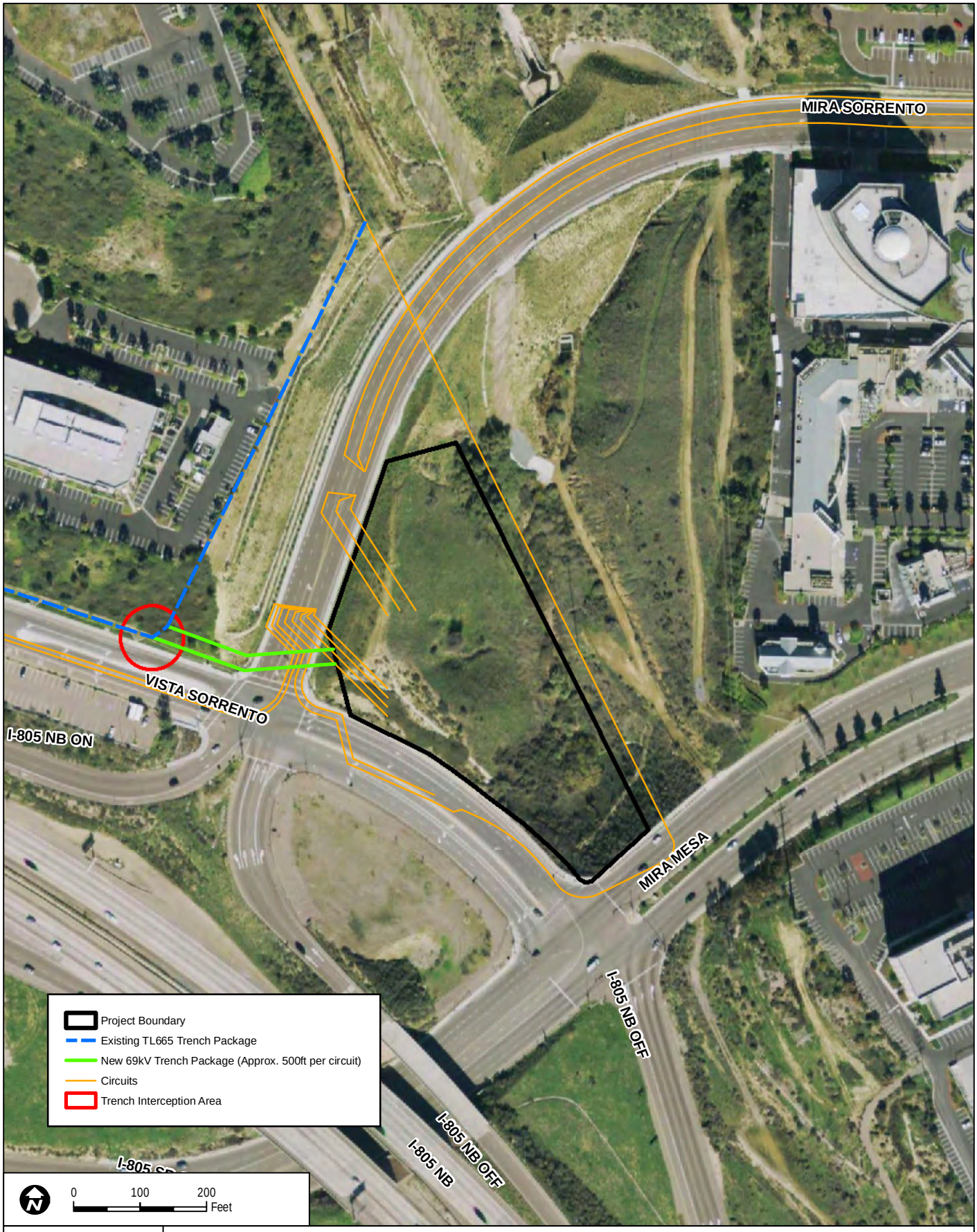

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4134-01

SOURCE: SDGE 2011

FIGURE 4-5

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Mira Sorrento Distribution Substation Project

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5.0 EVALUATION OF ENVIRONMENTAL IMPACTS

5.1 INTRODUCTION

This Initial Study includes analyses of the16 environmental issue areas listed below per section number. These issue areas incorporate the topics presented in CEQA's Environmental Checklist (identified in Appendix G to CEQA Guidelines).

5.2	Aesthetics	5.10	Land Use/Planning
5.3	Agricultural and Forestry Resources	5.11	Mineral Resources
5.4	Air Quality/Greenhouse Gas Emissions	5.12	Noise
5.5	Biological Resources	5.13	Population/Housing
5.6	Cultural Resources	5.14	Public Services
5.7	Geology/Soils	5.15	Recreation
5.8	Hazards and Hazardous Materials	5.16	Transportation/Traffic
5.9	Hydrology/Water Quality	5.17	Utilities/Service Systems

Explanations for the checklist findings, as well as existing conditions are provided for each environmental issue area.

5.1.1 Environmental Setting

The Environmental Setting sections present a description of the physical environment for each of the 16 environmental parameters analyzed for the Mira Sorrento Distribution Substation Project (proposed project). The discussion of environmental setting varies among the parameters. The content and level of detail of the environmental setting is relative to the parameter discussed and the extent of the potential impacts that could occur from project activities.

5.1.2 Regulatory Setting

Current regulatory settings are presented in the Regulatory Setting sections of the 16 environmental parameters. Federal, state, regional, and local regulations applicable to the project are identified.

5.1.3 Environmental Impacts

The results of the environmental analyses conducted for the proposed project are presented in these portions of Sections 5.2 through 5.17. Each of the environmental analysis discussions present:

- Significance criteria
- Impact discussion
- Levels of significance
- Mitigation measures.

The significance criteria are a benchmark for determining if a project would result in significant environmental impacts when evaluated against the baseline (i.e., existing conditions). Each of the environmental analysis sections presents discussions about the potential effects of the proposed project on the environment. Analyses are presented for each CEQA Environmental Checklist question, accompanied by a determination made as to whether or not the proposed project would result in a significant environmental impact based on the established thresholds of significance. Mitigation measures are identified, if warranted, that could reduce the impact to a less-than-significant level. The impact analyses are divided into the basic phases of the project (i.e., construction, operation, and maintenance) and further divided by component if warranted by the environmental parameter, significance criteria, or impact analysis.

5.2 AESTHETICS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

5.2.1 Environmental Setting

This section of the Initial Study documents the visual setting of the proposed substation site and surrounding landscape with respect to scenic quality and visual sensitivity. The visual analysis is based on the review of San Diego Gas & Electric's (SDG&E's) Proponent's Environmental Assessment (PEA) (SDG&E 2011) and data responses (SDG&E 2012), and a review of relevant governmental plans and policies regarding visual resources. In addition, Dudek visited the project site in January 2012 in order to accurately describe the existing landscape conditions and document views of estimated potential visual changes that could occur as a result of the proposed project. Visual simulations prepared by SDG&E as part of the PEA (and in response to data requests) have been reviewed and are incorporated into the visual analysis to document viewing conditions and changes to the existing landscape.

5.2.1.1 Description of Terms and Concepts

Scenic Quality is a measure of the intrinsic scenic beauty of a landscape and the positive responses it evokes. Scenic quality is described in terms of the composition of the built and natural environment, considering landform, vegetation, rocks, cultural features, and water features. The scenic quality of the project area was evaluated according to the following three classifications:

Distinctive: Where the landscape composition combines to provide unusual, unique or outstanding scenic quality. These landscapes have strong positive attributes of variety, unity, vividness, intactness, order, harmony, uniqueness, pattern and/or balance.

Typical: Where the landscape composition combines to provide scenic quality that is representative of the area, given the characteristic natural features and land use developments. These landscapes have generally positive, although commonly seen, attributes with respect to variety, unity, vividness, intactness, order, harmony, uniqueness, pattern and balance. They are representative of the region's natural and ecological qualities and land use patterns.

Indistinctive: Where the landscape composition combines to provide low scenic quality. These areas typically have weak, degraded, or missing attributes of variety, unity, vividness, intactness, order, harmony, uniqueness, pattern and balance.

Visual Sensitivity is a measure of an existing landscape's susceptibility to adverse visual changes, based on the combined factors of number and type of viewers, and potential visual exposure to the proposed project. Visual Sensitivity is evaluated according to high, moderate and low visual sensitivity ranges. A landscape with a high degree of visual sensitivity is less able to accommodate adverse visual changes from the proposed project, than areas deemed to be of moderate or low sensitivity.

- *Viewer Type and Volume of Use.* This factor considers the type of use and volume of use that various land uses receive that may be visually sensitive to the proposed project. Areas considered to be of potential high visual sensitivity include residential areas, park and recreation areas, and major travel and recreation routes.
- Viewer Exposure. Addresses the variables that affect viewing conditions from potentially sensitive areas. Viewer exposure considers the following factors: (1) landscape visibility (the ability to see the landscape where the project will be); (2) the viewing distance (i.e., the proximity of viewers to the project); (3) viewing angle—whether the project or alternatives would be viewed from above (superior), below (inferior), or from a level (normal) line-of-sight; (4) and extent of visibility—whether the line-of-sight is open and panoramic to the project area or restricted by terrain, vegetation, and/or buildings; and (5) duration of view.

5.2.1.2 Scenic Quality

Overview. The existing Mira Sorrento Substation site is 3.7 acres in size and presently undeveloped. The site is bounded by Vista Sorrento Parkway to the south, undeveloped lands with a small drainage to the east, office commercial and business parks further to the east and west, and undeveloped land to the north. Nearby land uses include the Sorrento Towers North and Sorrento Court retail park to the east, the Marriott Courtyard Hotel and Waters Ridge Condominium Development to the north on a hillside above the site, and the Sorrento Gateway Business Park to the west. Several road systems also surround portions of the site, including Mira Sorrento Place, north of the site, and Mira Mesa Boulevard and I-805, located 300 to 500 feet south of the site.

Site Description. Topography on the site consists of moderate slopes. Overall, the project site elevations range from 225 feet above mean sea level in the western part of the site to 120 feet above mean sea level in the southeastern part of the site near Mira Mesa Boulevard.

Most of the site supports non-native grasslands, with some small areas of coastal sage scrub. A narrow band of riparian vegetation is found along an existing drainage located east of the

proposed development area, and a small grouping of pepper trees are at the northern extent of the site. Ornamental vegetation has also been used for landscaping on manufactured slopes at the southern end of the site, adjacent to Vista Sorrento Parkway. On-site disturbances include a dirt trail used by pedestrians, near the base of the fill slope for Vista Sorrento Road. The scenic quality at the substation site is considered "typical," since these landscape features are characteristic of remaining natural canyon remnants in urban areas of San Diego.

Surrounding Area Description. Scenic quality off-site to the south, east and west is dominated by urban landscapes of commercial and business parks, SDG&E's transmission corridor, roadways, and associated landscaped surfaces and manufactured slopes. Off-site undeveloped landscapes, similar in scenic quality to the project site, are immediately north of the substation site, and are in the process of being converted to an urban landscape for the extension of Mira Sorrento Place. SDG&E's existing 230-kilovolt (kV) transmission line corridor lies to the east, and supports two high-voltage transmission systems on steel pole structures. The utility corridor is industrial in character, and passes north and east of the proposed substation site. Native shrubs and grasslands are characteristic of the right-of-way, which provides access to the transmission facilities. The scenic quality of the surrounding natural and urban landscapes is classified as typical since they are representative of the mosaic of urban design and natural landscapes in this part of San Diego. Commercial and business parks have been developed over the past 15 years, and contain landscape and architectural aesthetic elements consistent with the City of San Diego's urban design standards.

5.2.1.3 Visual Sensitivity

Visibility conditions of the proposed substation site were determined in the field based on line of sight analyses. The following locations were considered:

Roadways – The project site is visible to travelers along sections of the following roads (existing and future):

- From Vista Sorrento Parkway located adjacent and south of the site
- From Mira Sorrento Place adjacent and north and west of the site
- From Mira Mesa Blvd, located approximately 300 feet to the south
- From Interstate 805, located approximately 500 feet to the south.

Residential Areas – The project site is not visible from any residences. The closest residences are at the Marriott Courtyard and Waters Ridge Condominiums located on the hill approximately 800 to 1,000 feet north of the site. Residents would not have views to the proposed substation site from this condominium development, since the condominium units are sufficiently set back from the edge of the mesa, above the site. The substation site is visible from the development's walking trail and private recreation area, as described below.

Park and Recreation Areas – The project site is not visible from any public park or recreation area. The substation site is visible from the southern edge of the Waters Ridge Condominium recreation area and walking trail, which is a private development. The recreation area is located on a hillside, south of the condominium units, and approximately 1,000 feet north of the site.

Commercial/Business Park Areas – The project site is not visible from the Sorrento Court retail area, the Sorrento Gateway Business Park or the Marriott Courtyard Hotel, due to intervening parking lots, manufactured slopes and landscaping associated with these commercial and business park developments. The elevation of the proposed substation, which would be lower than these surrounding commercial and business park developments, also contributes to the limited visibility of the substation site.

Depending on location and elevation, the project site is potentially visible from southwest-facing offices of the Sorrento Towers North Office Complex. The west building of this complex lies approximately 600 feet to the northeast of the proposed substation site.

5.2.2 Regulatory Setting

The substation site is located in the Mira Mesa Community Plan area of the City of San Diego. The substation site is within the Sorrento Mesa subarea that has been designated as industrial park to accommodate research and development, office and manufacturing uses. No explicit visual resource policies exist for the project area. The community plan does contain guidelines that protect natural landforms. Pertinent land use policies and plans are discussed in Section 5.10, Land Use, of this Initial Study.

5.2.3 Environmental Impacts

Significance Criteria

Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.) provides guidance for evaluating whether a development project may result in significant impacts. Appendix G suggests that a development project could have a significant impact on aesthetics if the project would:

a) Have a substantial adverse effect on a scenic vista
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway
c) Substantially degrade the existing visual character or quality of the site and its surroundings
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Impact Discussion

a) Have a substantial adverse effect on a scenic vista?

The proposed project would not directly or indirectly impact any scenic vista. The project site is surrounded by commercial and industrial land uses, transportation systems and a developed SDG&E utility corridor. Views to the site are limited to middle-ground viewing distances due to both the view blockages created by surrounding commercial and business park buildings and roads, and the on-site elevations that are similar to, or lower than, the surrounding canyon and mesa landforms.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

According to the state and local plans for the project site, no state scenic highway or other state scenic resources exist in the project area or on site. The undeveloped portion of the site primarily supports grassland and shrub vegetation, including several small trees. However, none of these natural resources are unique, or important as scenic resources. The existing scenic quality of the site and surrounding landscapes are assessed as 'typical' of the region's urban and natural landscapes and do not contain any unique or special scenic quality attributes, and therefore, the impacts to scenic resources from development of the proposed project would be less than significant.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Based on review of SDG&E's proposed substation plan, landscape plan, interconnection, the Initial Study field analysis concludes the following aesthetic and visual changes would result to the following key observation points and viewing locations.

KOP1: Mira Sorrento Place – Foreground Viewing Distance Zone – North and West of the Substation Site:

- Visual Contrast: Weak to Moderate
- Project Dominance: Moderate
- View Blockage or Impairment: Not applicable

Figure 5.2-1 provides the existing and proposed view looking southwest to the site from Mira Sorrento Place. As shown in Figure 5.2-1, visibility into the substation will be screened by the substation retaining and screening walls and landscaping plan. Views to the substation facilities and equipment will decrease over time as trees and shrubs installed as part of SDG&E's landscaping plan mature.

KOP 2: Interstate 805 – Foreground to Middle-ground Viewing Distance Zone – South of the Substation

- Visual Contrast: Weak to Moderate
- Project Dominance: Low
- View Blockage or Impairment: Not Applicable

Figure 5.2-2 provides the existing and proposed view from the I-805 northbound off-ramp. As shown in Figure 5.2-2, the proposed substation would be partially visible from I-805 and from the I-805 off-ramp. Viewer exposure would be high in terms of number of viewers, although viewing time would be limited due to highway speeds. Overall, visual sensitivity is assessed as moderate. Existing views from I-805 towards the substation site are to a variety of urban and natural landscapes, including the undeveloped substation site, SDG&E's existing utility corridor and transmission lines, commercial and business park developments of Mira Mesa, and transportation systems, including Vista Sorrento Parkway and to Mira Mesa Blvd. The

substation facilities will initially be partially visible from the interstate and off-ramp when first constructed. Based on SDG&E's site design and landscaping plan, the visual contrasts of the site will be moderate initially, however, contrasts will diminish to weak over time as landscaping matures and provides substantial screening of the substation equipment. Long-term (10 years), the site will be perceived as visually compatible in character and scale with the surrounding large- to mid-scale commercial and business parks, as well as SDG&E's existing utility corridor.

KOP 3: Vista Sorrento Parkway – Foreground Viewing Distance Zone – South of the Substation

- Visual Contrast: Low
- Project Dominance: Low
- View Blockage or Impairment: None

Figure 5.2-3 provides the existing and proposed view to the site from southbound Vista Sorrento Parkway looking northeast to the site. As sown in Figure 5.2-3, SDG&E's proposed screening wall will largely obscure visibility to the substation from Vista Sorrento Parkway. In addition, views to the substation will decrease over time as trees and shrubs installed as part of SDG&E's landscaping plan mature. Northbound viewers may have partial views to the substation; however, the proposed retaining walls, screening walls and landscaping will effectively obscure visibility to the substation facilities over time. Due to the restricted visibility to the site and the intervening landscaping that SDG&E is proposing, the visual contrasts and dominance of the substation facility are assessed to be low.

As shown in Figures 5.2-1 through 5.2-3 and described above, the construction of the Mira Sorrento Substation will convert a predominantly undeveloped site in the Mira Mesa Community of San Diego to a utility substation facility, with associated transmission and distribution system changes. The visual character of the site will change from undeveloped to a man-made urban landscape, supporting energy facilities. While this landscape character change will be noticeable from surrounding land uses with views to the site, the conversion of the landscape for this use is consistent with the Mira Mesa Community Plan and zoning, and is considered to be a less than significant impact to the existing visual character of the site and surrounding area.

Implementation of SDG&E's proposed substation design plan and landscape plan (APM-AES-1 and APM-AES-2; see Table 4-5) will ensure that the visual character of the site and surrounding areas are not degraded, and are consistent with City of San Diego development guidelines. SDG&E has designed the Mira Sorrento Substation to be a low-profile facility, approximately 10 feet in height with equipment maximum height of 30 feet. The proposed screening and retaining walls would substantially block views to these low-profile substation facilities. The screen walls will be designed to comply with architectural guidelines of the City of San Diego. The proposed substation design uses earth-tone materials for the retaining walls and a landscaping plan to reduce the future visibility of the facility from Mira Sorrento Place and Vista Sorrento Parkway. SDG&E's retaining walls and landscape plan will also partially screen views of the substation of I-805.

SDG&E's proposed landscape plan will utilize a variety of trees and shrubs in groupings to soften the character of the retaining and screening walls and substation equipment. The

landscaping plan will also be effective in visually breaking up the scale of the retaining walls and substation facility.

The interconnection of the substation to the existing 69 kV transmission would be located underground and therefore upon completion of construction not visible.

d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

SDG&E has proposed lighting in the substation area that would be used only during emergencies. A shielded safety light would be installed at the entry gate to indicate where the yard light switch is located. Given the minimal lighting that is proposed, and the presence of substantial lighting sources at the nearby commercial and business park developments and along I-805, the additional lighting impacts from the proposed project would be minor, and less than significant.

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SOURCE: SDG&E 2011

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FIGURE 5.2-1

KOP 1–View Looking Southwest from Mira Sorrento Place

Mira Sorrento Distribution Substation Project

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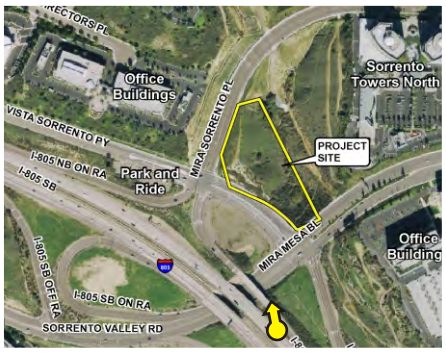

EXISTING

PROPOSED

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SOURCE: SDG&E 2011

FIGURE 5.2-2

KOP 2–View Looking Northwest from I-805 Northbound Off-Ramp

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Mira Sorrento Distribution Substation Project

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EXISTING

PROPOSED

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SOURCE: SDG&E 2011

FIGURE 5.2-3

KOP 3–View Looking Northeast from Southbound Vista Sorrento Parkway

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Mira Sorrento Distribution Substation Project

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5.3 AGRICULTURE RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), or timberland (as defined by Public Resources Code Section 4526)?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

5.3.1 Environmental Setting

The site has been designated by the California Department of Conservation's (DOC's) Farmland Mapping and Monitoring Program as Urban and Built-Up Land (DOC 2008). Based on site visits and review of general plans and agricultural maps of the project site, there are no agricultural resources in the project area. The project is located in an industrial park area to accommodate research and development, office and manufacturing uses. There are no areas in or near the project that are, or are planned to be in agricultural cultivation.

5.3.2 Regulatory Setting

The project site is not used, zoned, or highly suitable for agricultural production, and therefore, agricultural policies from the state, county, or City of San Diego would not apply to the proposed project site.

5.3.3 Environmental Impacts

Significance Criteria

Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.) provides guidance for evaluating whether a development project may result in significant impacts. Appendix G suggests that a development project could have a significant impact on agriculture if the project would:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), or timberland (as defined by PRC Section 4526)
d) Result in the loss of forest land or conversion of forest land to non-forest use
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use.

Impact Discussion

a) Conversion of Farmland?

Since there are no agricultural resources in the project area, the proposed project would not cause or facilitate conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses, therefore no impact would occur.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No portion of the project site is being used for agricultural purposes, or is located within areas that are zoned for agricultural use, therefore no impact would occur.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC Section 12220(g)), or timberland (as defined by PRC Section 4526)?

The proposed project is not located on forest land or timberland, as defined by the California Public Resources Code (PRC). The proposed project is also not located on timberland zoned as timberland production, as defined by California Government Code or the City of San Diego General Plan. Thus, there is no potential for conflict with PRC Section 12220(g), or PRC Section 4526, and no impacts will result from the proposed project.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

See response (c) above.

e) Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or conversion of forest land to non-forest use?

Since there are no agricultural resources in the project are, there is no potential for individual or cumulative loss of farmland. No impact would occur.

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5.4 AIR QUALITY/GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☒
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐
Greenhouse Gas Emissions				
f) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
g) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

5.4.1 Environmental Setting

Air Pollution Climatology

The project site is located within the San Diego Air Basin (SDAB) and is subject to the San Diego Air Pollution Control District (SDAPCD) guidelines and regulations. The SDAB is one of fifteen air basins that geographically divide the state of California. The SDAB is currently classified as a federal nonattainment area for ozone (O_3) and a state nonattainment area for particulate matter

less than or equal to 10 microns (PM_{10}), particulate matter less than or equal to 2.5 microns ($PM_{2.5}$), and O_3.

The SDAB lies in the southwest corner of California and comprises the entire San Diego region, covering 4,260 square miles, and is an area of high air pollution potential. The SDAB experiences warm summers, mild winters, infrequent rainfalls, light winds, and moderate humidity. This usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds.

The SDAB experiences frequent temperature inversions. Subsidence inversions occur during the warmer months as descending air associated with the Pacific High Pressure Zone meets cool marine air. The boundary between the two layers of air creates a temperature inversion that traps pollutants. The other type of inversion, a radiation inversion, develops on winter nights when air near the ground cools by heat radiation and air aloft remains warm. The shallow inversion layer formed between these two air masses also can trap pollutants. As the pollutants become more concentrated in the atmosphere, photochemical reactions occur that produce O_3, commonly known as smog.

Light and daytime winds, predominately from the west, further aggravate the condition by driving air pollutants inland, toward the mountains. During the fall and winter, air quality problems are created due to carbon monoxide (CO) and oxides of nitrogen (NO_x) emissions. CO concentrations are generally higher in the morning and late evening. In the morning, CO levels are relatively high due to cold temperatures and the large number of motor vehicles traveling. High CO levels during the late evenings are a result of stagnant atmospheric conditions trapping CO in the area. Since CO is produced almost entirely from automobiles, the highest CO concentrations in the SDAB are associated with heavy traffic. Nitrogen dioxide (NO_2) levels are also generally higher during fall and winter days.

Under certain conditions, atmospheric oscillation results in the offshore transport of air from the Los Angeles region to San Diego County (County). This often produces high O_3 concentrations, as measured at air pollutant monitoring stations within the County. The transport of air pollutants from Los Angeles to San Diego has also occurred within the stable layer of the elevated subsidence inversion, where high levels of O_3 are transported.

Air Quality Characteristics

Air quality varies as a direct function of the amount of pollutants emitted into the atmosphere, the size and topography of the air basin, and the prevailing meteorological conditions. Air quality problems arise when the rate of pollutant emissions exceeds the rate of dispersion. Reduced visibility, eye irritation, and adverse health impacts upon those persons termed “sensitive receptors” are the most serious hazards of existing air quality conditions in the area. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution, as identified by the California Air Resources Board (CARB), include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. Sensitive receptors include residences, schools, playgrounds, child care centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

Pollutants and Effects

Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include O_3, NO_2, CO, sulfur dioxide (SO_2), PM_{10}, $PM_{2.5}$, and lead. These pollutants are discussed below.[1] In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants.

Ozone (O_3)

O_3 is the principal component of smog and is formed in the atmosphere through a series of reactions involving reactive organic gases (ROGs) (also referred to as volatile organic compounds or VOCs) and NO_x in the presence of sunlight. ROGs and NO_x are called precursors of O_3. NO_x includes various combinations of nitrogen and oxygen, primarily consisting of nitric oxide (NO) and NO_2. O_3 is a principal cause of lung and eye irritation in the urban environment. Significant O_3 concentrations are primarily produced in the summer, when atmospheric inversions are greatest and temperatures are high. ROG and NO_x emissions are both considered critical in O_3 formation. Control strategies for O_3 have focused on reducing emissions from motor vehicles; industrial processes using solvents and coatings; stationary combustion devices, such as boilers, engines, and gas turbines; and consumer products.

Nitrogen Dioxide (NO_2)[2]

NO_2 is a product of combustion and is generated in vehicles and in stationary sources such as power plants and boilers. NO_2 can cause lung damage. As noted above, NO_2 is part of the NO_x family and is a principal contributor to O_3 and smog.

Carbon Monoxide (CO)

CO is a colorless and odorless gas that is associated primarily with the incomplete combustion of fossil fuels in motor vehicles in the urban environment. Relatively high concentrations are typically found near crowded intersections and along heavily used roadways carrying slow-moving traffic. Even under the most severe meteorological and traffic conditions, high concentrations of CO are limited to locations within a relatively short distance (300 to 600 feet) of heavily traveled roadways. Overall CO emissions have decreased as a result of the state and federal motor vehicle control programs, which have mandated increasingly lower emission levels for vehicles manufactured

[1] The following descriptions of health effects for each of the criteria air pollutants associated with project construction and operations are based on the Environmental Protection Agency's (EPA's) Six Common Air Pollutants (EPA 2009) and the CARB "Glossary of Air Pollutant Terms" (CARB 2009) published information.

[2] In this section, the term NO_2 will be used with respect to the presence of nitrogen dioxide in the atmosphere. The term NO_x will be used to refer to the emissions of oxides of nitrogen from stationary and mobile sources, which are primarily in the form of nitric oxide (NO) and, to a lesser extent, NO_2.

since 1973, as well as inspection and maintenance programs and the use of reformulated gasoline. CO concentrations in the atmosphere are typically higher in winter. The use of oxygenated gasoline in the winter months is required to reduce CO emissions.

Respirable Particulate Matter (PM_{10})

Particulate matter includes both liquid and solid particles of a wide range of sizes and composition. While some PM_{10} comes from automobile exhaust, the principal source of PM_{10} is dust from construction and from the action of vehicle wheels on paved and unpaved roads. Agriculture, wind-blown sand, and fireplaces can also be important sources. PM_{10} can cause increased respiratory disease, lung damage, and premature death. Control of PM_{10} is achieved through the control of dust at construction sites, the cleaning of paved roads, and the wetting or paving of frequently used unpaved roads.

Fine Particulate Matter ($PM_{2.5}$)

The sources, health effects, and control of $PM_{2.5}$ are similar to those of PM_{10}. In 1997, the U.S. Environmental Protection Agency (EPA) determined that the health effects of $PM_{2.5}$ were severe enough to warrant an additional standard, which was revised and made more stringent in 2006 (EPA 2006). In addition, CARB adopted an annual standard for $PM_{2.5}$ in June 2002.

Sulfur Dioxide (SO_2)[3]

SO_2 is a combustion product, with the primary source being power plants and heavy industry that use coal or oil as fuel. SO_2 is also a product of diesel engine combustion. The health effects of SO_2 include lung disease and breathing problems for asthmatics. SO_2 in the atmosphere contributes to the formation of acid rain. In the SDAB, there is relatively little use of coal and oil, and SO_2 is of lesser concern than in many other parts of the country.

Lead

Lead is a stable compound, which persists and accumulates both in the environment and in animals. The lead used in gasoline anti-knock additives represented a major source of lead emissions into the atmosphere. However, lead emissions have significantly decreased due to the near elimination of the use of leaded gasoline.

Toxic Air Contaminants

Toxic air contaminants (TACs) refer to a category of air pollutants that pose a present or potential hazard to human health but that tend to have more localized impacts than criteria pollutants. CARB has identified diesel particulate matter as the predominant TAC in California. Diesel particulate matter is emitted into the air by mobile vehicles that are diesel powered. Such vehicles include heavy-duty diesel trucks, construction equipment, and passenger vehicles. Certain ROGs (e.g., benzene, formaldehyde) may also qualify as TACs.

[3] In this section, the term SO_2 will be used with respect to the presence of sulfur dioxide in the atmosphere. The term SO_x will be used to refer to the emissions of sulfur oxides from stationary and mobile sources, which are primarily in the form of SO_2 and, to a lesser extent, sulfur trioxide (SO_3).

Local Air Quality

SDAB Attainment Designation

An area is designated in attainment when it is in compliance with the National Ambient Air Quality Standards (NAAQS) and/or California Ambient Air Quality Standards (CAAQS). These standards are set by the EPA or CARB for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare.

The criteria pollutants of primary concern that are considered in this air quality assessment include O_3, NO_2, CO, SO_2, PM_{10}, and $PM_{2.5}$. Although there are no ambient standards for VOCs or NO_x, they are important as precursors to O_3.

The SDAB is designated as a former Subpart 1 nonattainment for the 8-hour NAAQS for O_3 pending redesignation by the EPA. The SDAB is currently in the process of being redesignated as a "serious" nonattainment area for O_3 despite the possibility of the SDAB achieving the original 1997 federal 8-hour O_3 standard in 2011. In 2009, the EPA proposed a "moderate" ozone nonattainment classification for the SDAB. Because the attainment deadline for "moderate" classification designation has since passed, the SDAB will be redesignated. A pending final rule for a "serious" nonattainment classification is expected in 2012. The SDAB was designated in attainment for all other criteria pollutants under the NAAQS with the exception of PM_{10}, which was determined to be unclassifiable. The SDAB is currently designated nonattainment for O_3, both 1-hour and 8-hour, and PM_{10} and $PM_{2.5}$ under the CAAQS. It is designated attainment for CO, NO_2, SO_2, lead, and sulfates.

Table 5.4-1 summarizes SDAB's federal and state attainment designations for each of the criteria pollutants.

Table 5.4-1: San Diego Air Basin Attainment Classification

Pollutant	Federal Designation	State Designation
O_3 (1-hour)	Attainment*	Nonattainment
O_3 (8-hour)	Nonattainment (Former Subpart I)	Nonattainment
CO	Attainment (Maintenance Area)	Attainment
PM_{10}	Unclassifiable**	Nonattainment
$PM_{2.5}$	Attainment	Nonattainment
NO_2	Attainment	Attainment
SO_2	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	(no federal standard)	Attainment
Hydrogen sulfide	(no federal standard)	Unclassified
Visibility	(no federal standard)	Unclassified

Source: SDAPCD 2010

* The federal 1-hour standard of 0.12 parts per million (ppm) was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in State Implementation Plans.

** At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable.

Air Quality Monitoring Data

The SDAPCD operates a network of ambient air monitoring stations throughout the County that measure ambient concentrations of the pollutants and determine whether the ambient air quality meets the CAAQS and NAAQS. The SDAPCD monitors air quality conditions at 10 locations throughout the SDAB. The Overland Avenue monitoring station is the nearest location to the project site where criteria pollutant concentrations are monitored. Ambient concentrations of pollutants from 2008 through 2010 are presented in Table 5.4-2, along with the number of days exceeding CAAQS. Air quality within the project region is in compliance with both CAAQS and NAAQS for NO_2, CO, and SO_2.

Table 5.4-2: Local Air Quality Levels

Pollutant	Standard (Maximum Allowable Amount)		Year[1]	Maximum Concentration[2]	Number of Days State/Federal Std. Exceeded
	California	*Federal Primary*			
1-hour Ozone (O_3)[1]	0.09 ppm for 1 hour	NA[6]	2008 2009 2010	0.100 ppm 0.105 0.100	4/0 2/0 2/0
8-hour Ozone (O_3)[1]	0.07 ppm for 8 hours	0.075 ppm for 8 hours	2008 2009 2010	0.093 ppm 0.082 0.074	12/5 1/3 3/0
1-hour Carbon Monoxide (CO)[3]	20 ppm for 1 hour	35 ppm for 1 hour	2008 2009 2010	4 ppm 4 3	0/0 0/0 0/0
8-hour Carbon Monoxide (CO)[3]	9.0 ppm for 8 hours	9.0 ppm for 8 hour	2008 2009 2010	2.60 ppm 2.77 2.17	0/0 0/0 0/0
Nitrogen Dioxide (NO_2)[1]	0.18 ppm for 1 hour	0.100 ppm for 1 hour	2008 2009 2010	0.077 ppm 0.060 0.073	0/NA 0/NA 0/NA
Fine Particulate Matter ($PM_{2.5}$)[1,5]	No Separate Standard	35 µg/m m^3 for 24 hours	2008 2009 2010	27.2 µg/m^3 25.1 18.7	NA/0 NA/NM NA/0
Particulate Matter (PM_{10})[1,4,5]	50 µg/m^3 for 24 hours	150 µg/m m^3 for 24 hours	2008 2009 2010	41.0 µg/m^3 50.0 32.0	0/0 0/0 0/0

Source: SDG&E 2011; CARB 2012a; EPA 2012
ppm = parts per million; NM = not measured; µg/m^3 = micrograms per cubic meter; NA = not applicable *
There was insufficient (or no) data available to determine this value.
Notes:
1. Data collected from the Overland Monitoring Station – 5555 Overland Avenue, San Diego, CA 92123.
2. Maximum concentration is measured over the same period as the California Standards.
3. Data collected from the Beardsley Monitoring Station –1110 Beardsley Street, San Diego, CA 92113.
4. PM_{10} exceedances are based on State thresholds established prior to amendments adopted on June 20, 2002.
5. PM_{10} and $PM_{2.5}$ exceedances are derived from the number of samples exceeded, not days.
6. The federal standard was revoked June 2005.

Global Climate Change

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind, lasting for an extended period (decades or longer).

The Greenhouse Effect and Greenhouse Gases

Gases that trap heat in the atmosphere are often called greenhouse gases (GHGs). The greenhouse effect traps heat in the troposphere through a three-fold process as follows: short-wave radiation emitted by the Sun is absorbed by the Earth; the Earth emits a portion of this energy in the form of long-wave radiation; and GHGs in the upper atmosphere absorb this long-wave radiation and emit this long-wave radiation into space and toward the Earth. This "trapping" of the long-wave (thermal) radiation emitted back toward the Earth is the underlying process of the greenhouse effect. Principal GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), O_3, and water vapor (H_2O). Some GHGs, such as CO_2, CH_4, and N_2O, occur naturally and are emitted to the atmosphere through natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas CH_4 results mostly from off-gassing associated with agricultural practices and landfills. Man-made GHGs, which have a much greater heat-absorption potential than CO_2, include fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFC), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3), which are associated with certain industrial products and processes (CAT 2006).

The greenhouse effect is a natural process that contributes to regulating the earth's temperature. Without it, the temperature of the Earth would be about 0°F (-18°C) instead of its present 57°F (14°C). Global climate change concerns are focused on whether human activities are leading to an enhancement of the greenhouse effect (National Climatic Data Center 2009).

The effect each GHG has on climate change is measured as a combination of the mass of its emissions and the potential of a gas or aerosol to trap heat in the atmosphere, known as its global warming potential (GWP). The GWP varies between GHGs; for example, the GWP of CH_4 is 21, and the GWP of N_2O is 310. Total GHG emissions are expressed as a function of how much warming would be caused by the same mass of CO_2. Thus, GHG gas emissions are typically measured in terms of pounds or tons of "CO_2 equivalent" (CO_2E).[4]

According to CARB, some of the potential impacts in California of global warming may include loss in snowpack, sea-level rise, more extreme heat days per year, more high O_3 days, more large forest fires, and more drought years (CARB 2006). Several recent studies have attempted to explore the possible negative consequences that climate change, left unchecked, could have in California. These reports acknowledge that climate scientists' understanding of the complex global climate system, and the interplay of the various internal and external factors that affect

[4] The CO_2 equivalent for a gas is derived by multiplying the mass of the gas by the associated GWP, such that MT CO_2E = (metric tons of a GHG) x (GWP of the GHG). For example, the GWP for CH_4 is 21. This means that emissions of 1 metric ton of methane are equivalent to emissions of 21 metric tons of CO_2.

climate change, remains too limited to yield scientifically valid conclusions on such a localized scale. Substantial work has been done at the international and national level to evaluate climatic impacts, but far less information is available on regional and local impacts.

The primary effect of global climate change has been a rise in average global tropospheric temperature of 0.2°C per decade, determined from meteorological measurements worldwide between 1990 and 2005. Climate change modeling using 2000 emission rates shows that further warming would occur, which would induce further changes in the global climate system during the current century. Changes to the global climate system and ecosystems and to California could include, but would not be limited to, the following:

- The loss of sea ice and mountain snowpack resulting in higher sea levels and higher sea surface evaporation rates with a corresponding increase in tropospheric water vapor due to the atmosphere's ability to hold more water vapor at higher temperatures (IPCC 2007)
- Rise in global average sea level primarily due to thermal expansion and melting of glaciers and ice caps, the Greenland and Antarctic ice sheets (IPCC 2007)
- Changes in weather that include widespread changes in precipitation, ocean salinity, and wind patterns, and more energetic aspects of extreme weather including droughts, heavy precipitation, heat waves, extreme cold, and the intensity of tropical cyclones (IPCC 2007)
- Decline of Sierra snowpack, which accounts for approximately half of the surface water storage in California, by 70% to as much as 90% over the next 100 years (CAT 2006)
- Increase in the number of days conducive to O_3 formation by 25% to 85% (depending on the future temperature scenario) in high O_3 areas of Los Angeles and the San Joaquin Valley by the end of the 21st century (CAT 2006)
- High potential for erosion of California's coastlines and seawater intrusion into the Delta and levee systems due to the rise in sea level (CAT 2006).

Contributions to Greenhouse Gas Emissions

Global

Anthropogenic GHG emissions worldwide in 2005 totaled approximately 41,100 million metric tons CO_2E (MMT CO_2E)[5] (CAIT 2009). Six countries—China, United States, Russian Federation, India, Japan, and Brazil—and the European Community accounted for approximately 60% of the total global emissions, approximately 25,000 MMT CO_2E (CAIT 2009).

United States

The United States was the second highest producer of GHG emissions in 2009 after China, emitting 6,633.2 MMT CO_2E (EPA 2011). The primary GHG emitted by human activities in the United States was CO_2, representing approximately 83% of total GHG emissions. Carbon

[5] The CO_2 equivalent emissions on a global or national scale are commonly expressed as "million metric tons of carbon dioxide equivalent" ($MMTCO_2E$). The carbon dioxide equivalent for a gas is derived by multiplying the tons of the gas by the associated GWP, such that $MMTCO_2E$ = (million metric tons of a GHG) x (GWP of the GHG). For example, the GWP for CH_4 is 21. This means that emissions of 1 million metric tons of CH_4 are equivalent to emissions of 21 million metric tons of CO_2.

dioxide from fossil fuel combustion, the largest source of U.S. GHG emissions, accounted for approximately 78% of U.S. GHG emissions in 2009 (EPA 2011).

State of California

According to the 2008 GHG inventory data compiled by CARB for the California Greenhouse Gas Inventory for 2000–2008, California emitted 478 MMT CO_2E of GHGs, including emissions resulting from out-of-state electrical generation (CARB 2010a). The primary contributors to GHG emissions in California are transportation, electric power production from both in-state and out-of-state sources, industry, agriculture and forestry, and other sources, which include commercial and residential activities. These primary contributors to California's GHG emissions and their relative contributions in 2008 are presented in Table 5.4-3.

Table 5.4-3: Greenhouse Gas Sources in California

Source Category	Annual GHG Emissions (MMT CO_2E)	Percentage of Total
Agriculture	28.06	5.9%
Commercial uses	14.68	3.1%
Electricity generation	116.35 [a]	24.3%
Forestry (excluding sinks)	0.19	0.0%
Industrial uses	92.66	19.4%
Recycling and waste	6.71	1.4%
Residential uses	28.45	6.0%
Transportation	174.99	36.6%
High GWP substances	15.65	3.3%
Totals	**477.74**	**100.0%**

[a] Includes emissions associated with imported electricity, which account for 61.24 MMT CO_2E annually
Source: CARB 2010a

5.4.2 Regulatory Setting

Federal

The federal Clean Air Act (CAA), passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The EPA is responsible for implementing most aspects of the CAA, including the setting of NAAQS for major air pollutants, hazardous air pollutant standards, approval of state attainment plans, motor vehicle emission standards, stationary source emission standards and permits, acid rain control measures, stratospheric O_3 protection, and enforcement provisions. NAAQS are established for "criteria pollutants" under the CAA, which are O_3, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for O_3, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for O_3, NO_2, SO_2, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over 1- to 3-year periods, depending on the pollutant. The CAA requires the EPA to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS

must prepare a State Implementation Plan that demonstrates how those areas will attain the standards within mandated time frames. National and state ambient air quality standards are shown in Table 5.4-4.

State

Criteria Air Pollutants

The federal CAA delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts (AQMDs) and air pollution control districts (APCDs) at the regional and county levels. CARB, which became part of the California Environmental Protection Agency (CalEPA) in 1991, is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the federal CAA, and regulating emissions from motor vehicles and consumer products.

CARB has established the CAAQS, which are generally more restrictive than the NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. The CAAQS for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, PM_{10}, $PM_{2.5}$, and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. The NAAQS and CAAQS are presented in Table 5.4-4.

Table 5.4-4: Ambient Air Quality Standards

Pollutant	Average Time	California Standards[1]	National Standards[2]	
		Concentration[3]	***Primary[3,4]***	***Secondary[3,5]***
O_3	1 hour	0.09 ppm (180 µg/m^3)	—	Same as Primary Standard
	8 hours	0.070 ppm (137 µg/m^3)	0.075 ppm (147 µg/m^3)	
CO	8 hours	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	None
	1 hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	
NO_2	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)	Same as Primary Standard
	1 hour	0.18 ppm (339 µg/m^3)	0.100 ppm (188 µg/m^3)	
SO_2	24 hours	0.04 ppm (105 µg/m^3)	—	—
	3 hours	—	—	0.5 ppm (1300 µg/m^3)
	1 hour	0.25 ppm (655 µg/m^3)	0.075 ppm (196 µg/m^3)	—
PM_{10}	24 hours	50 µg/m^3	150 µg/m^3	Same as Primary Standard
	Annual Arithmetic Mean	20 µg/m^3	—	
$PM_{2.5}$	24 hours	No Separate State Standard	35 µg/m^3	Same as Primary Standard
	Annual Arithmetic Mean	12 µg/m^3	15.0 µg/m^3	
Lead[6]	30-day Average	1.5 µg/m^3	—	—

Table 5.4-4: Ambient Air Quality Standards

Pollutant	Average Time	California Standards[1]	National Standards[2]	
		Concentration[3]	***Primary[3,4]***	***Secondary[3,5]***
	Rolling 3-Month Average	—	0.15 µg/m^3	Same as Primary Standard

Source: CARB 2012b
ppm = parts per million by volume
µg/m^3 = micrograms per cubic meter
mg/m^3 = milligrams per cubic meter

1 California standards for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, suspended particulate matter—PM_{10}, $PM_{2.5}$, and visibility reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2 National standards (other than O_3, NO_2, SO_2, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. For NO_2 and SO_2, the standard is attained when the 3-year average of the 98th and 99th percentile, respectively, of the daily maximum 1-hour average at each monitor within an area does not exceed the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

3 Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr.
Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4 National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

5 National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

6 CARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

Local

While CARB is responsible for the regulation of mobile emission sources within the state, local AQMDs and APCDs are responsible for enforcing standards and regulating stationary sources. The project is located within the SDAB and is subject to SDAPCD guidelines and regulations. In the County, O_3 and particulate matter are the pollutants of main concern since exceedances of state ambient air quality standards for those pollutants are experienced here in most years. For this reason, the SDAB has been designated as a nonattainment area for the state PM_{10}, $PM_{2.5}$, and O_3 standards. The SDAB is also a federal O_3 nonattainment area and a CO maintenance area.

As stated previously, the SDAPCD is responsible for planning, implementing, and enforcing federal and state ambient standards in the SDAB. The following rules and regulations apply to all sources in the jurisdiction of SDAPCD:

- **SDAPCD Regulation IV: Prohibitions; Rule 51: Nuisance.** Prohibits the discharge from any source such quantities of air contaminants or other materials that cause or have a tendency to cause injury, detriment, nuisance, annoyance to people and/or the public, or damage to any business or property (SDAPCD 1969).
- **SDAPCD Regulation IV: Prohibitions; Rule 55: Fugitive Dust.** Regulates fugitive dust emissions from any commercial construction or demolition activity capable of generating

fugitive dust emissions, including active operations, open storage piles, and inactive disturbed areas, as well as track-out and carry-out onto paved roads beyond a project site (SDAPCD 2009).

- **SDAPCD Regulation IV: Prohibitions; Rule 67.0: Architectural Coatings.** Requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories (SDAPCD 2001).

Greenhouse Gas Emissions

Federal

Massachusetts vs. EPA

On April 2, 2007, in *Massachusetts v. EPA*, 549 U.S. 497, the Supreme Court found that GHGs are air pollutants covered by the Clean Air Act (CAA). The court held that the EPA Administrator must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the administrator is required to follow the language of Section 202(a) of the CAA. On December 7, 2009, the administrator signed a final rule with two distinct findings regarding GHGs under Section 202(a) of the CAA:

- The administrator found that elevated concentrations of GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6) in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the endangerment finding.
- The administrator further found that combined emissions of GHGs (CO_2, CH_4, N_2O, and HFCs) from new motor vehicles and new motor vehicle engines contribute to GHG air pollution that endangers public health and welfare. This is referred to as the "cause or contribute" finding.

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the CAA.

Energy Independence and Security Act. On December 19, 2007, President Bush signed the Energy Independence and Security Act of 2007. Among other key measures, the act would do the following, which would aid in the reduction of national GHG emissions:

1. Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022
2. Set a target of 35 miles per gallon (mpg) for the combined fleet of cars and light trucks by model year 2020, direct National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks, and create a separate fuel economy standard for work trucks
3. Prescribe or revise standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy

efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

EPA and NHTSA Joint Final Rule for Vehicle Standards. On April 1, 2010, the EPA and the NHTSA announced a joint final rule to establish a national program consisting of new standards for light-duty vehicles model years 2012 through 2016. The joint rule is intended to reduce GHG emissions and improve fuel economy. EPA finalized the first-ever national GHG emissions standards under the CAA, and NHTSA finalized Corporate Average Fuel Economy (CAFE) standards under the Energy Policy and Conservation Act (EPA 2010). This final rule follows the EPA and Department of Transportation's joint proposal on September 15, 2009, and is the result of the President Obama's May 2009 announcement of a national program to reduce GHGs and improve fuel economy (75 FR 25324–25728). This final rule became effective on July 6, 2010 (EPA and NHTSA 2010).

The EPA's GHG standards require new passenger cars, light-duty trucks, and medium-duty passenger vehicles to meet an estimated combined average emissions level of 250 grams of CO_2 per mile in model year 2016, equivalent to 35.5 mpg if the automotive industry were to meet this CO_2 level all through fuel economy improvements. The CAFE standards for passenger cars and light trucks will be phased-in between 2012 and 2016, with the final standards equivalent to 37.8 mpg for passenger cars and 28.8 mpg for light trucks, resulting in an estimated combined average of 34.1 mpg. Together, these standards will cut GHG emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program. The rules will simultaneously reduce GHG emissions, improve energy security, increase fuel savings, and provide clarity and predictability for manufacturers (EPA 2010).

State

AB 1493. In a response to the transportation sector accounting for more than half of California's CO_2 emissions, Assembly Bill (AB) 1493 (Pavley) was enacted on July 22, 2002. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be vehicles whose primary use is noncommercial personal transportation in the state. The bill required that CARB set the GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. When fully phased in, the near-term (2009–2012) standards will result in a reduction of about 22% in GHG emissions compared to the emissions from the 2002 fleet, while the mid-term (2013–2016) standards will result in a reduction of about 30%.

Before these regulations could go into effect, the EPA must grant California a waiver under the federal CAA, which ordinarily preempts state regulation of motor vehicle emission standards. The waiver was granted by Lisa Jackson, the EPA administrator, on June 30, 2009. On March 29, 2010, the CARB executive officer approved revisions to the motor vehicle GHG standards to harmonize the state program with the national program for 2012 to 2016 model years (see EPA and NHTSA Joint Rule for Vehicle Standards). The revised regulations became effective on April 1, 2010.

SB 1078. Approved by former governor Gray Davis in September 2002, Senate Bill (SB) 1078 (Sher) established the Renewal Portfolio Standard program, which requires an annual increase in renewable generation by the utilities equivalent to at least 1% of sales, with an aggregate goal of 20% by 2017. This goal was subsequently accelerated, requiring utilities to obtain 20% of their power from renewable sources by 2010 (see SB 107 and Executive Orders S-14-08 and S-21-09.)

Executive Order S-3-05. In June 2005, former governor Arnold Schwarzenegger established California's GHG emissions reduction targets in Executive Order S-3-05. The Executive Order established the following goals: GHG emissions should be reduced to 2000 levels by 2010; GHG emissions should be reduced to 1990 levels by 2020; and GHG emissions should be reduced to 80% below 1990 levels by 2050. The secretary of CalEPA is required to coordinate efforts of various agencies to collectively and efficiently reduce GHGs. Representatives from several state agencies constitute the Climate Action Team. The Climate Action Team is responsible for implementing global warming emissions reduction programs. The Climate Action Team fulfilled its report requirements through the March 2006 Climate Action Team report to governor and the legislature (CAT 2006). A second biennial report, released in May 2010 (CAT 2010), expands on the policy oriented in the 2006 assessment. The 2010 report provides new information and scientific findings regarding the development of new climate and sea-level projections using new information and tools that have recently become available, and it evaluates climate change within the context of broader soil changes, such as land-use changes and demographics.

SB 107. Approved by former governor Arnold Schwarzenegger on September 26, 2006, SB 107 (Simitian) requires investor-owned utilities such as Pacific Gas and Electric, Southern California Edison, and SDG&E, to generate 20% of their electricity from renewable sources by 2010. Previously, state law required that this target be achieved by 2017 (see SB 1078).

AB 32. On September 27, 2006, former governor Arnold Schwarzenegger signed into law the California Global Warming Solutions Act of 2006 (AB 32). AB 32's GHG emissions limit is equivalent to the 1990 levels, which are to be achieved by 2020.

CARB has been assigned to carry out and develop the programs and requirements necessary to achieve the goals of AB 32. Under AB 32, CARB must adopt regulations requiring the reporting and verification of statewide GHG emissions. This program will be used to monitor and enforce compliance with the established standards. CARB is also required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 allows CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted.

As required under AB 32, on December 6, 2007, CARB approved the 1990 GHG emissions inventory, thereby establishing the emissions limit for 2020. The 2020 emissions limit was set at 427 MMT CO_2E (CARB 2007).

On December 11, 2008, CARB approved the required Climate Change Scoping Plan (Scoping Plan) to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction measures by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program. Additional development of these measures and adoption of the appropriate regulations will occur over the next 2 years, becoming effective by January 1, 2012. Emission reductions from the recommended measures in the Scoping Plan total 169 MMT CO_2E, which will allow California to attain the 2020 emissions limit of 427 MMT CO_2E, a 30% reduction from CARB's 2020 estimated statewide business-as-usual GHG emissions of 596 MMT CO_2E. The key elements of the Scoping Plan include the following (CARB 2008):

- Expanding and strengthening existing energy efficiency programs, as well as building and appliance standards
- Achieving a statewide renewable energy mix of 33%
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California's GHG emissions
- Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets
- Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard
- Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.

SB 1368. In September 2006, former governor Arnold Schwarzenegger signed SB 1368, which requires the California Energy Commission (CEC) to develop and adopt regulations for GHG emissions performance standards for the long-term procurement of electricity by local, publicly owned utilities. These standards must be consistent with the standards adopted by the California Public Utilities Commission (CPUC). On January 25, 2007, the CPUC adopted an Emissions Performance Standard for any long-term power commitments made by the state's electrical utilities. Utilities are not allowed to enter into a long-term commitment to buy baseload power from power plants that have CO_2 emissions greater than 1,100 pounds (0.5 metric ton) per megawatt-hour. On May 23, 2007, the CEC also adopted a performance standard consistent with that adopted by the CPUC.

Executive Order S-1-07. Issued on January 18, 2007, Executive Order S-1-07 sets a declining Low Carbon Fuel Standard (LCFS) for GHG emissions measured in CO_2-equivalent gram per unit of fuel energy sold in California. The target of the LCFS is to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020. The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered. CARB adopted the implementing regulation in April 2009. The regulation is expected to increase the production

of biofuels, including those from alternative sources such as algae, wood, and agricultural waste. In addition, the LCFS would drive the availability of plug-in hybrid, battery electric, and fuel cell–powered motor vehicles. The LCFS is anticipated to replace 20% of the fuel used in motor vehicles with alternative fuels by 2020.

SB 97. In August 2007, the legislature enacted SB 97 (Dutton), which directs the Governor's Office of Planning and Research (OPR) to develop guidelines under the California Environmental Quality Act (CEQA) for the mitigation of GHG emissions. OPR was to develop proposed guidelines by July 1, 2009, and the Natural Resources Agency was directed to adopt guidelines by January 1, 2010.

The Natural Resources Agency adopted CEQA Guidelines amendments on December 30, 2009 (CNRA 2009).

The amendments became effective on March 18, 2010. The amended guidelines establish several new CEQA requirements concerning the analysis of GHGs, including the following:

- Requiring a lead agency to "make a good faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project" (14 CCR 15064.4(a))
- Providing a lead agency with the discretion to determine whether to use quantitative or qualitative analysis or performance standards to determine the significance of GHG emissions resulting from a particular project (14 CCR 15064.4(a))
- Requiring a lead agency to consider the following factors when assessing the significant impacts from GHG emissions on the environment:
    - The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting
    - Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project
    - The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b))
    - Allowing lead agencies to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features or off-site measures, including offsets that are not otherwise required (14 CCR 15126.4(c)).

SB 375. In August 2008, the legislature passed and on September 30, 2008, former governor Arnold Schwarzenegger signed SB 375 (Steinberg), which addresses GHG emissions associated with the transportation section through regional transportation and sustainability plans. By September 30, 2010, CARB will assign regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035. The targets are required to consider the emission reductions associated with vehicle emission standards (see SB 1493), the composition of fuels (see Executive Order S-1-07), and other CARB-approved measures to reduce GHG emissions. Regional metropolitan planning organizations will be responsible for preparing a Sustainable Communities Strategy within the Regional Transportation Plan. The goal of the

Sustainable Communities Strategy is to establish a development plan for the region, which, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If a Sustainable Communities Strategy is unable to achieve the GHG reduction target, a metropolitan planning organization must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies. SB 375 provides incentives for streamlining CEQA requirements by substantially reducing the requirements for "transit priority projects," as specified in SB 375, and eliminating the analysis of the impacts of certain residential projects on global warming and the growth-inducing impacts of those projects when the projects are consistent with the Sustainable Communities Strategy or Alternative Planning Strategy. On September 23, 2010, CARB adopted the SB 375 targets for the regional metropolitan planning organizations. The targets for the San Diego Association of Governments (SANDAG) are a 7% reduction in emissions per capita by 2020 and a 13% reduction by 2035. Achieving these goals through adoption of a Sustainable Communities Strategy will be the responsibility of the metropolitan planning organizations.

Executive Order S-14-08. On November 17, 2008, former governor Arnold Schwarzenegger issued Executive Order S-14-08. This Executive Order focuses on the contribution of renewable energy sources to meet the electrical needs of California while reducing the GHG emissions from the electrical sector. The governor's order requires that all retail suppliers of electricity in California serve 33% of their load with renewable energy by 2020. Furthermore, the order directs state agencies to take appropriate actions to facilitate reaching this target. The Resources Agency, through collaboration with the CEC and California Department of Fish and Game, is directed to lead this effort. Pursuant to a Memorandum of Understanding between the CEC and California Department of Fish and Game creating the Renewable Energy Action Team, these agencies will create a "one-stop" process for permitting renewable energy power plants.

Executive Order S-21-09*.* On September 15, 2009, former governor Arnold Schwarzenegger issued Executive Order S-21-09. This Executive Order directed CARB to adopt a regulation consistent with the goal of Executive Order S-14-08 by July 31, 2010. CARB is further directed to work with the CPUC and CEC to ensure that the regulation builds upon the Renewable Portfolio Standard program and is applicable to investor-owned utilities, publicly owned utilities, direct access providers, and community choice providers. Under this order, CARB is to give the highest priority to those renewable resources that provide the greatest environmental benefits with the least environmental costs and impacts on public health and that can be developed most quickly in support of reliable, efficient, cost-effective electricity system operations.

SB X1 2. On April 12, 2011, Governor Jerry Brown signed SB X1 2 in the First Extraordinary Session, which would expand the Renewable Portfolio Standard (RPS) by establishing a goal of 20% of the total electricity sold to retail customers in California per year by December 31, 2013, and 33% by December 31, 2020, and in subsequent years. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal or tidal current, and that meets other specified requirements with respect to its location. In addition to the retail sellers

covered by SB 107, SB X1 2 adds local publicly owned electric utilities to the RPS. By January 1, 2012, the CPUC is required to establish the quantity of electricity products from eligible renewable energy resources to be procured by retail sellers in order to achieve targets of 20% by December 31, 2013; 25% by December 31, 2016; and 33% by December 31, 2020. The statute also requires that the governing boards for local publicly owned electric utilities establish the same targets, and the governing boards would be responsible for ensuring compliance with these targets. The CPUC will be responsible for enforcement of the RPS for retail sellers, while the CEC and CARB will enforce the requirements for local publicly owned electric utilities.

5.4.3 Environmental Impacts

Significance Criteria

Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) provides guidance for evaluating whether a project may result in significant impacts. Appendix G suggests that a project could have a significant impact on air quality if the project would:

Criteria Pollutants:

a) Conflict with or obstruct implementation of the applicable air quality plan
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)
d) Expose sensitive receptors to substantial pollutant concentrations
e) Create objectionable odors affecting a substantial number of people

Greenhouse Gas Emissions:

f) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
g) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gas emissions.

Criteria Pollutants

The project emissions are evaluated based on thresholds established by the City of San Diego (City of San Diego 2011). The City sets forth quantitative emission significance thresholds below which a project would not have a significant impact on ambient air quality. Project-related air quality impacts would be considered significant if any of the applicable significance thresholds presented in Table 5.4-5 are exceeded.

Table 5.4-5: City of San Diego Air Quality Significance Thresholds

Pollutant	Construction (pounds/day)	Operation (tons/year)
Criteria Pollutants Mass Daily Thresholds		
ROG	137	15
NO_x	250	40
CO	550	100
SO_x	250	40
PM_{10}	100	15
$PM_{2.5}$	—	—

Sources: City of San Diego 2011.
ROG – reactive organic gases
NO_x – oxides of nitrogen
CO – carbon monoxide
SO_x – sulfur oxides
PM_{10} – particulate matter less than or equal to 10 microns
$PM_{2.5}$ – particulate matter less than or equal to 2.5 microns

For these pollutants, if emissions exceed the thresholds shown in Table 5.4-6, the project could have the potential to result in a cumulatively considerable net increase in these pollutants and thus could have a significant impact on the ambient air quality.

Greenhouse Gas Emissions: Neither the State of California nor the SDAPCD has adopted emission-based thresholds for GHG emissions under CEQA. OPR's Technical Advisory titled *CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review* states that "public agencies are encouraged but not required to adopt thresholds of significance for environmental impacts. Even in the absence of clearly defined thresholds for GHG emissions, the law requires that such emissions from CEQA projects must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact" (OPR 2008, p. 4). Furthermore, the advisory document indicates in the third bullet item on page 6 that "in the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a 'significant impact,' individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice."

While the City of San Diego has not established official thresholds of significance for GHG emissions, the City has adopted a screening threshold of 900 MT CO_2E per year (City of San Diego 2010) based on the approach outlined in the California Air Pollution Control Officers Association (CAPCOA) report *CEQA & Climate Change* (CAPCOA 2008). The CAPCOA report references the 900 MT CO_2E guideline as a conservative threshold for requiring further analysis and mitigation. This emission level is based on the amount of vehicle trips, the typical energy and water use, and other factors associated with development projects. CAPCOA identifies project types that are estimated to emit approximately 900 MT CO_2E per year. Projects that meet these criteria are not required by the City to prepare a GHG technical analysis report. To assess the impacts of the significance of the Mira Sorrento Distribution Substation Project's (proposed project's) GHG emissions with respect to CEQA, the CPUC will apply the City's

screening threshold of 900 MT CO_2E/year, including all operational emissions and the construction emissions amortized over 30 years for this project.

Impact Discussion

a) Conflict with or Obstruct Implementation of the Applicable Air Quality Plan?

Regional planning efforts to improve air quality include a variety of strategies to reduce emissions from motor vehicles and minimize emissions from stationary sources. As discussed above, the SDAPCD is the agency principally responsible for comprehensive air pollution control in San Diego County. The SDAPCD develops rules and regulations, establishes permitting requirements for stationary sources, inspects sources, and enforces such measures through educational programs or fines, when necessary.

The applicable air quality plan for San Diego County is the RAQS. The RAQS is based on San Diego Association of Governments (SANDAG) growth forecasts for the region, and incorporates measures to meet state and federal requirements. Significance of air quality impacts is based on the degree to which the project is consistent with SANDAG's growth forecasts. If a project is consistent with growth forecasts, its resulting impacts were anticipated in the RAQS and are considered to be less than significant. Growth forecast in the RAQS are based on approved General Plans, Community Plans, and Redevelopment Plans.

The substation construction is proposed to increase the reliability of electrical service to existing customers and to accommodate projected and planned growth in San Diego. As discussed in Section 5.10, Land Use, the proposed project is designated for industrial/public facility uses in area planning documents. The project is consistent with the designated use of the site, and would not alter or introduce new conflicts with land use designations. The project does not include development of new homes or businesses and therefore, as further discussed in Section 5.13, Population/Housing, would not induce population growth in the SDAB. As discussed in *response 5.4.3 (b)* below, emissions during construction of the project would be less than the City's thresholds of significance, and operation of the project would result in very minimal emissions from occasional vehicle trips to maintain the substation. The types and quantities of construction equipment that would be used for the proposed project would be typical of the industry and would not be of sufficient magnitude in quantity to exceed those assumptions used in the preparation of construction equipment emissions in the RAQS. Because the RAQS has accounted for construction-related emissions, construction emissions generated by the proposed project would be consistent with those included in the emissions inventory of the RAQS and, therefore, would be consistent with construction-related emissions projected in the RAQS. Hence, the threshold of significance (i.e., conflict with or obstruct implementation of the applicable air quality plan) would not be exceeded and no impact would result.

b) Violation of Air Quality Standard or Substantial Contribution to an Existing or Projected Air Quality Violation

Construction: Construction emissions would be short-term and temporary and be generated by heavy equipment, construction-related trips by workers, material-hauling trucks, and associated fugitive dust generation from clearing and grading activities. The principal pollutants of concern

would be PM_{10} and ozone precursor emissions (ROG and NOx). Table 5.4-6 provides estimated project emissions during construction.

Table 5.4-6: Mira Sorrento Construction Air Emissions

Emissions Source	Pollutant (pounds/day)[1]					
	ROG	***NO_X***	***CO***	***PM_{10}***	***$PM_{2.5}$***	***SO_x***
2012						
Unmitigated Emissions	26.81	246.22	119.39	71.43	22.66	0.06
Mitigated Emissions[2]	26.81	246.22	119.39	45.22	17.18	0.06
City Thresholds	137	250	550	100	—	250
Is Threshold Exceeded After Mitigation?	No	No	No	No	—	No
2013						
Unmitigated Emissions	19.60	174.03	90.20	68.01	19.50	0.07
Mitigated Emissions[2]	19.60	174.03	90.20	41.79	14.03	0.07
City Thresholds	137	250	550	100	—	250
Is Threshold Exceeded After Mitigation?	No	No	No	No	—	No
2014						
Unmitigated Emissions	16.70	160.17	72.86	6.07	5.58	0.00
Mitigated Emissions[2]	16.70	160.17	72.86	6.07	5.58	0.00
City Thresholds	137	250	550	100	—	250
Is Threshold Exceeded After Mitigation?	No	No	No	No	—	No

Source: SDG&E 2012

ROG = reactive organic gases; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides; PM_{10} = particulate matter less than or equal to 10 microns; $PM_{2.5}$ = particulate matter less than or equal to 2.5 microns

Notes:

1. Emissions were calculated using the URBEMIS 2007 Model, as recommended by the SDAPCD.
2. The reduction/credits for construction emission mitigations are based on mitigation included in the URBEMIS 2007 model and as typically required by the SDAPCD. The mitigation includes the following: properly maintain of mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces twice daily; cover stock piles with tarps.

As shown in Table 5.4-6, total daily construction emissions with implementation of standard dust-control measures implemented to comply with SDAPCD Rule 55 would not exceed identified significance thresholds, or violate air quality standards; therefore, they are considered to be less than significant.

Operation: Once operational, the project would not create any air emissions beyond those associated with maintenance and repair of the project. The small number of vehicle trips (two to four trips per day) required for maintenance and operation would not exceed the thresholds of significance identified above and therefore would not contribute substantially to an existing or projected air quality violation.

c) Result in a Cumulatively Considerable Net Increase in any Criteria Pollutant for which the Project Region is in Nonattainment under an Applicable Federal or State Ambient Air Quality Standard?

The project's cumulative impacts are based on an analysis of the consistency of the project with the local general plan and the applicable air quality plan. As discussed previously under response 5.4.3 (a*)*, the proposed project would not conflict with or obstruct the implementation of any federal, state, or local air quality attainment plans. As a result, the proposed project would not result in a cumulatively considerable net increase in any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard.

d) Expose Sensitive Receptors to Substantial Pollutant Concentrations?

The SDAPCD defines sensitive receptors as residential areas, schools, playgrounds, health care facilities, day care facilities, and athletic facilities. The areas associated with the proposed project modifications would be bordered by industrial and office uses. The nearest sensitive receptor (residences) to the proposed site is located approximately 800 feet to the north of the project site. Based on the current level of traffic on nearby roadways, the short-term construction activities associated with the proposed project modifications would not create traffic congestion that could create substantial CO hot spots. Furthermore, as discussed in response 5.4.3 (b), the proposed project is not expected to release air emissions other than those associated with occasional site visits during operation, and short-term emissions during construction are expected to be less than significant.

Air Toxics: Diesel exhaust particulate matter would be emitted from heavy equipment used in the construction process. Because diesel exhaust particulate matter is considered to be carcinogenic, long-term exposure to diesel exhaust emissions could result in adverse health impacts. Implementation of the proposed project would result in short-term, temporary emissions of diesel exhaust from construction equipment. The emissions would not occur 24 hours per day, seven days per week, but would be more likely to occur during daytime working hours with varying uses over that time of equipment and vehicles dependent on diesel fuel. Because of the temporary short-term nature and frequency of construction emissions, diesel exhaust particulate matter would not expose sensitive receptors to substantial pollutant concentrations and therefore, would result in a less than significant impact. With respect to operations, no impacts associated with diesel exhaust particulate matter would result due to the very infrequent activities; i.e., maintenance, patrolling inspection, and occasional repairs.

e) Create Objectionable Odors

Construction activities could generate airborne odors associated with the operation of construction vehicles (i.e., diesel exhaust) and the application of architectural coatings. These emissions would be isolated to the immediate vicinity of the construction site, and would be limited to a finite period of time that would be relatively short in duration. Total construction would take up to 18 to 24 months. Operation of the substation would not create objectionable odors. As such, impacts related to creation of odors during construction and operation of the project would be less than significant.

Greenhouse Gas Emissions:

f) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction:

GHG emissions associated with the construction phase of the proposed project would occur as a result of burning the fuel required to operate the on-site construction equipment and mobilize work crews to and from the proposed project site. Emissions of CO_2 were estimated using the URBEMIS 2007 model (SDG&E 2011). Table 5.4-7 shows the estimated annual GHG construction emissions associated with the proposed project by year.

Operation and Maintenance:

Operation of the proposed project would result in GHG emissions from vehicular traffic generated by worker vehicle trips for regular maintenance and inspections, electrical generation, and fugitive SF_6 emissions from substation circuit breakers.

Table 5.4-7 shows the estimated annual operational GHG emissions associated with the proposed project and changes in emissions with construction of the proposed substation regarding electrical consumption and fugitive SF_6 emissions.

Table 5.4-7: Total Estimated Greenhouse Gas Emissions (Construction and Operations and Maintenance)

Source	Carbon Dioxide (MT/year)	Nitrous Oxide (MT/year)	Nitrous Oxide (MT CO_2E /yr)[4]	Methane (MT/year)	Methane (MT CO_2E/yr)[4]	Sulfur Hexafluoride (MT CO_2E/yr)	Total (MT CO_2E/yr)
Construction Emissions							
2012	1,523.67	0.04	12.04	0.17	3.51	0.00	1,539.21
2013	1,839.01	0.05	14.88	0.20	4.30	0.00	1,858.18
2014	1,395.44	0.04	11.05	0.15	3.10	0.00	1,409.59
Total Construction Emissions (MT CO_2E/year)[1]	*4,806.98*						
Total Amortized Construction Emissions over 30 years (Metric Tons of Carbon Dioxide Equivalents/year)	***158.60***	***0.00***	***1.27***	***0.36***	***160.89***	***0.00***	***160.23***
Operational Emissions							
Electricity	613.50	0.03	0.67	0.01	1.67	0.00	615.84
Circuit Breakers	0.00	0.00	0.00	0.00	0.00	38.05	38.05
Total Operational Emissions[1]	***613.50***	***0.03***	***0.67***	***0.02***	***1.67***	***38.05***	***653.89***

Table 5.4-7: Total Estimated Greenhouse Gas Emissions (Construction and Operations and Maintenance)

Source	Carbon Dioxide (MT/year)	Nitrous Oxide (MT/year)	Nitrous Oxide (MT CO_2E /yr)[4]	Methane (MT/year)	Methane (MT CO_2E/yr)[4]	Sulfur Hexafluoride (MT CO_2E/yr)	Total (MT CO_2E/yr)
Total Project-Related Operational Emissions (Annualized Construction Emissions + Operational Emissions)	*814.12 MT CO_2E/year*[1]						
City Threshold	*900 MTCO_2E/year*						
Is the Threshold Exceeded?	***No***						

Source: SDG&E 2012

Notes:

[1] Totals may be slightly off due to rounding.

As previously discussed, the City's screening threshold of 900 MT CO_2E/year (operational emissions plus construction emissions amortized over 30 years) is being used to assess the impact of the project's GHG emissions. The proposed project's increase in operational emissions plus the construction emissions amortized over 30 years would equal 814.12 MTCO_2E/year, which would be below the screening threshold. Therefore, the impact of the project's GHG emissions would be considered less than significant.

g) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

Construction:

The Climate Change Scoping Plan, approved by the CARB on December 12, 2008, provides an outline for actions to reduce California's GHG emissions. The Scoping Plan requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. Furthermore, the City has not adopted any GHG reduction measures that would apply to the GHG emissions associated with construction activities. At this time, no mandatory GHG regulations or finalized agency guidelines would apply to construction of this project, and no conflict would occur. Impacts would, therefore, be less than significant.

Operation and Maintenance:

According to CARB, the electric power generation industry is the primary user of SF_6, a synthetic gas used as an insulating medium (CARB 2010b). The use of SF_6, a highly potent GHG with a GWP 23,900 times greater than CO_2, is problematic because fugitive emissions can escape older gas-insulated substations and switchgear through insulation leaks. The most promising and cost-effective strategies to reduce SF_6 emissions is through the installation of new equipment, technologies, and practices including leak detection, repair, use of recycling equipment, and employer/employee training (CARB 2010b). On February 25, 2010, CARB

adopted a regulation that requires gas-insulated substations and switchgear owners to reduce their SF_6 emission rate by 1% per year over a 10-year period from 2011 to 2020. Beginning January 1, 2020, the maximum annual emission rate would be at 1%. The measure would also require gas-insulated substations and switchgear owners to (1) annually report their SF_6 emissions, (2) annually report their emission rate, (3) provide a complete inventory of all gas-insulated switchgear and their SF_6 capacities, (4) produce an SF_6 gas container inventory, and (5) keep all information current for CARB enforcement staff inspection and verification.

Implementation of SDG&E's standard practices for management of SF_6-containing equipment is consistent with the adopted CARB regulation to reduce emissions related to SF_6 use. As noted previously, the proposed project would not increase other operational emissions. For these reasons, the project would not conflict with an applicable plan, policy, or regulation adopted to reduce GHGs.

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5.5 BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-Than-Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☒	☐	☐

5.5.1 Environmental Setting

Information in this section was gathered from review of San Diego Gas & Electric's (SDG&E's) Proponents Environmental Assessment (PEA) (SDG&E 2011), which incorporates Habitat Assessment Surveys and a subsequent Draft Biological Technical Report (RECON 2010) prepared for the proposed project site. In addition, the initial habitat assessment for the site (Essex Environmental, October 2003, Appendix C to this Initial Study (IS)) and field reconnaissance completed by consultant biologists for the California Public Utilities Commission (CPUC) in May 2004 were also reviewed during preparation of this section. Further, information from SDG&E's PEA Completeness Review Response was also reviewed (SDG&E 2012).

Site Description*:* The proposed project site is situated on a small hilltop with relatively steep northwest- and southwest-facing manufactured slopes and a steep east-facing slope leading to a small isolated canyon. An existing drainage runs north–south along the canyon bottom and is culverted under Mira Sorrento Place and Vista Sorrento Parkway. Elevations in the immediate area range from 115 feet above mean sea level (amsl) at the canyon bottom to approximately 220 feet amsl atop the small hilltop on which the Mira Sorrento Distribution Substation Project (proposed project) would be located. The biological survey area (an approximate 6.6-acre area that includes the proposed project site) is bound by Mira Sorrento Place to the north and west, Mira Mesa Boulevard to the southeast, Vista Sorrento Parkway to the south, and commercial and industrial development to the east. The project site is located approximately 0.1-mile east of Interstate 805 (I-805) and is within the Mira Mesa community of the City of San Diego (City).

The following information summarizes biological resources information applicable to the biological survey area and the proposed project site.

Vegetation Communities: Seven vegetation communities including freshwater marsh, southern willow scrub, mule fat scrub, Diegan coastal sage scrub (varying subcategories), native grassland, disturbed habitat, ornamental vegetation, and developed lands were mapped in the biological survey area. The extent of vegetation communities in the biological survey area is shown on Figure 5.5-1 and listed in Table 5.5-1.

Table 5.5-1: Existing Vegetation Communities

Vegetation Community/Land Cover(Holland Code)	Total Acreage in Biological Survey Area
Freshwater marsh (52410)	0.1
Southern willow scrub (63320)	0.1
Mule fat scrub (63310)	—
Undisturbed	0.1
Disturbed	<0.1 (1,759 square feet)
Diegan coastal sage scrub (32510)	—
Remnant	0.7
Restored	1.0
Disturbed	0.3
Disturbed habitat (11300)	1.8
Native grassland (42100)	0.1
Ornamental vegetation (11000)	0.3

Table 5.5-1: Existing Vegetation Communities	
Vegetation Community/Land Cover(Holland Code)	Total Acreage in Biological Survey Area
Disturbed land (13000)	<0.1 (210 square feet)
Developed land (12000)	2.0
Total	6.6

Freshwater Marsh: Consisting of perennial emergent monocots including cattails (*Typha* sp.) and bulrush (*Scirpus* sp.) that form a 4- to 5-meter-tall closed canopy, freshwater marsh occurs in open bodies of fresh water with little current flow such as ponds, seeps, and springs (to a lesser extent), Within the survey area, freshwater marsh dominated by southern cattail (*Typha domingensis*) and scattered bulrush (*Schoenoplectus* sp.) occurs along the extent of north–south-trending drainage where perennial water inundation occurs and a dense tree canopy is absent.

Southern Willow Scrub: A relatively dense riparian community dominated by broad-leaved winter deciduous willow trees (*Salix* sp.) that grow in loose, sandy, or fine gravelly alluvium, southern willow scrub typically occurs adjacent to major drainages but can also be present near smaller features. The distribution of willow within this community limits the potential for a dense understory of smaller plants from developing. A small strand of southern willow scrub featuring a canopy of Arroyo willow (*Salix lasiolepis*) and understory of low-lying herbaceous species such as watercress (*Nasturtium officinale*) and brass-button (*Cotula* sp.) occurs at the southernmost extent of the drainage, within and alongside the creek bed.

Mule Fat Scrub: A tall, herbaceous riparian scrub community dominated by mule fat (*Baccharis salicifolia*), mule fat scrub occurs along drainages featuring a fairly coarse substrate and moderately deep water table. Typically occurring below 2,000 feet, this vegetation community is developed and maintained by flooding and other disturbances; however, in the absence of such disturbances, the community may change (through succession processes) to willow-cottonwood or sycamore-dominated riparian forest/woodlands. Within the biological survey area mule fat scrub borders the majority of the identified on-site drainage. The mule fat scrub vegetation is dense and dominated by mule fat; however, along the edges, native herbaceous species including Chinese pusley (*Heliotropium curassavicum)* and saltgrass (*Distictis spicata*) are present. In addition, disturbed mule fat scrub occurs adjacent to the southern portion of the canyon bottom drainage; and while the area is primarily comprised of mule fat, it has been disturbed by the introduction of non-native plants including selloana pampas grass (*Cortaderia selloana*), which is present along several portions of the drainage.

Diegan Coastal Sage Scrub: The southern form of coastal sage scrub, Diegan coastal sage scrub is comprised of low-growing aromatic, drought-deciduous soft-woody shrubs with an average height of three to four feet. This vegetation community is typically found on steep slopes with limited moisture availability or on clay rich soils that are slow to release stored water.

Three forms or subtypes of coastal sage scrub were been identified in the project site: remnant (naturally occurring), restored, and disturbed. Remnant Diegan coastal sage scrub occurs on the north-facing slope in the southern portion of the survey area, on a portion of the west-facing

slope, and along the hilltop within the western portion of the survey area (see Figure 5.5-1). On the north-facing slope the vegetation is dense and dominated by coyote bush (*Baccharis pilularis*) and black sage (*Salvia mellifera*). Vegetation on the east-facing slope is also dense but is dominated by California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), and big saltbrush (*Atriplex lentiformis*). Lastly, vegetation present on the hilltop is open and dominated by California buckwheat toyon (*Heteromeles arbutifolia*). Remnant coastal sage scrub is habitat that has likely not been disturbed in the past; however, it is a small and isolated patch. This subtype of coastal sage scrub has intact soils.

Restored coastal sage scrub is located on the slopes adjacent to Mira Sorrento Place (see Figure 5.5-1). On the northwest-facing slope, vegetation is very dense (over 80% cover) and is dominated by California sagebrush and broom baccharis (*Baccharis sarothroides*). Five Torrey pines (*Pinus torreyana)* have also been planted on this slope. Vegetation on the southeast-facing slope (located between the dirt access road and Mira Sorrento Place) is more open and dominated by laurel sumac (*Malosma laurina*) and lemonadeberry (*Rhus integrifolia*). An understory of native grasses such as needlegrass (*Nassella* sp.) is also present on the southeast-facing slope.

Lastly, small patches of disturbed coastal sage scrub occur on either side of the drainage as well as on the cut slope located adjacent to Vista Sorrento Parkway. Native shrubs, including coyote bush and black sage, as well as non-native ruderal groundcover species, such as short-pod mustard (*Hirschfeldia incana*), comprise the disturbed coastal sage scrub in the survey area.

Native Grassland: Generally composed of native perennial bunch grasses, native grasslands often have a relatively large component of non-native grasses but are distinguished as native grasslands when percentage cover by native species exceeds 10% or greater. A small patch of native grassland dominated by non-native grass species, including wild oat (*Avena* sp.) and foxtail chess (*Bromus madritensis* ssp.), but also featuring over 10% groundcover of native grasses and wildflowers was observed during habitat surveys within the larger expanse of non-native grasses on the east-facing slope of the survey area.

Disturbed Habitat: Disturbed habitat generally includes lands that have been cleared of vegetation or lands dominated by non-native plant species. Occurring throughout the central portion of the survey area, non-native grasslands are dominated by black mustard (*Brassica nigra*), short-pod mustard, tocalote (*Centaurea melitensis*), and various non-native grasses. Vegetation transect surveys conducted in February 2012 support the disturbed habitat designation by concluding that these areas support well over 50% cover of forbs and less than 50% cover of grasses (RECON 2012; SDG&E 2012). A large portion of the east-facing slope within the proposed project site is designated disturbed habitat.

Ornamental Vegetation: Often including lands planted with landscaping and maintained on an on-going basis, ornamental vegetation areas are defined as artificially installed plantings that would not otherwise occur on site. Two patches of ornamental vegetation (one, a stand of Peruvian pepper trees (*Schinus molle)* adjacent to the northern portion of the drainage, and the other, landscaped vegetation located along the west-facing slope near Vista Sorrento Parkway and dominated by acacia [*Acacia* sp.]) are located within the survey area.

Disturbed Land: Inclusive of lands that have been previously disturbed by on-site activities (such as the creation of dirt roadways or established pathways), disturbed lands within the survey area are associated with an existing unvegetated dirt access road located on the west-facing slope and near the canyon bottom.

Developed Lands: Developed land typically includes lands on which permanent structures and/or pavement have been installed (growth of natural vegetation in these areas is generally prohibited due to the presence of permanent structures). Paved city roads and a gravel access road in the northeast portion of the survey area are classified as developed lands.

Sensitive Vegetation Communities. Several of the vegetation communities identified within the survey area as described above are considered sensitive or have special status on account of their natural rarity and their decline in the area due to development and/or the number of sensitive plant or animal special dependent upon them. Sensitive communities also include those regulated by the federal government under the Clean Water Act or the California Porter-Cologne Water Quality Control Act (i.e., jurisdictional waters including wetlands) and the Endangered Species Act (i.e., site-specific designated critical habitat areas for federally listed wildlife species), those regulated by California Department of Fish and Game (CDFG) under Section 1600 of the California Fish and Game Code, and those considered sensitive by the SDG&E Natural Community Conservation Plan (NCCP), and City of San Diego Multiple Species Conservation Program (MSCP) Subarea Plan. Sensitive vegetation communities within the survey area include freshwater marsh, southern willow scrub, mule fat scrub, Diegan coastal sage scrub, and native grassland.

Wildlife: Recent and past habitat surveys suggest a relatively low diversity of wildlife species occurring within the proposed project site. During 2010 field surveys, five butterflies, including western pygmy blue (Brephidium exile*),* Lorquin's admiral *(Limenitis lorquini lorquini*), an unidentified sulphur, and cabbage white (*Pieris rapae*), were observed (although not detected, common species such as common white (*Pontia protodice*) are also expected to occur on site). Observations of fish species within the survey area were limited and consisted solely of western mosquitofish (*Gambusia affinis*) within the freshwater of the on-site drainage. Although no amphibian species were observed during the more recent surveys conducted for the proposed project, Pacific tree frog (*Pseudacris regilla*) was detected during 2003 surveys, and it is therefore anticipated to occur. Avian species typical of urban communities including Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), house finch (*Carpodacus mexicanus frontalis*), and lesser goldfinch (*Carduelis psaltria hesperophilus*) and species associated with scrub or riparian communities including California towhee (*Pipilo crissalis*) and Bewick's wren (*Thryomanes bewickii*) were detected during field surveys. Four reptile species, western fenced lizard (*Sceloporus occidentalis*), common side-blotched lizard (*Uta stansburiana*), coastal whiptail, and California kingsnake (*Lampropeltis getula californiae*), were also detected on site as were mammalian species typically associated with rural or urban areas including California ground squirrel (*Spermophilus beecheyi*) and coyote (*Canis latrans*).

Movement Corridors: Due to its location within a highly urbanized area and adjacency to several roadways carrying high volumes of traffic, no major migration corridors traverse the proposed project site.

Special-Status Plants: Special-status plant species include those listed by the U.S. Fish and Wildlife Service (USFWS) or CDFG as threatened, endangered, proposed, or candidate species as well as those listed as sensitive or rare (sensitive species are those included in the California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants of California (2011) and species recorded within two miles of the project area by the California Natural Diversity Database (CNDDB 2010; SDG&E 2012). As shown in Table 5.5-2, 30 sensitive species were considered and were determined to have no or low potential to occur within the proposed project area. Of these:

- One special-status plant species (*Pinus torreyana*) is present
- Seven special-status plant species have low potential to occur
- Twenty-two special-status plant species are not anticipated to occur.

Special-status plants observed during field surveys and those considered to have moderate to high potential to occur on site are discussed in greater detail as follows.

Torrey Pine

Five Torrey pine individuals were identified during 2009 field surveys of the project site within the cut slope immediately north of Mira Sorrento Place and within restored vegetation. These individuals are not part of a naturally occurring population and were installed as a component of past revegetation efforts at the site.

The extent of special-status plants with potential to occur in the biological study area is listed in Table 5.5-2.

Special-Status Wildlife: Special-status wildlife species include those listed by the USFWS or CDFG as endangered, threatened, proposed, or candidate species as well as those listed by CDFG as fully protected or species of special concern and species recorded within two miles of the project area by the CNDDB (CNDDB 2010; SDG&E 2012). The special-status wildlife species with potential to occur within the study area include the following:

- One special-status reptile species (Coastal whiptail (*Aspidoscelis tigris stejnegeri*), observed during recent 2009 surveys) and one special-status mammal species (southern mule deer (*Odocoileus hemionus*), previously observed during 2003 surveys)
- No special-status species with a high potential to occur
- Two avian special-status species (Cooper's hawk (*Accipiter cooperii*) and coastal California gnatcatcher (*Polioptila californica californica*) with moderate potential to occur
- Four reptile and two avian special-status species with low potential to occur
- One invertebrate, five avian, and four mammal species with no potential to occur.

Special-status animals observed during field surveys and those considered to have moderate to high potential to occur on site are discussed in greater detail as follows.

Coastal whiptail

Although coastal whiptail has no official state or federal status, it was previously a federal candidate for listing and is considered secure on a global basis but vulnerable on a regional

basis based on its CNDDB ranking (SDG&E 2011). Ranging from Santa Barbara County south into western Baja California, Mexico (predominantly on the coastal slope), coastal whiptail habitat includes coastal sage scrub and chaparral communities, woodlands, and streamsides where plants are sparsely distributed (SDG&E 2011). One coastal whiptail was observed during 2009 field surveys within on-site disturbed coastal sage scrub vegetation. Due to the observation during field surveys, as well as presence of open coastal sage scrub vegetation, isolation of the survey area due to surrounding development, and known occurrences within a 2-mile radius of the project site, the species is expected to currently be present on site.

Southern Mule Deer

An SDG&E NCCP covered species, southern mule deer, are presently widespread throughout undeveloped portions of San Diego County at elevations of 400 to 3,600 feet (SDG&E 2011). Southern mule deer require relatively large, undisturbed tracts of chaparral, coastal sage scrub, and mixed grassland/shrub habitats, and although the species is not threatened with extinction within its range, ongoing urbanization and habitat fragmentation could result in a reduction in local populations unless appropriate conservation measures are implemented. During 2003 surveys conducted for the proposed project site, southern mule deer were observed; however, subsequent development in the area has isolated the project site, and therefore, this species is no longer expected to occur within the project area (SDG&E 2011).

Cooper's hawk

Often found nesting locally within mature forests, open woodlands, river groves, parks, and residential areas, Cooper's hawk has moderate potential to forage within the survey area but is not expected to nest due to lack of suitable habitat.

Coastal California gnatcatcher

Found on the coastal slopes of Southern California, ranging from Ventura County southward through Los Angeles, Orange, Riverside, and San Diego Counties into Baja California, Mexico, coastal California gnatcatchers typically occur in or near sage scrub habitat but may also occur in chaparral, grassland, and riparian woodland habitat when these communities are located adjacent to sage scrub. The coastal California gnatcatcher is federally listed as threatened, is a CDFG species of special concern, and is a covered species under the SDG&E NCCP.

Due to the presence of suitable coastal sage scrub habitat and the high number of recorded occurrences in the project vicinity, coastal California gnatcatcher is considered to have moderate potential to occur on site. However, the suitability of coastal sage scrub habitat occurring within the proposed project site is relatively low due to low shrub height and unsuitable plant species composition within restored areas and due to the open structure of remnant scrub vegetation.

The extent of special-status wildlife with potential to occur in the biological study area is listed in Table 5.5-3.

Table 5.5-2: Sensitive Plant Species with the Potential to Occur

Species	Federal/State Status	CNPS List	SDG&E NCCP	Habitat/Blooming Period	Potential to Occur/Comments
BRYOPHYTES					
Sphaerocarpaceae					
Geothallus tuberosus Campbell's liverwort	-/-	1B	-	Ephemeral liverwort; mesic coastal sage scrub, vernal pools; elevation below 2,000 feet. Recently reported from Camp Pendleton and likely extirpated elsewhere in urbanized San Diego County.	This species is not expected to occur due to the lack of suitable vernal pool habitat (SDG&E 2012). The nearest recorded occurrence is approximately 1 mile southeast of the survey area (CNDDB 2010).
Sphaerocarpos drewei Bottle liverwort	-/-	1B	-	Ephemeral liverwort; openings in chaparral and coastal sage scrub; elevation 300–2,000 feet.	This species has a low potential to occur due to the presence of marginally suitable scrub habitat. The nearest recorded occurrence is approximately 1 mile southeast of the survey area (CNDDB 2010).
GYMNOSPERMS					
Pinaceae *Pine Family*					
Pinus torreyana (ssp. *Torreyana*) Torrey pine	-/-	1B	C, RSS;	Evergreen tree; closed-cone coniferous forest, chaparral, sandstone; elevation 300-500 feet.	This species was observed within the proposed project site, but the individuals do not belong to a naturally occurring population. They have been planted within restored vegetation.
ANGIOSPERMS: DICOTS					
Apiaceae – Carrot Family					
Eryngium aristulatum var. parishii *San Diego button-celery*	CE/FE	1B	C	Annual/perennial herb; vernal pools, mesic areas of coastal sage scrub and grasslands, blooms April-June; elevation less than 2,000 feet.	This species is not expected to occur due to the lack of suitable vernal pool habitat (SDG&E 2012). There are multiple recorded occurrences within 2 miles of the survey area; however, all are associated with vernal pool habitat, and one population is extirpated (CNDDB 2010; USFWS 2009).
Asteraceae – Sunflower Family					
Ambrosia pumila San Diego ambrosia	-/FE	1B	C, NE, RSS	Perennial herb; chaparral, coastal sage scrub, valley and foothill grassland, creek beds, vernal pools, often in disturbed areas; blooms May–Sept; elevation less than 1,400 feet. Many occurrences extirpated in San Diego County.	This species is not expected to occur within the survey area due to lack of suitable sandy alluvium soils. It would have been apparent during the survey if present.
Artemisia palmeri San Diego sagewort	-/-	4	-	Deciduous shrub; coastal sage scrub, chaparral, riparian, mesic, sandy areas; blooms May–Sept.; elevation less than 3,000 feet.	There are multiple recorded occurrences of this species within 2 miles of the survey area, with the closest within 1 mile to the northwest (CNDDB 2010); however, this species would have been apparent if

Table 5.5-2: Sensitive Plant Species with the Potential to Occur

Species	Federal/State Status	CNPS List	SDG&E NCCP	Habitat/Blooming Period	Potential to Occur/Comments
					present; it is not expected to occur within the survey area due to lack of suitable sandy loam soils.
Corethrogyne filaginifolia var. *incana [=Lessingia filaginifolia* var. *filaginifolia]* San Diego sand aster	-/-	1B	-	Perennial herb; chaparral, coastal bluff scrub, coastal sage scrub, blooms June–Sept.; elevation less than 400 feet. Known in California from only six occurrences.	This species would have been apparent if present and is not expected to occur due to the lack of suitable sandy soils. The nearest recorded occurrence is approximately 2 miles west of the survey area (CNDDB 2010).
Corethrogyne filaginifolia var. *linifolia [=Lessingia filaginifolia* var. *filaginifolia]* Del Mar sand aster	-/-	1B	C	Perennial herb; coastal bluff scrub, openings in southern maritime chaparral and coastal sage scrub, sandy soil; blooms May-Sept.; elevation less than 500 feet.	This species would have been apparent if present and is not expected to occur due to the lack of suitable sandy soils. The nearest recorded occurrence, which is possibly extirpated, is approximately 2 miles west of the survey area (CNDDB 2010).
Holocarpha virgata ssp. *Elongate* Graceful tarplant	-/-	4	-	Annual herb; coastal sage scrub, cismontane woodland, valley and foothill grassland, chaparral; blooms July–Nov.; elevation 200–3,600 feet.	This species has a low potential to occur due to the presence of marginally suitable scrub and grassland habitat.
Isocoma menziesii var. *menziesii [*=var. *decumbens]* Decumbent goldenbush	-/-	1B	-	Shrub; chaparral, coastal sage scrub, sandy soils, often in disturbed areas; blooms April–Nov.; elevation less than 500 feet.	This species is not expected to occur due to the lack of sandy soils. It would have been apparent during surveys if present.
Iva hayesiana San Diego marsh-elder	-/-	2	-	Perennial herb; marshes and swamps, playas, riparian areas; blooms April–Sept.; elevation below 1,700 feet.	This species would have been apparent if present during surveys; it is not expected to occur within the survey area. The nearest recorded occurrence is within 2 miles northwest of the survey area (CNDDB 2010).
Lasthenia glabrata ssp. *coulteri* Coulter's goldfields	-/-	1B	-	Annual herb; coastal salt marsh, vernal pools, playas; blooms Feb–June; elevation less than 4,000 feet.	This species is not expected to occur within the survey area due to the lack of suitable salt marsh or vernal pool habitat (SDG&E 2012). The nearest recorded occurrences are within 2 miles of the survey area (CNDDB 2010).
Viguiera laciniata San Diego County viguiera	-/-	4	-	Shrub; chaparral, coastal sage scrub; blooms Feb–June; elevation less than 2,500 feet.	This species would have been apparent during surveys if present and was not observed. Therefore, it is not expected to occur within the survey area.

Table 5.5-2: Sensitive Plant Species with the Potential to Occur

Species	Federal/State Status	CNPS List	SDG&E NCCP	Habitat/Blooming Period	Potential to Occur/Comments
Boraginaceae – Borage Family					
Harpagonella palmeri Palmer's grapplinghook	-/-	4	C, RSS	Annual herb; chaparral, coastal sage scrub, valley and foothill grassland; clay soils; blooms March–May; elevation less than 2,800 feet. Inconspicuous and easily overlooked.	This species has a low potential to occur within the survey area due to the presence of marginally suitable scrub habitat and clay soils. The nearest recorded occurrence is within 1 mile northwest of the survey area (CNDDB 2010).
Cactaceae – Cactus Family					
Cylindropuntia californica [=Opuntia californica var. *californica, O. parryi*] Snake cholia	-/-	1B	C, NE, RSS	Succulent shrub; chaparral, coastal sage scrub; blooms April–May; elevation 100–500 feet.	This species is not expected to occur within the survey area; it would have been apparent if present during surveys. The nearest recorded occurrence is approximately 1 mile west of the survey area (CNDDB 2010).
Ferocactus viridescens San Diego barrel cactus	-/-	2	C, RSS	Succulent; chaparral, coastal sage scrub, valley and foothill grassland, vernal pools; blooms May–June; elevation less than 1,500 feet.	This species would have been apparent if present during surveys; it is not expected to occur. There are multiple recorded occurrences of this species in the vicinity of the survey area, with two within 1 mile (CNDDB 2010).
Convolvulaceae – Morning-Glory Family					
Dichondra occidentalis Western dichondra	-/-	4	-	Perennial herb; chaparral, cismontane woodland, coastal sage scrub, valley and foothill grassland; blooms Mar.–July; elevation less than 1,650 feet.	This species has a low potential to occur due to the presence of marginally suitable scrub habitat, within an area that has experienced a high level of previous disturbance.
Crassulaceae – Stonecrop Family					
Dudleya brevifolia [=D. blochmaniae ssp. *Brevifolia]* Short-leaved dudleya	CE/-	1B	C, NE	Perennial herb; southern maritime chaparral, coastal sage scrub on Torrey sandstone; blooms in April; elevation less than 1,000 feet. Known from fewer than five occurrences in the Del Mar and La Jolla areas of San Diego.	This species is not expected to occur due to the lack of suitable open habitat and soils. The nearest recorded occurrences, both of which are extirpated, are within 1 mile south of the survey area (CNDDB 2010).
Fagaceae – Oak Family					
Quercus dumosa Nuttall's scrub oak	-/-	1B	-	Evergreen shrub; closed-cone coniferous forest, coastal chaparral, coastal sage scrub, sandy and clay loam soils; blooms Feb.–March; elevation less than 1,300 feet.	This species is not expected to occur within the survey area; it would have been apparent during surveys if present. The nearest recorded occurrences are within 2 miles of the survey area (CNDDB 2010).

Table 5.5-2: Sensitive Plant Species with the Potential to Occur

Species	Federal/State Status	CNPS List	SDG&E NCCP	Habitat/Blooming Period	Potential to Occur/Comments
Lamiaceae – Mint Family					
Acanthomintha ilicifolia San Diego thorn-mint	CE/FT	1B	C, NE	Annual herb; chaparral, coastal sage scrub, and grasslands on friable or broken clay soils; blooms April–June; elevation less than 3,100 feet.	This species has a low potential to occur due to the presence of marginally suitable scrub habitat, within an area that has experienced a high level of previous disturbance. Broken clay soils were not observed within the remnant coastal sage scrub.
Monardella linoides ssp. *Viminea [=M. viminea]* Willowy monardella	CE/FE	1B	C, NE	Perennial herb; closed-cone coniferous forest, chaparral, coastal sage scrub, riparian scrub, riparian woodlands, sandy seasonal dry washes; blooms June–Aug; elevation 160–1,300 feet. Known in California from fewer than 15 locations.	This species is not expected to occur within the survey area. It would have likely been apparent if present during the survey, and the survey area lacks suitable sandy soils. The nearest recorded occurrence is approximately 2 miles northeast of the survey area (CNDDB 2010).
Pogogyne abramsii San Diego mesa mint	CE/FE	1B	C	Annual herb; vernal pools; blooms April-July; elevation 300–700 feet.	This species is not expected to occur due to the lack of suitable vernal pool habitat (SDG&E 2012). The nearest recorded occurrence is approximately 1 mile southeast of the survey area and is associated with vernal pools (CNDDB 2010).
Pogogyne nudiuscula Otay mesa mint	CE/FE	1B	C, NE	Annual herb; vernal pools; blooms May–July; elevation 300–800 feet. Known from six occurrences in Otay Mesa.	This species is not expected to occur due to the lack of suitable vernal pool habitat (SDG&E 2012). The nearest recorded occurrence, which has not been located since 1968, is approximately 2 miles east of the survey area (CNDDB 2010).
Polemoniaceae – Phlox Family					
Navarretia fossalis Spreading navarretia	-/FT	1B	C	Annual herb; vernal pools, marshes and swamps, chenopod scrub; blooms April–June; elevation 100–4,300 feet.	This species is not expected to occur due to the lack of suitable vernal pool habitat (SDG&E 2012). The nearest recorded occurrences are within 2 miles of the survey area (CNDDB 2010).
Rhamnaceae – Buckthorn Family					
Adolphia californica California adolphia	-/-	2	-	Deciduous shrub; Diegan coastal sage scrub and chaparral; clay soils; blooms Dec.–May; elevation 100–1,000 feet.	This species would have been observed during surveys; it is not expected to occur within the survey area. The nearest recorded occurrences are within 2 miles of the survey area (CNDDB 2010).
Ceanothus verrucosus Wart-stemmed ceanothus	-/-	2	C, RSS	Evergreen shrub; chaparral; blooms Dec.–April; elevation less than 1,300 feet.	This species would have been apparent if present; it is not expected to occur within the survey area. The nearest recorded occurrence is within 1 mile of the survey area (CNDDB 2010).

Table 5.5-2: Sensitive Plant Species with the Potential to Occur

Species	Federal/State Status	CNPS List	SDG&E NCCP	Habitat/Blooming Period	Potential to Occur/Comments
ANGIOSPERMS: MONOCOTS					
Juncaceae – Rush Family					
Juncus acutus ssp. *leopoldii* Southwestern spiny rush	-/-	4	-	Perennial herb; coastal dunes, meadows and seeps, coastal salt marsh, riparian; blooms May–June; elevation less than 3,000 feet.	This species is not expected to occur; it would have been apparent during surveys if present.
Poaceae – Grass Family					
Orcuttia californica California Orcutt grass	CE/FE	1B	C	Annual herb; vernal pools; blooms April–August; elevation 50–2,200 feet.	This species is not expected to occur due to the lack of suitable vernal pool habitat (SDG&E 2012). The nearest recorded occurrence, which is a reintroduced population, is approximately 2 miles northwest of the survey area (CNDDB 2010; USFWS 2009).
Themidaceae					
Brodiaea orcuttii Orcutt's brodiaea	-/-	1B	C, RSS	Perennial herb (bulbiferous); closed cone coniferous forest, chaparral, meadows and seeps, valley and foothill grassland, vernal pools, mesic, clay soil; blooms May–July; elevation less than 5,300 feet.	This species has a low potential to occur along the drainage within the survey area due to the presence of marginally suitable habitat and suitable soils. The nearest recorded occurrences are within 2 miles of the survey area (CNDDB 2010).
Muilla clevelandii San Diego goldenstar	-/-	1B	C, RSS	Perennial herb (bulbiferous); chaparral, coastal sage scrub, valley and foothill grassland, vernal pools, clay soils; blooms May; elevation 170–1,500 feet.	This species has a low potential to occur due to the presence of marginally suitable scrub and grassland habitat, within an area that has experienced a high level of previous disturbance. The nearest recorded occurrences are within 2 miles of the survey area (CNDDB 2010).

Source: SDG&E 2011; SDG&E 2012

FEDERAL CANDIDATES AND LISTED PLANTS
FE = Federally listed endangered
FT = Federally listed threatened

STATE LISTED PLANTS
CE = State listed endangered

SDG&E NATURAL COMMUNITY CONSERVATION PLAN (NCCP)
C = Covered Species
NE = Narrow endemic
RSS = Regionally Sensitive Species

CALIFORNIA NATIVE PLANT SOCIETY LISTS
1B = Species rare, threatened, or endangered in California and elsewhere. These species are eligible for state listing.
2 = Species rare, threatened, or endangered in California but more common elsewhere. These species are eligible for state listing.
4 = A watch list of species of limited distribution. These species need to be monitored for changes in the status of their populations.

Table 5.5-3: Sensitive Wildlife Species Observed or with the Potential to Occur			
Species	Status	Habitat/Blooming Period	Potential to Occur/Comments
INVERTEBRATES (Nomenclature from Eriksen and Belk 1999; Mattoni 1990; and Opler and Wright 1999)			
Anostraca – Fairy Shrimp			
San Diego fairy shrimp *Branchinecta sandiegonensis*	FE, NCCP *	Vernal pools.	This species is not expected to occur within the survey area due to the lack of suitable vernal pool habitat (SDG&E 2012). There are multiple recorded occurrences of this species within 2 miles of the survey area, all within vernal pools (CNDDB 2010; USFWS 2009).
REPTILES (Nomenclature from Crother 2001 and Crother et al. 2003)			
Iguanidae – Iguanid Lizards			
San Diego horned lizard *Phrynosoma coronatum* (San Diego/blainvillii population)	CSC, FSS, NCCP, *	Chaparral, coastal sage scrub with fine, loose soil. Partially dependent on harvester ants (Pogonomyrmex sp.) for forage.	This species has a low potential to occur within the survey area due to the presence of marginally suitable scrub habitat and soils. No harvester ants, a main component of this species' diet, were observed within the survey area. The nearest recorded occurrence is within 2 miles east of the survey area (CNDDB 2010).
Scincidae – Skinks			
Coronado skink *Eumeces skiltonianus interparientalis*	CSC, FSS, NCCP, *	Grasslands, open woodlands and forest, coastal sage scrub, broken chaparral. Rocky habitats near streams.	This species has a low potential to occur within the survey area due to the presence of marginally suitable habitat. Although a water source is present, the survey area is isolated by development.
Teiidae – Whiptail Lizards			
Belding's orange-throated whiptail *Aspidoscelis [=Cnemidophorus] hyperythra beldingi*	CSC, NCCP, *	Chaparral, coastal sage scrub with coarse sandy soils and scattered brush.	This species has a low potential to occur due presence of marginally suitable, isolated coastal sage scrub habitat and soils. The nearest recorded occurrences are between 1 and 2 miles from the survey area (CNDDB 2010).
Coastal whiptail *Aspidoscelis tigris stejnegeri*	*	Coastal sage scrub, chaparral, woodlands, and streamsides where plants are sparsely distributed.	This species was observed within disturbed coastal sage scrub in the survey area. There are two additional recorded occurrences within two miles of the survey area (CNDDB 2010).
Boidae – Boas			
Coastal rosy boa *Charina trivirgata roseofusca*	FSS, RSS, *	Coastal sage scrub, chaparral in inland and desert locales with rocky soils.	This species has a low potential to occur within the survey are due to the presence of marginally suitable, isolated scrub habitat. There are no rocky soils present on site.
BIRDS (Nomenclature from American Ornithologists' Union 1998, 7th ed. and Unitt 2004)			
Accipitridae – Hawks, Kites, and Eagles			
Northern harrier (nesting) *Circus cyaneus hudsonius*	CSC, NCCP	Coastal lowland, marshes, grassland, agricultural fields. Migrant and winter resident, rare summer resident.	This species has a low potential to forage within the survey area but is not expected to nest due to a lack of suitable habitat.

Table 5.5-3: Sensitive Wildlife Species Observed or with the Potential to Occur			
Species	Status	Habitat/Blooming Period	Potential to Occur/Comments
Cooper's hawk (nesting) *Accipiter cooperii*	WL	Mature forest, open woodlands, wood edges, and river groves. Parks and residential areas. Year-round resident.	This species has a moderate potential to forage within the survey area but is not expected to nest due to a lack of suitable habitat.
Rallidae – Rails, Gallinules, & Coots			
California black rail *Laterallus jamaicensis*	BCC, ST, CFP	Tidal marshes, grassy marshes. Resident populations extirpated.	This species is not expected to occur within the survey area due to the lack of suitable tidal marsh habitat. The nearest recorded occurrence, which is from 1952, is within 2 miles of the survey area (CNDDB 2010). This species is assumed to be extirpated from San Diego County.
Light-footed clapper rail *Rallus longirostris levipes*	FE, SE, CFP, NCCP	Salt marshes supporting *Spartina foliosa.* Localized resident.	This species is not expected to occur within the survey area due to the lack of suitable marsh habitat with *Spartina foliosa*. The nearest recorded occurrences are within 2 miles of the survey area along Los Peñasquitos Canyon Creek (USFWS 2009).
Vireonidae – Vireos			
Least Bell's vireo (nesting) *Vireo bellii pusillus*	FE, SE, BCC, NCCP, *	Willow riparian woodlands. Migrant and summer resident.	This species is not expected to occur within the survey area due to the lack of suitable riparian habitat (SDG&E 2012). The southern willow scrub on site is very small and isolated, and lacks a dense understory of vegetation that this species prefers. Multiple recorded occurrences are within 2 miles north of the survey area along Sorrento Creek and Los Peñasquitos Canyon Creek (CNDDB 2010; USFWS 2009).
Troglodytidae – Wrens			
Coastal cactus wren *Campylorhynchus brunneicapillus sandiegensis*	CSC, FSS, BCC, NE	Maritime succulent scrub, coastal sage scrub and desert scrub with *Opuntia* thickets. Rare localized resident.	This species is not expected to occur due to the lack of substantial cactus patches.
Sylviidae – Gnatcatchers			
Coastal California gnatcatcher *Polioptila californica californica*	FT, CSC, NCCP, *	Coastal sage scrub, maritime succulent scrub. Resident.	This species has a moderate potential to nest within the coastal sage scrub in the survey area. There are many recorded occurrences of this species (at least six local populations) within 2 miles of the survey area, and at least three of these local populations occur within 1 mile (CNDDB 2010; USFWS 2009). This species was detected within the vicinity of the proposed project in 2003 (SDG&E 2003).
Turdidae – Thrushes			
Western bluebird *Sialia mexicana occidentalis*	RSS	Open woodlands, farmlands, orchards.	This species has a low potential to nest within the survey area due to the presence of small patches of mature trees within the ornamental and riparian vegetation.

Table 5.5-3: Sensitive Wildlife Species Observed or with the Potential to Occur

Species	Status	Habitat/Blooming Period	Potential to Occur/Comments
Emberizidae – Emberizids			
Southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	WL, NCCP, *	Coastal sage scrub, chaparral, grassland; favors steep and rocky areas. Localized resident.	This species is not expected to occur within the survey area due to the fragmentation of the sage scrub habitat on site. There are no rocky outcrops present on site.
MAMMALS (Nomenclature from Baker et al., 2003 and Hall 1981)			
Heteromyidae – Pocket Mice & Kangaroo Rats			
Northwestern San Diego pocket mouse *Chaetodipus fallax fallax*	CSC, NCCP, *	San Diego County west of mountains in sparse, disturbed coastal sage scrub or grasslands with sandy soils.	This species is not expected to occur within the survey area due to the lack of suitable sandy soils.
Pacific pocket mouse *Perognathus longimembris pacificus*	FE, CSC, NE	Open coastal sage scrub; fine, alluvial sands near ocean.	This species is not expected to occur within the survey area due to the lack of suitable sandy soils.
Cricetidae – New World Mice and Rats			
San Diego desert woodrat *Neotoma lepida intermedia*	CSC, NCCP, *	Coastal sage scrub and chaparral.	No woodrat middens were observed within the survey area, and no substantial cactus patches (typically preferred for constructing middens) were observed. Therefore, this species is not expected to occur within the survey area. The nearest recorded occurrences are within 2 miles of the survey area (CNDDB 2010).
Cervidae – Deer			
Southern mule deer *Odocoileus hemionus fuliginata*	NCCP	Many habitats.	This species has previously been detected within the survey area (Essex 2003); however, due to the isolation of the survey area following construction of Mira Sorrento Place, this species is not expected to occur.

Source: SDG&E 2011; SDG&E 2012

SDG&E NATURAL COMMUNITY CONSERVATION PLAN
NCCP = COVERED SPECIES
NE = Narrow endemic
RSS = Regionally sensitive species

FEDERAL/STATE LISTED
FE = Federally listed endangered
FSS = Federal (USFWS) sensitive species
FT = Federally listed threatened
SE = State listed endangered
ST = State listed threatened

OTHER
BCC = U.S. Fish and Wildlife Service Birds of Conservation Concern species
CFP = California fully protected species
CSC = California Department of Fish and Game Species of Special Concern
WL = California Department of Fish and Game Watch List

* = Taxa listed with an asterisk fall into one or more of the following categories:
Taxa considered endangered or rare under Section 15380(d) of CEQA guidelines
Taxa that are biologically rare, very restricted in distribution, or declining throughout their range
Population(s) in California that may be peripheral to the major portion of a taxon's range, but which are threatened with extirpation within California
Taxa closely associated with a habitat that is declining in California at an alarming rate (e.g., wetlands, riparian, old growth forests, desert aquatic systems, native grasslands)

Critical Habitat: To the extent prudent and determinable (as dictated by the Endangered Species Act (ESA)), the USFWS is required to designate critical habitat for endangered and threatened species (16 U.S.C. 1533 (a)(3)). Defined as areas of land, water, and air space containing the physical and biological features essential for the survival and recovery of endangered and threatened species, designated critical habitat includes sites for breeding and rearing, movement or migration, feeding, roosting, cover, and shelter. Critical habitat designation delineates all suitable habitat for the species, whether or not it is occupied.

No USFWS-designated critical habitat is located on site or within 1 mile of the proposed project area. While critical habitat for San Diego fairy shrimp (*Branchinecta sandiegonensis*), San Diego thornmint (*Acanthomintha ilicifolia*), and Western snowy plover (*Charadrius alexandrines nivosus*) is present within 5 miles of the proposed project area, there is no critical habitat designated within the immediate project vicinity.

Preserve Areas: The City has prepared the MSCP to ensure the long-term survival of the California gnatcatcher and other sensitive coastal sage scrub-dependent plant and animal species in accordance with state-sanctioned NCCP program guidelines, as well as other species and habitats in the region. While the proposed project site is located within the boundaries of the MSCP Subarea Plan as well as within the SDG&E NCCP Subregional Plan Area, the site is not located on lands designated as a preserve (Multiple Habitat Planning Area) by the City (SDG&E 2011).

Wetland and Jurisdictional Waters: A jurisdictional delineation conducted pursuant to guidelines set forth by the U.S. Army Corps of Engineers (ACOE) was performed by consulting biologists (RECON) at potential jurisdictional wetland sites within the biological survey area in September 2009. As shown in Table 5.5-4, 0.23-acre of ACOE wetlands and jurisdictional waters and 0.38-acre of CDFG, Regional Water Quality Control Board (RWQCB), and City of San Diego jurisdictional resources are located within the survey area. The location of wetlands and jurisdictional resources within the biological survey area are depicted on Figure 5.5-2.

Table 5.5-4: Existing Jurisdictional Resources within the Proposed Project Survey Area

Jurisdictional Resource	Acres
ACOE	—
Wetlands	0.19
Non-wetland waters of the US1	0.04
CDFG2	—
Streambed	0.04
Riparian	0.34
City of San Diego Wetland3	0.38
RWCQB4	0.38

Source: SDG&E 2011

1. Composed of the unvegetated, unnamed drainage channel within the survey area.
2. CDFG resources consist of riparian habitat associated with the unnamed canyon bottom drainage. Streambed resource acreage is the same as ACOE non-wetland waters acreage, and riparian resource acreage includes all riparian habitat within the survey area in addition to ACOE wetlands.
3. The City of San Diego takes jurisdiction over all naturally occurring wetland vegetation.
4. RWCQB takes jurisdiction over all waters of the State and all waters of the United States.

5.5.2 Regulatory Setting

Federal

Clean Water Act

The ACOE and the EPA have jurisdiction over "waters of the United States," which are generally classified as wetlands, navigable water, or other waters and include marine waters, tidal areas, stream channels, and associated wetlands.[1] Under federal regulations, wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas" (40 CFR 232.2).

Policies regulating the loss of wetlands generally stress the need to compensate for wetland acreage losses by creating wetlands from non-wetland habitat on at least an acre-for-acre basis. Projects that cause the discharge of dredged or fill materials in waters of the United States require permitting by the ACOE. Actions affecting small areas of jurisdictional waters may qualify for a Nationwide Permit, provided conditions of the permit are met (such as avoiding impacts to threatened or endangered species or to important cultural sites). Projects that do not meet the Nationwide Permit conditions or projects that disturb a larger area require an Individual Permit. The process for obtaining an Individual Permit requires a detailed alternatives analysis and development of a comprehensive mitigation/monitoring plan.

Rivers and Harbor Act of 1899

Section 10 of the Rivers and Harbors Act (33 U.S.C. 401 et seq.) requires authorization from the ACOE for the construction of any structure in or over any navigable water of the U.S., the excavation/dredging or deposition of material in these waters, or any obstruction or alteration in a "navigable water." The construction of structures or work outside the limits defined for navigable waters of the U.S. require a Section 10 permit if the structure or work affects the course, location, condition, or capacity of the water body.

Endangered Species Act

The federal ESA provides legislation to protect federally listed plant and animal species. Section 7 of the ESA requires that all federal agencies must, in consultation with the USFWS or National Marine Fisheries Service, ensure that the lead agency's actions do not jeopardize the continued existence of a listed species, or destroy or adversely modify the listed species' "critical habitat." Section 9 prohibits the take of any fish or wildlife species listed under the ESA as endangered. Take of threatened species also is prohibited under Section 9 unless otherwise authorized by federal regulations. *Take*, as defined by the ESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." *Harm* is defined as "any act that kills or injures the species, including significant habitat modification." Section 9 also prohibits removing, digging up, cutting, and maliciously damaging or destroying

[1] Visit the following website for further specification regarding non-navigable (i.e., wetlands) waters that are classified as waters of the United States: http://www.epa.gov/owow/wetlands/pdf/CWA_Jurisdiction_Following_Rapanos120208.pdf.

federally listed plants on sites under federal jurisdiction. Section 10 of the ESA describes the process by which take permits are issued by USFWS/National Marine Fisheries Service for take of listed species incidental to an otherwise lawful activity.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 et seq.) is a federal statute that implements treaties with several countries on the conservation and protection of migratory birds. The number of bird species covered by the MBTA is extensive and is listed in 50 CFR 10.13. The regulatory definition of "migratory bird" is broad and includes any mutation or hybrid of a listed species and includes any part, egg, or nest of such bird (50 CFR 10.12). Migratory birds are not necessarily federally listed endangered or threatened birds under the ESA. The MBTA, which is enforced by USFWS, makes it unlawful "by any means or in any manner, to pursue, hunt, take, capture, [or] kill" any migratory bird or attempt such actions, except as permitted by regulation. The applicable regulations prohibit the take, possession, import, export, transport, sale, purchase, barter, or offering of these activities, except under a valid permit or as permitted in the implementing regulations (50 CFR 21.11).

State

California Endangered Species Act

The California Endangered Species Act (CESA) provides legal protection for plants or wildlife species listed as rare, threatened, or endangered. The act prohibits the take of endangered and threatened species; however, habitat destruction is not included in the state's definition of take. Under CESA, *take* is defined as an activity that would directly or indirectly kill an individual of a species, but the definition does not include harm or harass. CESA Section 2090 requires state agencies to comply with endangered species protection and recovery and to promote conservation of these species. CDFG administers the act and authorizes take through Section 2081 agreements, except for species designated as fully protected.

Animal species considered endangered or threatened by the state are listed in 14 CCR 670.5, and the CDFG maintains lists of plant and animal species designated endangered, threatened, and rare. The CDFG also maintains a list of "species of special concern" based on limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. The CDFG is empowered by state law to review projects for their potential to impact state-listed species and species of special concern, as well as their habitats.

California Fish and Game Code

The California Fish and Game Code governs state-designated wetlands, including riparian and stream habitat, and mandates that mitigation be implemented to replace wetland extent and value lost to development. Sections 1600–1607 of the Fish and Game Code regulates activities that would affect rivers, streams, or lakes by altering the flow; substantially changing or using any materials from the bed, channel, or bank of any river, stream, or lake; or disposing of debris. Activities that affect these areas, as well as associated riparian habitats, would require a Streambed Alteration Permit from the Fish and Game Code. Section 3503 of the Fish and

Game Code prohibits impacts to actively nesting birds, their nests, or their eggs. Section 3503.5 prohibits killing of raptor species and destruction of raptor nests.

The Fish and Game Code provides protection from take for a variety of species, referred to as *fully protected species*. Fish and Game Code Section 3511 lists fully protected birds and prohibits take of these species. The code defines *take* as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Except for take related to scientific research, all take of fully protected species is prohibited.

Porter-Cologne Water Quality Control Act and Section 401 of the Clean Water Act

California's RWQCB administers both the Porter-Cologne Water Quality Control Act and Section 401 of the CWA. The Porter-Cologne Water Quality Control Act, California Water Code Section 13260, requires that "any person discharging waste, or proposing to discharge waste, within any region that could affect the 'waters of the State' to file a report of discharge" with the RWQCB. Waters of the state are defined in the Porter-Cologne Act as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code, Section 13050 (e)).

According to the RWQCB, waters of the state include but are not limited to rivers, streams, lakes, bays, marshes, mudflats, unvegetated seasonally ponded areas, drainage swales, sloughs, wet meadows, natural ponds, vernal pools, diked bay lands, seasonal wetlands, and riparian woodlands pursuant to Section 401 of the CWA. The RWQCB has also claimed jurisdiction and exercised discretionary authority over "isolated waters."

Streambed Alteration Agreement

CDFG must be notified prior to beginning any activity that would obstruct or divert the natural flow of, use material from, or deposit or dispose of material into a river, stream, or lake, whether permanent, intermittent, or ephemeral waterbodies under Section 1602 of the California Fish and Game Code. CDFG has 30 days to review the proposed actions and propose measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFG and the applicant is the "Streambed Alteration Agreement." The conditions of a streambed alteration agreement and a Clean Water Act (CWA) Section 404 permit often overlap.

California Native Plant Protection Act

The Native Plant Protection Act of 1977 (California Fish and Game Code, Sections 1900–1913) directed the CDFG to carry out the Legislature's intent to "preserve, protect and enhance rare and endangered plants in this State." The Native Plant Protection Act gave the California Fish and Game Commission the power to designate native plants as "endangered" or "rare" and protect endangered and rare plants from take. When the California Endangered Species Act was passed in 1984, it expanded on the original Native Plant Protection Act and enhanced legal protection for plants and created the categories of "threatened" and "endangered" species to parallel the Federal Endangered Species Act. The California Endangered Species Act converted all rare animals into the act as threatened species but did not do so for rare plants, which resulted in three listing categories for plants in California: rare, threatened, and endangered. The Native Plant Protection Act remains part of the California Fish and Game

Code, and mitigation measures for impacts to rare plants are specified in a formal agreement between CDFG and the project proponent.

Local

City of San Diego General Plan

Several policies within the Conservation Element (Part X) of the City of San Diego General Plan (City of San Diego 2008) relate to the protection of biological resources, and therefore, they are considered applicable to the proposed project. These policies include the following:

- Policy CE-G.1. Preserve natural habitats pursuant to the MSCP, preserve rare plants and animals to the maximum extent practicable, and manage all City-owned native habitats to ensure their long-term biological viability.
  a. Educate the public about the impacts invasive plant species have on open space.
  b. Remove, avoid, or discourage the planting of invasive plant species.
  c. Pursue funding for removal of established populations of invasive species within open space.
- Policy CE-H.7. Encourage site planning that maximizes the potential biological, historic, hydrological, and land use benefits of wetlands.
- Policy CE-H.8. Implement a "no net loss" approach to wetlands conservation in accordance with all city, state, and federal regulations.

SDG&E Natural Community Conservation Plan (NCCP)

Approved in December 1995, SDG&E's NCCP authorizes take of 110 species (covered species) resulting from impacts from SDG&E's ongoing activities including installation, use, maintenance, and repair operations and expansion to those systems (SDG&E 1995). With the NCCP, SDG&E, USFWS, and CDFG have, concurrent with the approval date, entered into a long-term Implementing Agreement that describes the legal rights and obligations regarding each of these parties with respect to the implementation and maintenance of the NCCP. The Implementing Agreement authorizes SDG&E to conduct its activities within the plan area provided they are performed in conformance with the plan. The NCCP prescribes as "operational protocols" various protection, mitigation, and conservation measures that SDG&E must implement as part of its covered activities to ensure the survivability and conservation of protected species and their habitat. The 61 operational protocols provided in SDG&E's NCCP include provisions for personnel training; pre-activity studies; and maintenance, repair, and construction of facilities, including access roads, survey work, and emergency repairs. SDG&E's NCCP does not exempt projects subject to permits from the CPUC or other agencies, thereby triggering the requirement for California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) review, using the SDG&E NCCP for the evaluation of impacts to covered species and their habitats. SDG&E's NCCP also has defined a number of plant and animal species as narrow endemics. These species are restricted in their distribution, may have rigid or narrow ecological requirements, and generally have low population numbers. As such, take authorization of these species is limited to emergencies and unavoidable impacts from repairs to existing facilities. Take of the species for non-emergency work may not occur without first conferring with the USFWS and

CDFG. Furthermore, for new projects, destruction of narrow endemic wildlife species or their supporting habitat would not be covered by the NCCP.

Under its NCCP, SDG&E consults with the USFWS and CDFG on certain projects or activities in natural areas by preparing "pre-activity surveys" that evaluate the scope and nature of potential impacts in advance of construction or maintenance activities. The pre-activity survey, when submitted, initiates consultation with the USFWS and CDFG under established time frames to identify potential impacts and feasible avoidance, minimization, and/or mitigation measures as described in the NCCP.

As described in the Implementing Agreement for the SDG&E NCCP, USFWS, CDFG, and SDG&E agree that absent unforeseen circumstances, the mitigation measures provided in SDG&E's NCCP constitute the only mitigation measures that shall be required for any activity covered by the plan where it results in an impact to a covered species or its habitat.

The proposed project falls within the area where SDG&E's utility operations are governed by the NCCP. For the proposed project, SDG&E has adopted the operational protocols contained in the NCCP. While the project area is located within the City's MSCP Subarea Plan, SDG&E's public utility activities, such as the proposed project, are not subject to the regulatory jurisdiction of such local governments and, therefore, are not governed by the terms and conditions of such plans. However, in implementing its NCCP for the project, SDG&E would coordinate with the City and other jurisdictions to achieve consistency to the extent feasible. Where consistency is not feasible, SDG&E's NCCP provides for appropriate protocols and mitigation measures to protect natural community and natural resource values in these conservation-planning areas.

City of San Diego Multiple Species Conservation Program

Prepared pursuant to general standards developed by the USFWS and the CDFG to meet the requirements of the California NCCP Act of 1992, the City of San Diego MSCP Subarea Plan allows the City to issue take permits at the local level. Consistent with the MSCP plan, the Subarea Plan serves to implement the City's portion of the MSCP preserve (City of San Diego 1997). The City has also developed a Multiple Habitat Planning Area (MHPA) in cooperation with the wildlife agencies, property owners, developers and environmental groups. While the MHPA delineates specific core biological resource areas and corridors within the City boundaries that are intended for long-term conservation, limited development is permitted within the MHPA.

The City also designates certain habitats as environmentally sensitive lands (ESLs). Wetlands and listed non-covered species habitats are designated as ESLs and are protected by federal and state regulations. Under the ESL, impacts to wetlands should be avoided, and the City requires that a wetland buffer (a minimum of 100 feet wide) shall be maintained around all features as appropriate to protect the functions and values of the wetland. According to the City's Land Development Code, the width of the buffer may be increased or decreased on a case-by-case basis in consultation with CDFG, USFWS, and ACOE.

5.5.3 Environmental Impacts

Significance Criteria

Appendix G of the CEQA Guidelines provides guidance for evaluating whether a development project may result in significant impacts. Appendix G suggests that a development project could have a significant impact on biological resources if the proposed project would:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Impact Discussion

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Special-Status Plants

As stated in Section 5.5.1, Environmental Setting, five Torrey pines have been planted along the cut slope located south of Mira Sorrento Place and within restored coastal sage scrub vegetation. However, because these trees are not part of a naturally occurring population, they would not be considered an MSCP Tier I habitat (Torrey pines forests are considered a Tier I habitat); impacts to these individuals would not be considered significant, and therefore, no mitigation is required. While the habitat assessment surveys did not detect any other special-status plant species on site, several plants were determined to have low potential to occur on site (see Table 5.5-3), and a detailed rare plant survey was not conducted for the site. Therefore, because a rare plant survey has not been conducted for the site, it is assumed that potential exists for special-status plants to occur on site and that these plants may be impacted during construction if appropriate protective measures are not implemented. Potential impacts are therefore considered significant.

To ensure that impacts to special-status plants are reduced to less-than-significant level, SDG&E would implement APM-BIO-1 to avoid, minimize, or mitigate for impacts to biological resources. Among those operational protocols to be implemented include operational protocol 11 (personnel training) and 13 (pre-activity studies), which would inform workers of sensitive biological resources occurring on site and would require pre-construction surveys to identify on-site resources. In addition to APM-BIO-1, SDG&E would implement Mitigation Measure (MM) BIO-1 to ensure that impacts to special-status plants are reduced to less-than-significant levels.

MM BIO-1 Prior to construction, SDG&E shall retain a qualified biologist to conduct a focused rare plant survey for the entire proposed impact area within the project area during the time period when the special-status plant species are detectable. Locations of rare/special-status plants shall be identified and inventoried. If special-status plants are identified during surveys, then SDG&E shall retain a qualified biologist to supervise construction activities within the vicinity of the special-status plant species. If impacts to special-status plant species are unavoidable, the biologists shall recommend avoidance or mitigation approaches. Alternatively, if the special-status plant species in question is a covered species within the SDG&E Subregional NCCP, mitigation consistent with measures established in the NCCP shall be provided. The results of the focused plant surveys and measures outlined above that will be implemented by SDG&E in the event special-status plant species are identified on site shall be provided to CPUC prior to any construction activities including clearing, staging, grading, etc.

Special-Status Wildlife (Reptiles)

Coastal whiptail, a sensitive wildlife species not covered under the NCCP was observed on site during habitat surveys. While construction activities could directly impact the habitat of the species through disturbance of habitat, SDG&E would implemented APM-BIO-1 to avoid, minimize, or mitigate impacts to biological resources by restricting vehicles to existing roads when feasible, minimizing impacts by defining the disturbance areas, designing the proposed project to avoid or minimize new disturbance and erosion, and adjusting access roads to avoid sensitive habitats. APM-BIO-1 requires that the NCCP operational protocol requires that pre-activity studies, including focused surveys, are conducted. In addition, implementation of MM BIO-2 (which requires a biological monitor to be present during all vegetation removal activities to prevent impacts to special-status species), as well as MM BIO-3 and MM BIO-4, would further reduce potential impacts to less than significant levels.

MM BIO-2 SDG&E shall retain qualified biologists and other qualified resource specialists, as necessary, to monitor project construction. Monitors shall be hired and trained prior to construction and shall be responsible for preconstruction surveys, work area delineations (i.e., staking, flagging, etc.), on-site monitoring, documentation of violations and compliance, coordination with construction inspectors, and post-construction

documentation. The SDG&E on-site biological monitors shall prepare weekly reports during ground-disturbance activities and send them to the CPUC and the CPUC monitors. The SDG&E on-site biological monitors shall prepare a post-construction compliance report within 60 days of the end of ground-disturbance activities and send it to the CPUC.

SDG&E's monitors shall be responsible for obtaining clearance from the CPUC and, if necessary, resource agencies for project modifications. All project modifications variances will be documented and none will be allowed with verbal approval only. Project modifications that are considered minor with little risk to sensitive resources by the SDG&E on-site biological monitors and the CPUC biological monitors may be approved on the site but will be documented. Project modifications that could affect sensitive resources but are required to ensure the health and safety of work crews shall also be documented.

MM BIO-3 SDG&E shall conduct Worker Environmental Awareness Program (WEAP) training for construction crews (primarily crew and construction foremen) before construction activities begin within any of the sensitive habitat areas. The WEAP shall include a brief review of the special-status species and other sensitive resources that could occur in the proposed project area (including their habitat requirements and an identification of portions of the project site and adjacent areas where they might be found) and their legal status and protection. The program shall cover all mitigation measures; environmental permits and proposed project plans, such as best management practices (BMPs); erosion control and sediment plan; reclamation plan; and any other required plans. The designated biological monitor shall be responsible for ensuring that construction personnel adhere to the guidelines and restrictions. WEAP training sessions shall be conducted as needed for new personnel brought onto the job during the construction period. A list of all personnel who have attended the WEAP training shall be kept by the biological monitor and shall be available for CPUC review in the field at all times, and a copy shall be submitted to the CPUC. During WEAP training, construction personnel shall be informed of the importance of avoiding ground-disturbing activities outside of the designated work area.

MM BIO-4 At the end of each workday, any open holes shall be fully covered, after they have been inspected by the on-site biologist, with steel plates or other effective coverings to prevent entrapment of wildlife species. If fully covering the excavations is impractical, ramps will be used to provide a means of escape for wildlife that enter the excavations, or open holes will be securely fenced with exclusion fencing. If common wildlife species are found in a hole, the designated biological monitor shall immediately be informed and the animal(s) shall be removed. If the animal(s) is/are a sensitive species that require(s) special handling authorization, a qualified

biologist (agency-permitted or approved to handle a specific species) shall remove the animal before resumption of work in that immediate area. SDG&E shall specify this requirement in its agreements with all construction contractors.

Special-Status Wildlife (Avian)

As shown in *Table 5.5-5,* construction of the project would impact 1.0 acre (0.1 acre temporary, 0.9 acre permanent) of Diegan coastal sage scrub. Coastal sage scrub generally provides breeding and foraging habitat for the federally listed threatened California gnatcatcher (observed adjacent to the site) as well as other sensitive wildlife and plant species. SDG&E has proposed APM-BIO-1 to reduce impacts to coastal sage scrub and sensitive species that may potentially breed and forage in coastal sage scrub, and these measures are in accordance with the SDG&E NCCP Plan. As created, this plan allows for "incidental take" of species covered under the plan, under Section 10(a) of the U.S. Endangered Species Act, and under Sections 2081 and 2800 et seq. of the California Endangered Species Act. According to the SDG&E Subregional NCCP, "incidental take" of covered species is allowed for utility actions relating to maintenance and construction of new facilities. Under the terms of the plan, SDG&E will notify the resource agencies of the project and its potential impacts. Reporting will be in the form of an Environmental Field Survey that describes the project, location, existing habitat, impacts, recommendations to minimize impacts, and form of mitigation. More specifically for temporary impacts, SDG&E will reseed impacted areas and implement a 2-year monitoring program to determine success. For permanent impacts, SDG&E will deduct from SDG&E's Conservation Bank at a 1:1 ratio. Additionally, SDG&E will implement the protective measures described in the SDG&E NCCP. Operational protocols (Chapter 7.1) of the SDG&E NCCP would be implemented and are incorporated into this document by reference.

To further reduce impacts to the California gnatcatcher, SDG&E has proposed APM-BIO-2 in addition to the requirements of SDG&E's NCCP. As provided in APM-BIO-2, if spring surveys conducted in accordance with the NCCP and prior to construction determine the presence of the California gnatcatcher, SDG&E will ensure that grading and brushing activities within California gnatcatcher habitat be conducted from September 1 through February 28. In addition, when conducting all other construction activities during the breeding season (March 1–August 31), a qualified biologist shall conduct a pre-construction survey, and if a nest is located in the vicinity of project activities, the nest shall be monitored daily until activities are no longer occurring in the vicinity or the fledglings become independent of their nest. Lastly, if the monitor determines that project activities are disturbing or disrupting nesting, recommendations shall be made to reduce noise and/or disturbance in the vicinity. In addition to APMs BIO-1 and BIO-2, implementation of MM BIO-2, MM BIO-3, and MM BIO-4 would minimize potential impacts to sensitive species and their habitats to a less than significant level.

A number of other bird species use scrub and grassland habitats or wetlands, if sufficient cover is available, for nesting during the bird breeding season. The breeding season for

non-raptor bird species, is defined as February 15 through September 15. Impacts to an active nest of any bird species addressed under the MBTA during construction activities would be considered potentially significant. Direct impacts to nesting bird species would be considered significant. Implementation of MM BIO-5 will ensure that impacts to nesting birds are reduced to less than significant.

MM BIO-5 If construction activities including but not limited to grading or site disturbance are to occur between February 15 and September 15, a nesting bird survey shall be conducted by a qualified biologist to determine the presence of nests or nesting birds within 200 feet of the construction activities. The nesting bird surveys shall be completed no more than 72 hours prior to any construction activities. The survey will focus on special-status species known to use the area as well as other nesting birds that are protected under the MBTA. No grading or site disturbance shall occur within a 200-foot buffer of an active nest except as provided below. If work cannot be delayed until after the breeding season, a qualified biologist shall monitor the nest daily until project activities are no longer occurring within 200 feet of the nest or until the fledglings become independent of the nest. The monitoring biologist shall halt construction activities if he or she determines that the construction activities are disturbing the nesting activities. The monitor shall make practicable recommendations to reduce the noise or disturbance in the vicinity of the nest. This may include recommendations such as (1) turning off vehicle engines and other equipment whenever possible to reduce noise, (2) working in other areas until the young have fledged, or (3) placing noise barriers to maintain the noise at the nest to 60 dBA leq hourly or less or to the preconstruction ambient noise level if that exceeds 60 dBA leq hourly. The on-site biologist will review and verify compliance with these nesting boundaries and will verify that the nesting effort has finished. Unrestricted construction activities can resume when no other active nests are found. Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to the California Public Utilities Commission.

Special-Status Wildlife (Mammals)

One sensitive mammal species, southern mule deer, was detected within the project area during past surveys; however, subsequent to the 2003 surveys, Mira Sorrento Place was constructed, and the connectivity of the proposed project site to off-site areas was severely reduced. Therefore, due to the physical isolation of the proposed project site, southern mule deer is not anticipated to occur. In addition, impacts to special-status mammal species would be minimized through implementation of APM-BIO-1, which would require SDG&E to use standard operational protocols to avoid, minimize, or mitigate for impacts to sensitive biological resources. As such, impacts to special-status wildlife (mammals) would be less than significant.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Table 5.5-5 quantifies the acreage of temporary and permanent impacts to vegetation communities resulting from construction and operation of the proposed project.

Table 5.5-5: Summary of Acreage Impacts on Vegetation Communities

Vegetation Community	Summary of Acreages	
	Acreage of Temporary Impact	*Acreage of Permanent Impact*
Freshwater marsh	0.0	0.0
Southern willow scrub	0.0	0.0
Mule fat scrub	0.0	0.0
Diegan coastal sage scrub	0.1	0.9
Native grassland	0.0	0.1
Disturbed habitat	0.3	1.2
Ornamental vegetation	<0.1 (1,709 square feet)	0.2
Disturbed land	0.0	0.0
Developed land	0.0	0.0
Total	0.4	2.4

Source: SDG&E 2011

Construction of the Mira Sorrento Distribution Substation would result in temporary impacts to approximately 0.1 acre of Diegan coastal sage scrub, 0.3 acre of disturbed habitat, and less than 0.1 acre (1,709 square feet) of ornamental vegetation. These impacts are associated with the limits of temporary disturbance as depicted on Figure 5.5-1. Development of the new substation would also result in permanent impacts to approximately 0.9 acre of Diegan coastal sage scrub, 0.1 acre of native grassland, 1.2 acres of disturbed habitat, and 0.2 acre of ornamental vegetation (see Figure 5.5-1 for limits of permanent disturbance). Two of the vegetation communities that would be impacted by the development of the proposed project, Diegan coastal sage scrub and native grasslands, are considered sensitive natural communities according to the City's Subarea Plan (Diegan coastal sage scrub is considered a Tier II upland habitat and native grassland is considered a Tier I upland habitat), and therefore, any impact to these communities would be considered significant.

To ensure that permanent impacts to sensitive vegetation communities are reduced to less than significant levels, SDG&E would implement APM-BIO-1, which requires SDG&E to conduct all activities in accordance with NCCP Operational Protocols to avoid, minimize, or mitigate impacts to biological resources. Specifically, SDG&E would utilize specific operational protocols established in their NCCP (including but not limited to protocols 7, 11, 13, 14, 15, 16, 17, 20, 24, 25, 28, 29, 30, 35, 36, 39, 41, 42, 43, 44, 48, and 57). In addition to APM-BIO-1, implementation of MM BIO-6 will ensure that impacts to sensitive vegetation communities would be mitigated to less than significant.

MM BIO-6 Where impacts to Diegan coastal sage scrub and native grasslands cannot be avoided, SDG&E shall restore temporarily disturbed areas to preconstruction conditions following construction and deduct credits from the SDG&E Mitigation Credits for permanent impacts to sensitive communities, as stated in the SDG&E NCCP. Where on-site restoration is planned for mitigation of temporary impacts to sensitive vegetation communities, the applicant shall identify a habitat restoration specialist to be approved by the CPUC or that the resource agencies have indicated is acceptable to determine the most appropriate method of restoration. Restoration techniques can include hydroseeding, handseeding, imprinting, and soil and plant salvage, as discussed in Section 7.2.1 of the NCCP. Monitoring will include visual inspection of restored areas after 1 year. A second application may be made. If, after the second year, restoration is deemed unsuccessful, the USFWS and CDFG, in cooperation with SDG&E, shall determine whether the remaining loss shall be mitigated through a deduction from the SDG&E Mitigation Credits, or whether a third application would better achieve the intended purpose. The mitigation objective for impacted sensitive vegetation communities shall be restoration to preconstruction conditions as measured by species cover, species diversity, and exotic species cover. The cover of native species should increase while the cover of non-native or invasive species should decrease. Success criteria shall be established by comparison with reference sites. If, however, roots are not grubbed during temporary impacts, restoration/hydroseeding may not be necessary. This applies to impacts greater than 500 square feet, and only where grubbing occurred. For all temporary impacts greater than 500 square feet, acreage not meeting success criteria shall be deducted from SDG&E's mitigation credits at a 1:1 ratio.

In addition, SDG&E shall mitigate for permanent impacts to Diegan coastal sage scrub (all subtypes) and native grassland at a ratio of 1:1 for all permanent impacts that would result from construction activities. Evidence shall be provided to the CPUC that 0.9 acre of coastal sage scrub and 0.1 acre of native grasslands have been deducted from NCCP credits.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Construction

As shown on Figure 5.5-2 and Table 5.5-5, development of the proposed project would avoid jurisdictional resources and would not directly impact riparian habitat associated with the drainage feature located east and downslope of the proposed substation site (where practicable). In addition and as mentioned previously, SDG&E would implement operational protocols (see APM-BIO-1) to avoid, minimize, or mitigate for impacts to

biological resources including wetland resources. In particular, SDG&E would implement operational protocol 14, which requires that an environmental surveyor identify and flag the extent of sensitive habitat on site so that these areas are avoided during construction. Further, potential indirect impacts to riparian habitat would be reduced by implementation of additional BMPs to ensure that erosion and sedimentation do not adversely impact the drainage. Therefore, through avoidance of jurisdictional resources and implementation of APM-BIO-1 and BMPs, impacts to wetlands during construction would be less than significant.

Operations

During operations and maintenance of the Mira Sorrento Distribution Substation, jurisdictional resources would be avoided. Following construction, the east-facing slope located between the proposed substation wall and the existing wetlands would be revegetated, and operational and maintenance activities associated with the substation would not require activities within the wetland resources area. Therefore, impacts would be less than significant.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

As stated in Section 5.5.1, Environmental Setting, the proposed project site is located within a highly urbanized area and is adjacent to several roadways carrying high volumes of traffic. In addition, commercial, industrial, and residential development is located off site to the west, north, and east (surface streets and I-805 are located to the south), and existing development impairs use of the project site and off-site areas as major movement corridors or habitat linkages. While development of the proposed project would not significantly impede wildlife movement through the immediate area (development of the site would occur on a hilltop primarily within disturbed habitat), the drainage and riparian habitat located east of the proposed substation site may support limited wildlife movement within the canyon; however, the canyon itself is isolated from off-site habitat, and therefore, connectivity is relatively poor. As such, the proposed project would not substantially interfere with the movement of any resident or migratory fish or wildlife species, and impacts would be less than significant.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

As shown on Figure 5.5-2, the limits of temporary and permanent impacts associated with development of the Mira Sorrento Distribution Substation would be located within 100 feet of identified wetland resources, and therefore, the proposed project would conflict with the City of San Diego Land Development Code Biology Guidelines requiring the establishment and maintenance of buffers around wetlands. Therefore, while development of the proposed substation would not result in direct impacts to wetlands (see Section 5.5.3 (c) for discussion of proposed project impacts to wetlands), lack of an appropriate wetland buffer around the resource during construction would be in conflict with City of San Diego land development code. It should be noted, however, that

deviations from the minimum 100-foot wetland buffer width are possible, and buffer width may be decreased as determined on a case-by-case basis in consultation with CDFG, USFWS, and ACOE, with consideration given to the size of development, sensitivity of the wetland resources to detrimental edge effects, natural features such as topography, and the function and values of the identified resources. Furthermore, the slope between proposed substation walls and the identified wetlands would be revegetated on the tiers between retaining walls following construction, and a series of functional barriers would result. The construction of the walls between the wetlands and the proposed project would provide protection from indirect effects. There would be little noise from the proposed project upon completion of the project and little human activity and no urban predators introduced to the site. Thus, a reduced buffer width is appropriate and would result in no indirect impacts to the wetland area. Potential impacts are considered to be less than significant.

The proposed project site is not located within the City of San Diego MHPA, and therefore, development regulations applicable to parcels wholly or partially with the MHPA would not apply.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Temporary and permanent impacts to biological resources resulting from the proposed project would be restored and/or mitigated in accordance with the mitigation requirements established by SDG&E in its NCCP. Where appropriate (for permanent impacts to native grasslands and scrub for example), habitat credits would be deducted from NCCP credits. In addition, during construction, SDG&E would implement APM-BIO-1, which would ensure that construction activities are conducted in accordance with NCCP operational protocols to avoid, minimize, or mitigate impacts to biological resources. Therefore, because the provision of mitigation for impacts to special-status species and sensitive habitat would be consistent with the required ratios established in the NCCP, and because construction activities would be conducted in accordance with NCCP operational protocols, construction of the proposed project would be consistent with the provisions of the SDG&E Subregional NCCP and no impacts would occur. Regarding the identified policies of the City of San Diego General Plan and MSCP, implementation of APMs and mitigation measures would reduce potential impacts to biological resources to the maximum extent practicable, and where impacts are unavoidable, the mitigation measures and mitigation ratios are consistent with those set forth in the MSCP and are identified in MM BIO-6. SDG&E would employ a variety of methods on an as-needed basis (for example, revegetation for temporary impacts to sensitive vegetation communities and compensatory mitigation for permanent impacts), and as specified by APMs, to ensure that impacts are reduced to less-than-significant levels. Also, MM BIO-1 requires that SDG&E retain a qualified biologist to conduct a rare plant survey of the site such that rare plants are identified and avoided during construction activities.

As state above in Section 5.5.3 (c) direct and indirect impacts to wetland resources are not anticipated, and following construction, the substation wall, retaining walls, and the revegetated east-facing slope would ultimately work to protect the function and value of the identified wetland at the canyon bottom. Walls would provide a protective buffer and would minimize the potential for hazardous materials and sediment to reach the resource and native landscaping (invasive, non-native plant species would be excluded from plant palettes associated with revegetation efforts near the identified wetland) would reduce the potential for impacts associated with erosion and sedimentation.

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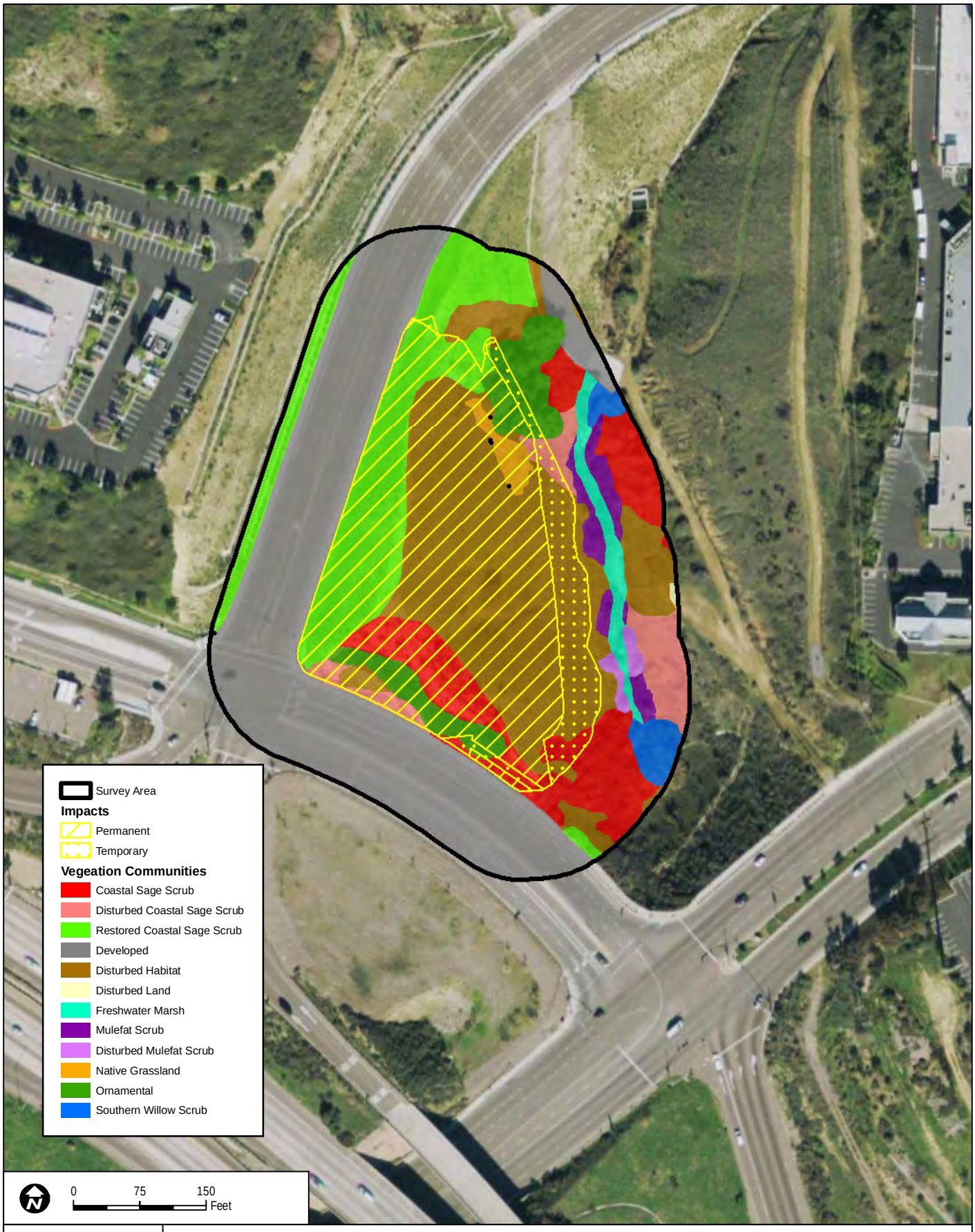

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4134-01

SOURCE: SDGE 2011

FIGURE 5.5-1

Temporary and Permanent Impacts - Vegetation Communities

Mira Sorrento Distribution Substation Project

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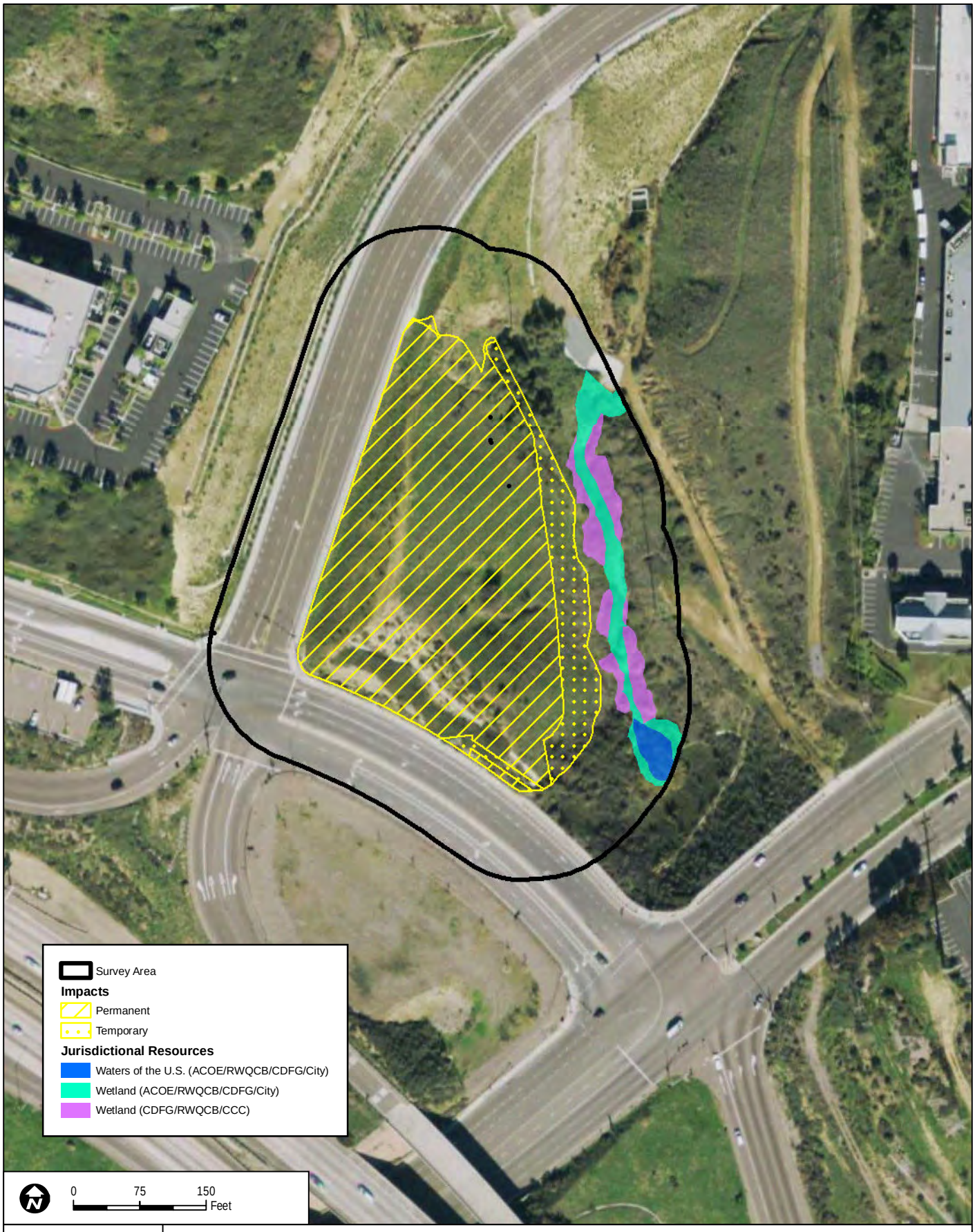

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4134-01

SOURCE: SDGE 2011

FIGURE 5.5-2

Temporary and Permanent Impacts - Jurisdictional Resources

Mira Sorrento Distribution Substation Project

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5.6 CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 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?	☐	☒	☐	☐

5.6.1 Environmental Setting

Information presented in this section was gathered from a review of San Diego Gas & Electric's (SDG&E's) Proponent's Environmental Assessment (PEA) (SDG&E 2011), including a cultural resources survey performed for the project site (RECON 2003). Site record and archival searches were completed at the San Diego Museum of Man and the South Coastal Information Center. A field survey for cultural resources was completed in 2003. In addition, ASM Affiliates conducted archaeological monitoring for the project in 2009.

A paleontological archival search was completed for the project site (San Diego Natural History Museum 2003).

Records Search and Field Survey Results – Cultural Resources: No historic or prehistoric sites were found during this survey and the record and archival search indicates that there are no sites recorded on the property.

Paleontological Resources Assessment Results: This investigation noted six paleontological localities within 1 mile of the subject property. The project site is located on deposits mapped as Ardath Shale-Scripps Foundation. Fossils occur in the formation and consist predominantly of marine organisms.

5.6.2 Regulatory Setting

Federal

National Historic Preservation Act

The regulations implementing Section 106 (36 CFR Part 800 or agency counterpart regulations) of the National Historic Preservation Act (NHPA) of 1966 (as amended) require federal agencies to identify all cultural properties on land under its control or jurisdiction that meet the criteria for inclusion in the National Register of Historic Places (NRHP) and to afford the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on those actions that may affect them.

The NHPA established the federal government's policy on historic preservation and the programs, including the NRHP, through which that policy is implemented. Under the NHPA, historic properties include "... any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places" (16 U.S.C. 470w (5)). Section 106 of the NHPA (16 U.S.C. 470f) requires federal agencies, prior to implementing an "undertaking" (e.g., issuing a federal permit), to consider the effects of the undertaking on historic properties and to afford the ACHP and the SHPO a reasonable opportunity to comment on any undertaking that would adversely affect properties eligible for listing on the NRHP.

State

The California Environmental Quality Act (CEQA) recognizes that historical resources are part of the environment and a project that "may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment" (PRC 21084.1). CEQA also requires that the lead agency determine whether the project will have a significant effect on unique archaeological resources that are not eligible for listing in the CRHR, and to avoid unique archaeological resources when feasible or mitigate any effects to less-than-significant levels (PRC 21083.2).

5.6.3 Environmental Impacts

Significance Criteria

Appendix G of CEQA provides guidance for evaluating whether a development project may result in significant impacts (14 CCR 15000 et seq.). Appendix G suggests that a development project could have a significant impact on cultural resources if the project would:

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

Impact Discussion

a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

As discussed in the Environmental Setting section, the site does not contain historic resources, and is not listed or eligible for listing in the National Register of Historic Places. No impact to historic resources would result.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

As discussed in the Environmental Setting section, a record search, field survey, and archaeological monitoring completed in 2009 for the site do not show any archaeological resources listings on the project site. Although the probability of subsurface archaeological deposits within the project area appears to be low based on previous work in the area and project research conducted for the proposed project, construction activities may result in the loss of previously unidentified or unknown cultural resources. During construction, implementation of Mitigation Measure (MM) CUL-1 would ensure that impacts to unknown cultural resources would be less than significant.

MM CUL-1: In the event that any prehistoric or historic subsurface cultural resources are discovered during ground-disturbing activities, such as chipped or ground stone, historic debris, building foundation, or human bones, all work within 50 feet of the resources shall be halted, and a qualified archaeologist shall be consulted to assess the significance of the find. If any find is determined to be significant, representatives of SDG&E, California Public Utilities Commission (CPUC), and the qualified archaeologist shall meet to determine the appropriate avoidance measures or other appropriate mitigation, with the ultimate determination to be made by the CPUC. All significant cultural materials recovered shall be subject to scientific analysis; professional museum curation, as necessary; and a report prepared by a specialist according to current professional standards.

In considering any suggested mitigation proposed by the consulting archaeologist to mitigate impacts to historical resources or unique archaeological resources, the CPUC and SDG&E shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while mitigation for historical resources or unique archaeological resources is carried out. If the CPUC, in consultation with the qualified archaeologist, determines that a significant archaeological resource is present and that the resource could be adversely affected by the proposed project, SDG&E will:

- Redesign the project to avoid any adverse effect on the significant archaeological resource

- Implement an archaeological data recovery program (ADRP), unless the qualified archaeologist determines that the archaeological resource is of greater interpretive use than research significance, and that interpretive use of the resource is feasible. If the circumstances warrant an ADRP, such a program shall be conducted. The project archaeologist and the CPUC shall meet and consult to determine the scope of the ADRP. The archaeologist shall prepare a draft ADRP that shall be submitted to the CPUC for review and approval. The ADRP shall identify how the proposed ADRP would preserve the significant information the archaeological resource is expected to contain. That is, the ADRP shall identify the scientific/historical research questions that are applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to portions of the historical property that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practical.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

As discussed in the Environmental Setting section, the site is located on deposits that have the potential for fossils to occur. Grading and excavation for the proposed project may result in disturbance or destruction of paleontological resources associated with the Ardath Shale-Scripps Formation. SDG&E has proposed APM-CUL-1 through APM-CUL-3 (see Table 4-5) requiring paleontological monitoring during grading and excavation. Implementation of these APMs would ensure that potential impacts to paleontological resources would be less than significant.

d) Disturb any human remains, including those interred outside of formal cemeteries?

The records search revealed that human remains were found approximately 1 mile southwest of the site, and therefore, the potential for unintended discovery of unknown human remains during subsurface construction. Implementation of MM CUL-2, which provides details about procedures for discovery of human remains, would reduce potential impacts to human remains to less than significant.

MM CUL-2 If human remains are discovered, there shall be no further excavation or disturbance of the discovery site or any nearby area reasonably suspected to overlie adjacent human remains until the project applicant has immediately notified the county coroner and otherwise complied with the provisions of State CEQA Guidelines, Section 15064.5(e). If the remains are found to be Native American, the county coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours. The most likely descendant of the deceased Native American shall be notified by the NAHC and given the opportunity to make proper disposition of human remains. If the NAHC is unable to identify the most likely

descendant, or if no recommendations are made within 24 hours, remains may be reinterred with appropriate dignity elsewhere on the property in a location not subject to further subsurface disturbance. If recommendations are made and not accepted, the NAHC will mediate.

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5.7 GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

5.7.1 Environmental Setting

Information presented in this section was gathered from a review of San Diego Gas & Electric's (SDG&E's) Proponent's Environmental Assessment (PEA) (SDG&E 2011), including Kleinfelder Inc.'s geotechnical investigation report in 2003 and updated report in 2010.

Site Geology: According to the geotechnical report, geologic units occurring on site include fill soils, alluvium, colluvium/topsoil, landslide deposit and Scripps Formation. Fill soils are those resulting from previous grading and earthwork activities for the off-site roadways.

Fill soils are present along the southern portion of the site. Colluvium/topsoil is generally located throughout site and consists of loose/soft clay to sandy clay. Alluvium deposits are present particularly east of the substation site in the vicinity of the natural drainage. Landslide deposit on site is fine-grained sand to clayey silt. These loose soils and landslide deposit are not suitable for use as foundation for structures, or for supporting fill material, and have moderate liquefaction/settlement potential.

The Scripps Formation consists of Eocene-age deposits of siltstone, claystone, and sandstone, and is located in subsurface areas throughout the site. Groundwater was encountered at one boring in the lower portion of the site at a depth of approximately 12.5 feet, and is associated with drainage east of the site.

Potential Geologic Hazards: Potential geologic hazards include surface rupture, seismic shaking, landslides, liquefaction, seismically induced settlement, tsunamis, seiches, and expansive soils.

Seismic Setting: The San Diego region is influenced by plate boundary interaction between the Pacific and North American plates. The San Clemente fault zone, approximately 60 miles west of San Diego, marks the edge of a regional fault zone characterized by northwest-striking, predominately right-slip faults that extend into the California Continental Borderland Province. This zone is bordered to the east by the San Andreas Fault, located approximately 90 miles east of San Diego. The nearest significant seismic hazard to coastal San Diego County is the Rose Canyon fault zone. The Rose Canyon fault zone is comprised predominantly of right lateral strike-slip faults that extend south-southeast, bisecting the San Diego metropolitan region. The State of California has designated portions of the fault zone in the Mount Soledad, Rose Canyon, and downtown San Diego area as Earthquake Fault Zones.

The project site is not underlain by active or potentially active faults, and does not lie within an Alquist-Priolo Earthquake Fault Zone. The nearest known active fault is the Rose Canyon fault located 3.9 miles west of the site.

Surface Rupture: As previously discussed, the subject site is not underlain by a known active or potentially active fault. Therefore, the potential for ground rupture due to faulting at the site is considered low.

Landslides: Several formations within the San Diego region are particularly prone to landsliding. These formations generally have high clay content and mobilize when they become saturated

with water. Other factors, such as steeply dipping bedding that project out of the face of the slope and/or the presence of fracture planes, will also increase the potential for landsliding.

A relatively shallow landslide was mapped on the proposed site. As mapped, the landslide deposit is approximately 190 feet in length and 90 feet in width, with a near vertical head scarp across the upper elevations.

Liquefaction and Seismic Settlement: The majority of the subject site is underlain at depth by weakly to moderately cemented sandstones and weakly to strongly indurated siltstones and claystones. Based on the dense nature of the on-site formational deposits as well as the absence of a shallow groundwater in those areas, the potential for liquefaction and seismic related settlement across the majority of the site is low. However, a drainage crosses the southeastern portion of the site. Unconsolidated and saturated landslide deposits were encountered in this area along with alluvium mapped near the channel area. Therefore, the potential for liquefaction in the southeastern portion of the site is considered moderate.

Tsunamis and Seiches: Based on the elevation and inland location of the site, the potential for damage due to either a tsunami or seiche is very low.

Expansive Soils: Expansive soils are characterized by their ability to undergo significant volume changes (shrink or swell) due to variations in moisture content. Expansive soils are present on the site.

5.7.2 Regulatory Setting

Geologic resources and geotechnical hazards are governed primarily by local jurisdictions. The conservation elements and seismic safety elements of city general plans contain policies for the protection of geologic features and avoidance of hazards, but do not specifically address transmission line construction projects. For the proposed underground segment, local grading ordinances establish detailed procedures for underground utility construction, including trench backfill, compaction, and testing. Relevant and potentially relevant statutes, regulations, and policies are discussed as follows.

State

California Environmental Quality Act (CEQA) (California Public Resources Code, Section 21000 et seq.) was adopted in 1970 and applies to most public agency decisions to carry out, authorize, or approve projects that may have adverse environmental impacts. CEQA requires that agencies inform themselves about the environmental effects of their proposed actions, consider all relevant information, provide the public with an opportunity to comment on the environmental issues, and avoid or reduce potential environmental harm whenever feasible. Relevant CEQA sections include those for protection of geologic and mineral resources, protection of soil from erosion, and protection of paleontological resources (certain fossils found in sedimentary rocks).

Alquist-Priolo Earthquake Fault Zoning Act of 1972

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 (formerly the Special Studies Zoning Act) (California Public Resources Code, Sections 2621–2630) regulates development and construction of buildings intended for human occupancy to avoid the hazard of surface fault rupture. While the act does not specifically regulate gas pipelines, it does help define areas where fault rupture is most likely to occur. The act groups faults into categories of active, potentially active, and inactive. Historical and Holocene-age faults are considered active, late-Quaternary-age and Quaternary-age faults are considered potentially active, and pre-Quaternary-age faults are considered inactive. These classifications are qualified by the conditions that a fault must be shown to be "sufficiently active" and "well defined" by detailed site-specific geologic explorations in order to determine whether building setbacks should be established.

California Seismic Hazards Mapping Act: Seismic Ground Shaking Hazards

The California Seismic Hazards Mapping Act of 1990 (California Public Resources Code, Sections 2690–2699.6) is designed to protect the public from the effects of strong ground shaking, liquefaction, landslides, other ground failures, or other hazards caused by earthquakes. The act requires site-specific geotechnical investigations to identify the hazard and the formulation of mitigation measures before the permitting of most developments designed for human occupancy. Special Publication 117, *Guidelines for Evaluating and Mitigating Seismic Hazards in California* (CGS 2008), constitutes the guidelines for evaluating seismic hazards other than surface fault rupture and for recommending mitigation measures, as required by California Public Resources Code, Section 2695(a). Because the project area has yet to be mapped, the provisions related to the California Seismic Hazards Mapping Act would not apply.

Erosion Regulations

State regulations pertaining to the management of erosion/sedimentation as they relate to water quality are described in Section 5.9 of this Initial Study/Mitigated Negative Declaration. The primary purpose of these regulations and standards is to protect surface waters from the effects of land development. Among other measures included in such regulations and standards are the requirements to reduce the potential for sedimentation caused by erosion.

California Building Code

The 2001 California Building Code (CBC) is based on the 1997 Uniform Building Code (UBC), which is used widely throughout the United States, when adopted on a state-by-state or district-by-district basis, and has been modified for California conditions with numerous more detailed and/or more stringent regulations. The State of California provides minimum standards for structural design and site development for projects containing buildings for human occupancy through the CBC.

Chapter 16 of the CBC (2001) reduces impacts associated with exposure of people and structures to seismic hazards, and it ensures that structures meet specific minimum seismic safety and structural design standards. Chapter 33 specifies the requirements to be fulfilled for site work, demolition, and construction, including the protection of adjacent properties from damage caused by such work. The CBC requires a site-specific geotechnical study to address

seismic issues and identifies seismic factors that must be considered in structural design. Chapter 33 requires all development intended for human occupancy to adhere to regulations pertaining to grading activities, including drainage and erosion control and treatment of expansive soils.

5.7.3 Environmental Impacts

Significance Criteria

Appendix G of CEQA provides guidance for evaluating whether a development project may result in significant impacts (14 CCR 15000 et seq.). Appendix G suggests that a development project could have a significant impact on geology, soils, and seismicity if the project would:

a) Expose people or structures to potential adverse effects, including the risk of loss, injury, or death involving the following:
   i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the state geologist for the area or based on other substantial evidence of a known fault
   ii) Strong seismic ground shaking
   iii) Seismic-related ground failure, including liquefaction
   iv) Landslides
b) Result in substantial soil erosion or the loss of topsoil
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

Impact Discussion

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology, Special Publication 42, 2007)*

No portion of the project is located in an active fault zone. Consequently, it is anticipated that implementation of the proposed project would not expose people or structures to substantial adverse effects, including the risk of loss, injury, or death caused by fault rupture.

ii) *Strong seismic ground shaking*

The project site would likely be subject to ground shaking in response to either a local moderate or more distant large magnitude earthquake. To reduce impacts from ground

shaking, SDG&E proposes to implement APM-GEO-1 (see Table 4-5), which incorporates recommendations from the geotechnical investigation for the project site (Kleinfelder 2003 and 2010). Incorporation of these recommendations will ensure that project design will adhere to specific performance standards to address geologic hazards identified on the project site and therefore would reduce impacts from ground shaking to less than significant.

iii) Seismic-related ground failure, including liquefaction

The drainage area in the southeastern portion of the site has moderate potential for liquefaction. To reduce impacts to liquefaction and potential ground failure, SDG&E proposes to implement APM-GEO-1, which would ensure that development of the project is in conformance with recommendations of the geotechnical investigation. These recommendations address the potential for ground failure, including liquefaction, and would ensure that impacts would be less than significant.

iv) Landslides

A shallow landslide was mapped on the project site during the geotechnical investigation. To reduce impacts due to a potential landslide, SDG&E proposes to implement APM-GEO-1, which requires that the project conform to the recommendations of the geotechnical investigation. These recommendations require that construction grading remove potentially compressible soils within the development area. Because potentially unstable soils will be removed as part of the project, impacts related to landslide hazards would be less than significant.

b) Result in substantial soil erosion or the loss of topsoil?

Clearing and grading of the site for project construction would result in the potential to increase erosion on site. SDG&E has committed to incorporate a Stormwater Pollution Prevention Plan (SWPPP) and associated best management practices (BMPs) as discussed under APM-HYD-1 (see Table 4-5). These BMP measures would minimize erosion or loss of topsoil during construction and require that upon completion of the project, all cut and fill slopes would be landscaped, and require that design of the site would ensure that deployment of drainage on and off site would not result in erosion. In addition to APM-HYD-1, Mitigation Measure (MM) HY-1 (see Section 5.9, Hydrology and Water Quality) has been added to ensure that impacts due to soil erosion will be less than significant.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

As discussed in responses 5.7.3 (*a-iii* and *a-iv)*, the project contains soils that are susceptible to landslides and liquefaction; however, SDG&E proposes to implement APM-GEO-1, which would ensure removal of unstable soils in the development area. Consequently, impact caused by unstable soils and geologic unit would be less than significant.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Soils on the project site have a medium expansion range. SDG&E would comply with standard UBC and CBC standards by incorporating recommendations from the geotechnical investigation (APM-GEO-1), which include removal of expansive soils. Consequently, potential impacts from expansive soils would be less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The construction and operation of the project would not include modifications or additions to current wastewater disposal systems. Therefore, there would be no impact related to soils incapable of supporting septic systems.

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5.8 HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☒	☐	☐

5.8.1 Environmental Setting

Information presented in this section was gathered from a review of San Diego Gas & Electric's (SDG&E's) Proponent's Environmental Assessment (PEA) (SDG&E 2011), including a Phase I Environmental Site Assessment (ESA) prepared by Haley & Aldrich Inc. for the proposed site (2009).

Hazardous Materials/Contaminated Sites: The site does not contain any known hazardous materials or identified hazardous materials sites. Seven sites within 1 mile of the site were identified, as listed in Table 5.8-1. None of these sites were found to pose a risk to the proposed site.

Proximity to Schools: There are no schools within 0.25 mile of the Mira Sorrento Distribution Substation Project (proposed project) site. The closest school to the proposed site is the San Diego College of Ayurveda, located approximately 0.3 mile to the west.

Fire Hazard: Government Code 51175-89 directs the California Department of Forestry and Fire Protection (CAL FIRE) to identify areas of very high fire hazard severity zones with Local Responsibility Areas (LRAs). The proposed project site has been identified as a high fires hazard severity zone by CAL FIRE.

Proximity to Airports: The site is not within 2 miles of a public or private airport, but it is within 2 miles of Marine Corps Air Station (MCAS) Miramar. According to the Mira Mesa Community Plan and MCAS Miramar Airport Land Use Compatibility Plan (ALUCP), the site is located within the Accident Potential Zone (APZ) II and the 60–65 dB CNEL Noise Contour Area of MCAS Miramar. The ALUCP shows that the project site is located outside of the Clear Zone of MCAS Miramar. The ALUCP specifies that any development proposal that includes an object over 200 feet above ground level or that penetrates the 100:1 slope extending 20,000 feet from the nearest point of the nearest runway must be submitted to the Federal Aviation Administration for an obstruction evaluation (ALUC 2011).

Table 5.8-1: Environmental Database Results

Database Searched	Search Distance (miles)	Number of Sites	Anticipated Risk	Reasoning
HAZNET	0.50	2	None	Because no violations have been reported, and based on the database report, these sites are not expected to pose a risk.
Facility Index System (FINDS)	0.50	2	None	Because no violations have been reported, and based on the database report, these sites are not expected to pose a risk.
San Diego County HMMD	0.50	1	None	This case remained open as of the date of preparation of the Phase I ESA (August 2009). As the release was limited to soil only, and TCE and PCE soil concentrations (September 2008) were below PRGs, a Request for Site Closure Report was submitted to DEH in November 2008. The case is currently being processed by DEH; however, the site is not expected to pose a risk.

Table 5.8-1: Environmental Database Results

Database Searched	Search Distance (miles)	Number of Sites	Anticipated Risk	Reasoning
San Diego County Site Assessment and Mitigation Program (SAM)	0.50	1	None	This case remained open as of the date of preparation of the Phase I ESA (August 2009). As the release was limited to soil only, and TCE and PCE soil concentrations (September 2008) were below PRGs, a Request for Site Closure Report was submitted to DEH in November 2008. The case is currently being processed by DEH; however, the site is not expected to pose a risk.
RCRA Generators	Site & Adjoining	2	None	Because no violations have been reported, and based on the database report, these sites are not expected to pose a risk.
State Spills, Leaks, Investigation and Cleanup	0.50	1	None	This case remained open as of the date of preparation of the Phase I ESA (August 2009). As the release was limited to soil only, and TCE and PCE soil concentrations (September 2008) were below PRGs, a Request for Site Closure Report was submitted to DEH in November 2008. The case is currently being processed by DEH; however, the site is not expected to pose a risk.
State DTSC (ENVIROSTOR)	1.0	2	None	Of the two sites identified in the ENVIROSTOR database, one is located within 0.87 mile downgradient of the Mira Sorrento Distribution Substation site; however, based on the database report, distance to the project site, and downgradient location, the site is not expected to pose a risk. The case for the second site remained open as of the date of preparation of the Phase I ESA (August 2009). Since the release was limited to soil only, and TCE and PCE soil concentrations (September 2008) were below PRGs, a Request for Site Closure Report was submitted to DEH in November 2008. DEH is currently processing the case; however, the site is not expected to pose a risk.

Source: SDG&E 2011

5.8.2 Regulatory Setting

Federal

Hazardous Materials

Toxic Substances Control Act of 1976

Congress enacted the Toxic Substances Control Act of 1976 (15 U.S.C. 2601 et seq.) to give the U.S. Environmental Protection Agency (EPA) the ability to track the thousands of industrial chemicals being produced in or imported into the United States. The EPA routinely screens industrial chemicals and reports and tests those found to pose a potential health hazard to the

environment and/or to human health. Through the Toxic Substances Control Act, the EPA can ban the manufacture and import of chemicals that pose an immediate risk. The EPA also can track and control new industry-developed chemicals to protect the environment and human health from potential risks.

Resource Conservation and Recovery Act of 1976

The Resource Conservation and Recovery Act (RCRA), or Solid Waste Disposal Act (42 U.S.C. 6901 et seq.), established a framework for the proper management of hazardous and non-hazardous solid waste. This act, along with the Toxic Substances Control Act, enacted a program administered by the EPA for regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA was amended in 1984 by the Hazardous and Solid Waste Act, which affirmed and extended the "cradle to grave" system of regulating hazardous wastes from their creation to disposal. The use of certain techniques for the disposal of some hazardous wastes was specifically prohibited by the Hazardous and Solid Waste Act. RCRA focuses on active and future facilities; it does not address abandoned or historical sites, which are managed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 U.S.C. 9601 et seq.).

Comprehensive Environmental Response, Compensation, and Liability Act

CERCLA (42 U.S.C. 9601 et seq.), commonly known as Superfund, was enacted by Congress on December 11, 1980. This law provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA established requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for the release of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified. The law authorizes two types of responses: (1) short-term removals requiring prompt response and (2) long-term remedial response actions that permanently and significantly reduce serious on-site dangers. CERCLA also enabled revision of the National Contingency Plan (42 U.S.C. 9605). The National Contingency Plan provided guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The National Contingency Plan also established the National Priorities List of contaminated sites warranting further investigation by the EPA. CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) on October 17, 1986.

Superfund Amendments and Reauthorization Act

Under SARA Title III, a nationwide emergency planning and response program was established that imposed reporting requirements for businesses that store, handle, or produce significant quantities of hazardous or acutely toxic substances, as defined under federal laws. SARA Title III required each state to implement a comprehensive system to inform federal authorities, local agencies, and the public when a significant quantity of hazardous, acutely toxic substances are stored or handled at a facility. In addition, SARA provided new enforcement and settlement tools, increased the focus on human health problems posed by hazardous waste sites, and stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites.

EPA Risk Management Program

Ammonia is an example of an acutely hazardous material that the EPA regulates under the Risk Management Program, contained in the Clean Air Act (42 U.S.C. 7401 et seq.). Although a federal program, the Risk Management Program is intended to reduce hazards at the local level. The program requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes detailed safety precautions and maintenance plans and an adequate emergency response program. The information required is intended to help local fire, police, and emergency response personnel (first responders) in the event of an accidental spill or exposure event.

Clean Water Act

The EPA's Oil Pollution Prevention Rule was published under the authority of the Clean Water Act and is outlined in 40 CFR 112. Facilities subject to the rule must prepare and implement a plan to prevent any discharges of oil into or upon navigable waters of the United States or adjoining shorelines. The plan is called a Spill Prevention, Control, and Countermeasures (SPCC) Plan and is generally intended to minimize the potential for spills into navigable waters of the United States as opposed to response and cleanup after a spill occurs.

All nontransportation-related facilities that have an aggregate aboveground storage capacity greater than 1,320 gallons or a completely buried storage capacity greater than 42,000 gallons, and have a reasonable expectation of discharge into or upon navigable waters of the United States, are required to prepare an SPCC Plan. SPCC plan requirements are discussed in 40 CFR 112, Oil Pollution Prevention. As part of the Clean Water Act, the EPA oversees and enforces the Oil Pollution Prevention regulations contained in 40 CFR 112.

Clean Air Act

Under the authority of Section 112(r) of the Clean Air Act, the Chemical Accident Prevention Provisions require facilities that produce, handle, process, distribute, or store more than a "threshold quantity" of any extremely hazardous toxic and flammable substance listed at 40 CFR Part 68.130 to develop and implement a Risk Management Program, prepare a risk management plan, and submit the risk management plan to EPA. Although a federal program, the Risk Management Program is intended to reduce hazards at the local level. The program is applicable to companies of all sizes that use certain flammable and toxic substances. The Risk Management Program is intended to help local fire, police, and emergency response personnel (first responders) in the event of an accidental spill or exposure event. The Risk Management Program is contained in the Clean Air Act (42 U.S.C. 7401 et seq.).

Uniform Building Code and Uniform Fire Code

The Uniform Building Code and Uniform Fire Code contain building standards and federal fire protection codes. The Uniform Building Code addresses proper building materials, spacing, and siting in order to minimize the potential for damage from fires. The Uniform Fire Code addresses applicable water pressure, fire hydrants, automatic fire sprinkler systems, fire alarm systems, explosion hazards, safety measures, and additional building-specific information.

Occupational Safety and Health Administration Process Safety Management of Highly Hazardous Chemicals

The Process Safety Management of Highly Hazardous Chemicals (HHCs) (29 CFR 1910.119) is intended to prevent or minimize the consequences of catastrophic releases of toxic, reactive, flammable, or explosive HHCs by regulating their use, storage, manufacturing, and handling. The standard intends to accomplish its goal by requiring a comprehensive management program integrating technologies, procedures, and management practices. The standard does not apply to gas well drilling and servicing activities.

U.S. Department of Transportation Office of Hazardous Materials Safety

Transportation of hazardous materials is regulated by the U.S. Department of Transportation's (DOT's) Office of Hazardous Materials Safety. The Office of Hazardous Materials Safety formulates, issues, and revises hazardous materials regulations under the federal Hazardous Materials Transportation Law (49 CFR 100–185). These regulations cover hazardous materials definitions and classifications, hazard communications, shipper and carrier operations, training and security requirements, and packaging and container specifications.

The hazardous materials transportation regulations require carriers transporting hazardous materials to receive training in the handling and transportation of hazardous materials. Training requirements include pre-trip safety inspections; use of vehicle controls and equipment, including emergency equipment; procedures for safe operation of the transport vehicle; training on the properties of the hazardous material being transported; and loading and unloading procedures. All drivers must possess a commercial driver's license (49 CFR 383). Vehicles transporting hazardous materials must be properly placarded. In addition, the carrier is responsible for the safe unloading of hazardous materials at the site, and operators must follow specific procedures during unloading to minimize the potential for an accidental release of hazardous materials.

State

Hazardous Materials

Hazardous Waste Control Law

The California Hazardous Waste Control Law (HWCL) is administered by the California EPA (CalEPA) to regulate hazardous wastes. While the HWCL is generally more stringent than RCRA, until the EPA approves the California hazardous waste control program (which is charged with regulating the generation, treatment, storage, and disposal of hazardous waste), both state and federal laws apply in California. The HWCL lists 791 chemicals and approximately 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal, and transportation; and identifies some wastes that cannot be disposed of in landfills.

The California Code of Regulations (CCR) provides the following definition for hazardous waste (22 CCR 66261.10 (a) (1)):

> . . . a waste that exhibits the characteristics may: (A) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible, illness; or (B) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported, or disposed or otherwise managed.

According to 22 CCR, substances having a characteristic of toxicity, ignitability, corrosivity, or reactivity are considered hazardous waste. Hazardous wastes are hazardous substances that no longer have a practical use, such as material that has been abandoned, discarded, spilled, or contaminated or is being stored prior to proper disposal.

Toxic substances may cause short- or long-term health effects, ranging from temporary effects to permanent disability or death. For example, toxic substances can cause eye or skin irritation, disorientation, headache, nausea, allergic reactions, acute poisoning, chronic illness, or other adverse health effects if human exposure exceeds certain levels (the level depends on the substance involved). Carcinogens (substances known to cause cancer) are a special class of toxic substances. Examples of toxic substances include most heavy metals, pesticides, and benzene (a carcinogenic component of gasoline). Ignitable substances (e.g., gasoline, hexane, and natural gas) are hazardous because of their flammable properties. Corrosive substances (e.g., strong acids and bases such as sulfuric (battery) acid or lye) are chemically active and can damage other materials or cause severe burns upon contact. Reactive substances (e.g., explosives, pressurized canisters, and pure sodium metal) may cause explosions or generate gases or fumes as a result of contamination or exposure to heat, pressure, air, or water.

Other types of hazardous materials include radioactive and biohazardous materials. Radioactive materials and wastes contain radioisotopes, which are atoms with unstable nuclei that emit ionizing radiation to increase their stability. Radioactive waste mixed with chemical hazardous waste is referred to as “mixed wastes.” Biohazardous materials and wastes include anything derived from living organisms. They may be contaminated with disease-causing agents such as bacteria or viruses.

Department of Toxic Substance Control

The Hazardous Waste Control Law states that any person who stores, treats, or disposes of hazardous wastes must obtain a Hazardous Waste Facility Permit or a grant of authorization from the Department of Toxic Substances Control.

California Accidental Release Prevention Program

Similar to the federal Risk Management Program, the California Accidental Release Prevention Program includes additional state requirements and an additional list of regulated substances and thresholds. The regulations of the program are contained in 19 CCR 2735.1 et seq. The intent of California Accidental Release Prevention is to provide first responders with basic information necessary to prevent or mitigate damage to public health, safety, and the environment from the release or threatened release of hazardous materials.

California Department of Transportation and California Highway Patrol

The California Department of Transportation (Caltrans) regulates the transportation of hazardous materials throughout the state. Caltrans requires that drivers transporting hazardous wastes obtain a certificate of driver training that shows the driver has met the minimum requirements concerning the transport of hazardous materials, including proper labeling and marking procedures, loading/handling processes, incident reporting and emergency procedures, and appropriate driving and parking rules. The California Highway Patrol also requires shippers and carriers to complete hazardous materials employee training before transporting hazardous materials.

California Health and Safety Code

In California, the handling and storage of hazardous materials is regulated by Chapter 6.95 of the California Health and Safety Code. Under Sections 25500–25543.3, facilities handling hazardous materials are required to prepare a hazardous materials business plan. The business plan provides information to local emergency response agencies regarding the types and quantities of hazardous materials stored at a facility and provides detailed emergency planning and response procedures in the event of a hazardous materials release. In the event that a facility stores quantities of specific acutely hazardous materials above the thresholds set forth by California code, facilities are also required to prepare a risk management plan and California accidental release plan. The risk management plan and accidental release plan provide information about the potential impact zone of a worst-case release and require plans and programs designed to minimize the probability of a release and mitigate potential impacts.

Underground or aboveground storage tanks are typically used to store hazardous waste. Regulations regarding underground storage tanks (USTs) used to store hazardous materials require owners and operators to register, install, monitor, and remove their tanks according to established standards and procedures. Releases are to be reported to the local Certified Unified Program Agency. Chapter 6.67 of the California Health and Safety Code (Sections 25270–25270.13) regulates the storage of petroleum in ASTs and requires construction methods and monitoring to prevent petroleum releases. Owners of ASTs containing petroleum products with an aggregate storage capacity greater than 1,320 gallons are required to prepare and implement spill prevention and response strategies and to contribute to the Environmental Protection Trust Fund that is used to respond to some spills. Proper drainage, dikes, and walls are required to prevent accidental discharge from endangering employees, facilities, or the environment.

California Occupational Safety and Health Administration

The California Occupational Safety and Health Administration (Cal/OSHA) is the primary agency responsible for worker safety in the handling and use of chemicals in the work place. Cal/OSHA standards are generally more stringent than federal regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 CCR 337–340). The regulations specify requirements for employee training, availability of safety equipment, accident prevention programs, and hazardous substance exposure warnings.

Public Resource Code

The Public Resource Code (PRC) includes regulations regarding the safe operations of electrical transmission lines. Applicable PRC regulations include the following sections:

PRC Section 4292. Requires clearing of flammable vegetation to reduce fire hazards around specific structures that support certain connectors or types of electrical apparatus. This cleared area (10-foot radius) is required to be kept clear of flammable vegetation during the entire fire season (California Public Resources Code Section 4291 et seq.).

PRC Section 4293. Requires specific clearance between conductors and vegetation (clearance requirements are determined by line voltage). This code also requires the removal of trees adjacent to electrical transmission lines that may present a hazard if they fall on the line (California Public Resources Code Section 4291 et seq.).

5.8.3 Environmental Impacts

Significance Criteria

Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.) provides guidance for evaluating whether a development project may result in significant impacts. Appendix G suggests that a development project could have a significant impact on hazards and hazardous materials if the project would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous or other materials into the environment
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment
- For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan
- Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Impact Discussion

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Petroleum products, such as vehicle equipment fuel, may be transported and stored at the project site during construction, and transformer oil, paint, and solvents would be used during construction and operation of the substation. Herbicides may be used prior to grading and during operation of the substation to clear and maintain vegetation. To minimize impacts associated with the routine transport, use, or disposal of hazardous materials, SDG&E would implement APM-HAZ-1 (preparation of a project-specific Hazardous Substance Management and Emergency Response Plan). In order to ensure agency oversight of the handling of hazardous material during construction, Mitigation Measures (MM) HAZ-1a and HAZ-1b are provided. With implementation of APM-HAZ-1 and MM HAZ-1a and MM HAZ-1b, impacts due to potential hazardous substance spills during construction would be less than significant.

MM HAZ-1a Prior to construction, all SDG&E, contractor, and subcontractor project personnel would receive training regarding the appropriate work practices necessary to effectively implement hazardous materials procedures and protocols and to comply with the applicable environmental laws and regulations, including, without limitation, hazardous materials spill prevention and response measures. A sign-in sheet of contractor and subcontractor project personnel who have received training shall be provided to California Public Utilities Commission on a regular basis depending on the level of construction activity.

MM HAZ-1b The hazardous substance management and emergency response plan proposed by APM-HAZ-1 shall be reviewed and approved by the California Public Utilities Commission (CPUC) and San Diego County Department of Environmental Health (DEH), Hazardous Materials Division. The plan shall meet the requirements identified in California Health and Safety Code §25503.4, §25503.5, and §25504 and specifically addressed for the County of San Diego in the County of San Diego DEH, Hazardous Material Division guidance on Hazardous Materials Business Plans.

Operation and Maintenance:

The unmanned substation would be monitored and controlled by SDG&E's remote control center. Ongoing maintenance of the facility would involve testing, monitoring, and repair of the substation equipment, as well as emergency and routine procedures to enable efficient provision of SDG&E services. As proposed, transformers containing mineral oil would be installed at the Mira Sorrento Substation. Soil or groundwater contamination could potentially result from accidental spill or leakage of mineral oil at the substation transformers during facility operation. SDG&E proposes to construct an oil retention basin to ensure that future leaks or spills would be fully contained if they were to occur (see Figure 4-3, Site Plan). In addition, as stated in Section 5.9.2, the Clean Water Act requires that all nontransportation-related facilities with an aggregate aboveground storage capacity greater than 1,320 gallons prepare a site-specific SPCC plan that is intended to minimize the potential for spills into navigable waters of the United States. Specifically, the SPCC is required to include procedures for storage,

handling, spill response, and disposal of hazardous materials, as well as refueling and spill reporting protocol. In addition, as required by California Health and Safety Code Division 20, Chapter 6.95, SDG&E would be required to prepare a Hazardous Substance Management and Emergency Response Plan (APM-HAZ-1) for the Mira Sorrento Distribution Substation. At a minimum, this plan must include an inventory of hazardous materials stored on site and a site map, an emergency response plan, and procedures for the safe handling of hazardous material, as well as procedures for communication and coordination with emergency response providers. In order to ensure agency oversight of these plans, MM HAZ-1b and MM HAZ-1c are provided. With implementation of these measures along with development of the oil retention basin as proposed, impacts due to the inadvertent release of hazardous material during operation would be less than significant as the potential for an inadvertent release of hazardous material would be minimized and guidelines for containing and cleaning up spills in the event of a release of hazardous material would be in place.

MM HAZ-1c SDG&E shall prepare and submit a copy of the Spill Prevention, Control, and Countermeasure plan, as required by Title 40 CFR Section 112.7, to the California Public Utilities Commission for review and approval at least 60 days before the start of operation of the Mira Sorrento Substation.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

The Phase I ESA conducted for the proposed project revealed that no existing contamination has been identified on the proposed project site, and therefore, hazards due to construction releasing existing contamination to the environment would be less than significant.

As discussed above in response 5.8.3 (a), hazardous materials used during the construction and operation phases may inadvertently be released through spills or leaks; however, with the incorporation of SDG&E's APM-HAZ-1, and MM HAZ-1a through MM HAZ-1d, the potential to create a significant hazard through release of hazardous materials would be less than significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The proposed project would not be located within 0.25 mile of an existing or proposed school. The nearest school is located approximately 0.30 mile west of the proposed substation site. Therefore, because there are no existing or proposed schools within 0.25 mile of the proposed project component sites, no impacts would occur during construction and operations.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

A number of listed sites were identified as occurring within a 1-mile radius of the proposed substation site. However, according to the Phase I ESA, none of the sites identified within a 1-mile radius are likely to have impacted the substation site (Haley & Aldrich 2009). Therefore impacts would be less than significant.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

The project is not located within a public airport land use plan or within 2 miles of a public airport; however, the project is located within 2 miles of MCAS Miramar. The low profile of the substation would not affect flight activities at MCAS Miramar. Further, a letter from MCAS states that "electrical regulation substations" are compatible within these critical safety impact areas for MCAS Miramar operations" (SDGE 2012). Therefore, impacts would be less than significant.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No private airstrips exist within the vicinity of the project site; therefore, no impact would result.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

There are numerous fire and police stations and emergency medical service providers located throughout the service area. However, none is located immediately adjacent to the substation. Therefore, no fire protection, police protection, and/or emergency service providers would be directly affected by construction activities such that implementation of emergency response plans would be adversely affected.

During the construction period, all streets would remain open to emergency vehicles. The only indirect impact would result from construction vehicles using roadways to access construction sites. Because the number of vehicles would represent a minimal contribution to average daily traffic flow (see Section.5.16, Transportation/Traffic), these vehicles would not impair traffic flow. Therefore, the project would not block any of the designated emergency roads and, consequently, would not interfere with an adopted emergency response plan or emergency evacuation plan.

h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

The proposed project area is located within a wildland fire hazard area. Heat or sparks from construction equipment and vehicles, as well as the use of flammable hazardous materials, could potentially ignite the on-site vegetation and start a fire. Implementation of MM HAZ-2 would ensure that wildfire impacts would be less than significant.

MM HAZ-2 Wildfires shall be prevented or minimized by exercising care when operating utility vehicles within the right-of-way and access roads and by parking vehicles away from dry vegetation where hot catalytic converters can ignite a fire. In times of high fire hazard, it may be necessary for construction vehicles to carry water and shovels or fires extinguishers. Fire protective mats or shields would be used during grinding or welding to prevent or minimize the potential for fire.

The project is an unnamed facility and development of the substation pad would remove all flammable vegetation in a 400-foot by 200-foot area. The pad would be cleared, graded, paved, and then surrounded by an 8- to 12-foot-high masonry wall. No vegetation is proposed within the walled area. Because operation and maintenance activities at the substation facility would occur at the cleared and graded substation site and SDG&E would implement its Wildland Fire Prevention and Fire Safety Electric Standard Practice, which alerts operators to existing fire conditions and measures to avoid fire hazards, the potential for maintenance activities to ignite vegetation would be extremely low. Therefore, wildland fire impacts associated with operation of the substation facility would be less than significant.

The project involves the routing of the 69-kilovolt lines into the substation underground and the addition of underground distribution of circuits. Because the project only involves underground tie-in, no impacts related to increased fire hazard due to power lines would occur.

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5.9 HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☒	☐	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

5.9.1 Environmental Setting

The hydrology and water quality analysis in this section is based on the review of San Diego Gas & Electric's (SDG&E's) Proponent's Environmental Analysis (PEA) (SDG&E 2011) and data responses (SDG&E 2012), and a review of relevant governmental plans and policies regarding stormwater and water quality.

Surface Water: The Mira Sorrento Distribution Substation Project (proposed project) is located in San Diego Basin (9) of the California Regional Water Quality Control Board (RWQCB). Within the San Diego Basin (9), the project site is located within the highly urbanized Peñasquitos Hydrologic Unit (906). Major surface waters in the Peñasquitos Hydrologic Unit include the following: Los Peñasquitos Creek, Los Peñasquitos Lagoon, Rose Creek, Tecolote Creek, Mission Bay, and Miramar Reservoir.

The general topographic character of the site consists of a moderate to steep east- and west-facing slopes of an isolated canyon, with an unnamed intermittent stream that runs north to south along the eastern portion of the site, just east of the proposed development area (see Section 5.5, Biological Resources, Figure 5.5-1).

Flood Hazards: According to a Federal Emergency Management Agency (FEMA) flood insurance rate map (FEMA 2008), the site is in FEMA Zone C and considered outside of 100-year and 500-year floodplains and subject to minimal flooding. Based on the review of topographic maps, the site is not located downstream of a dam or within a dam inundation area. In addition, based on document review, there are no dams or facilities upstream of the site that could cause inundation of the subject site. Based on this review and site reconnaissance, the potential for flooding of the site is considered low.

Groundwater: The groundwater elevation of 120 feet mean sea level correlates to the adjacent drainage and represents a perched condition (Kleinfelder 2010). Groundwater was encountered at a depth of approximately 12.5 feet.

Surface Water Quality: Under Section 303(d) of the Clean Water Act (CWA), the State Water Resources Control Board (SWRCB) is required to develop a list of water quality limited segments for jurisdictional "waters of the United States." The waters on the list do not meet

water quality standards, and therefore, the RWQCB was required to establish priority rankings and develop action plans, called total maximum daily loads (TMDL), to improve water quality. The California Environmental Protection Agency (CalEPA) approved the San Diego RWQCB's 303(d) list of water quality limited segments in February 2009. The list includes pollutants causing impairment to receiving waters or in some cases the condition leading to impairment. The proposed project site lies within the Los Peñasquitos watershed. Los Peñasquitos Canyon Creek lies approximately 1 mile to the north of the proposed project site. Los Peñasquitos Creek is listed on the California 303(d) list for phosphate and total dissolved solids (TDS). The creek discharges to a 0.6-square-mile lagoon that is identified as an impaired water body (Los Peñasquitos Lagoon) that is listed on the California 303(d) list for sedimentation/siltation.

5.9.2 Regulatory Setting

Federal

Clean Water Act

Increasing public awareness and concern for controlling water pollution led to enactment of the Federal Water Pollution Control Act Amendments of 1972. As amended in 1977, this law became commonly known as the CWA (33 U.S.C. §1251 et seq.). The CWA established basic guidelines for regulating discharges of pollutants into the waters of the United States. The CWA requires that states adopt water quality standards to protect public health, enhance the quality of water resources, and ensure implementation of the CWA.

National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program, as authorized by Section 402 of the CWA, was established to control water pollution by regulating point sources that discharge pollutants into waters of the United States. In the State of California, the U.S. Environmental Protection Agency (EPA) has authorized the State SWRCB permitting authority to implement the NPDES program. In general, the SWRCB issues two baseline general permits: one for industrial discharges and one for construction activities. The Phase II Rule that became final on December 8, 1999, expanded the existing NPDES program to address stormwater dischargers from construction sites that disturb land equal to or greater than 1 acre.

Section 401 of the Clean Water Act

Section 401 of the CWA requires an applicant for a federal permit, such as the construction or operation of a facility that may result in the discharge of a pollutant, to obtain certification of those activities from the state in which the discharge originates. This process is known as the Water Quality Certification.

Section 404 of the Clean Water Act

Section 404 of the CWA established a permitting program to regulate the discharge of dredged or filled material into waters of the United States, which include wetlands adjacent to national waters. This permitting program is administered by the U.S. Army Corps of Engineers (ACOE) and enforced by the EPA.

Section 10 of the Rivers and Harbors Act

Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. §403) requires the ACOE to authorize construction of any structure in or over navigable waters of the United States or obstruction or alteration in a navigable water. Structure or work outside the limits defined for navigable waters of the United States require a Section 10 permit if the structure or work affects the course, location, condition, or capacity of the water body. Navigable waters are defined as waters that are subject to the ebb and flow of the tide.

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) (42 U.S.C. 201) was originally passed by Congress in 1974 to protect public health by regulating the public drinking water supply. The law was amended in 1986 and 1996 and requires many actions to protect drinking water and its sources, including rivers, lakes, reservoirs, springs, and groundwater wells. The act authorizes the EPA to set national health-based standards for drinking water to protect against both naturally occurring and man-made contaminants that may be found in drinking water. The EPA states that established drinking water standards must be met, and water agencies must work together to enforce standards.

Through Title 40, Part 144, of the Code of Federal Regulations (CFR) (40 CFR 144), the SDWA prohibits any injection activity that could allow the movement of fluid-containing contaminants into underground sources of drinking water if the presence of that contaminant could cause a violation of any primary drinking water regulation under 40 CFR 142, or that would otherwise adversely affect public health. This regulation applies to Classes I, II, and III and allows the director to take emergency action if a known contaminant is present or is likely to enter a public water system or underground drinking water source.

State

Streambed Alteration Agreement

Sections 1601–1603 of the California Fish and Game Code require an agreement between the CDFG and a public agency proposing to substantially divert or obstruct the natural flow or effect changes to the bed, channel, or bank of any river, stream, or lake. The agreement is designed to protect the fish and wildlife values of a river, lake, or stream.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act of 1967 (California Water Code, Section 13000 et seq.) requires the SWRCB and the nine RWQCBs to adopt water quality criteria to protect state waters. These criteria include the identification of beneficial uses, narrative and numerical water quality standards, and implementation procedures. The criteria for the project area are contained in the water quality control plan for the San Diego Basin.

State Water Resources Control Board

The SWRCB is responsible for issuing stormwater permits in accordance with the NPDES program. For projects disturbing one or more acres of land, the applicant must file a notice of

intent (NOI) for coverage under the General Permit for Stormwater Discharges Associated with Construction Activity (General Permit) and prepare a Stormwater Pollution Prevention Plan (SWPPP) that specifies Best Management Practices (BMPs) to prevent pollutants from contacting stormwater and procedures to control erosion and sedimentation.

Regional Water Quality Control Board

The proposed project falls within the jurisdiction of the Region 9 RWQCB. Each RWQCB is responsible for water quality control planning within their region, often in the form of a basin plan. The RWQCB is also responsible for implementing the provisions of the General Permit, including reviewing SWPPPs and monitoring reports, conducting compliance inspections, and taking enforcement actions. In addition, the RWQCB may issue individual dewatering permits for discharges associated with construction projects.

Local

City of San Diego Municipal Stormwater Permit

In 1990, under authority of the CWA but prior to finalization of the NPDES Phase I regulations, the San Diego RWQCB issued its first municipal permit for the San Diego Region (Order 90-42). The "Municipal Stormwater Permit" named the 18 municipalities within San Diego County, including the City of San Diego (City). More recently, on January 24, 2007, the San Diego RWQCB adopted Order No. R9-2007-0001 for a new Municipal Stormwater Permit (MS4), which represents the second municipal permit issued to the County co-permittees. Under the Municipal Stormwater Permit, co-permittees must reduce to the maximum extent possible the pollutants discharged from their respective storm drain systems. Pursuant to the Municipal Permit issued by the San Diego RWQCB, the co-permittees are required to develop and implement construction and permanent stormwater BMP regulations addressing stormwater pollution associated with private and public development projects. The Municipal Stormwater Permit outlines the individual responsibilities of the co-permittees including, but not limited to, the implementation of management programs, BMPs, and monitoring programs.

5.9.3 Environmental Impacts

Significance Criteria

Appendix G of the California Environmental Quality Act (CEQA) (14 CCR 15000 et seq.) suggests that a development project could have a significant impact on hydrology and water quality if the project would:

- Violate any water quality standards or waste discharge requirements
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff
- Otherwise substantially degrade water quality
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map
- Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam
- Be at risk of inundation by seiche, tsunami, or mudflow.

Impact Discussion

a) Violate any water quality standards or waste discharge requirements?

There is potential for limited, minor erosion and siltation and discharge of pollutants as a result of stormwater runoff from disturbed areas during construction. Ground disturbance would be limited to grading activities within the substation site and excavating for underground tie-in for TL665 into the substation. To minimize impacts related to erosion and discharge of pollutants, SDG&E proposes APM-HYD-1, which would implement best management practices (BMPs) as part of the Stormwater Pollution Prevention Plan (SWPPP) to be prepared as required by the National Pollutant Discharge Elimination System (NPDES) General Construction Activity Storm Water Permit.

Construction-period BMPs identified in the SWPPP may include silt fence, fiber rolls, street sweeping and vacuuming, storm drain inlet protection, stockpile management, solid waste management, stabilized construction entrance/exit, vehicle and equipment maintenance, desilting basin, gravel bag berm, sandbag barrier, material delivery and storage, spill prevention and control, concrete waste management, or other BMPs as contained in the latest edition of the California Stormwater Quality Association (CASQA) BMP handbook. Implementation of BMPs as identified in the SWPPP would ensure that the proposed project would comply with federal, state, and local water pollution control laws and that impacts to water quality related to erosion during construction would be less than significant.

The SWPPP will also include measures to minimize potential impacts to water quality from the use of hazardous materials during construction. The SWPPP includes a hazardous substance management plan that identifies the handling, storage, disposal, and emergency response procedures. As part of the hazardous substance management plan, hazardous materials spill kits would be maintained on site for small spills. Implementation of the hazardous substance management plan would protect both surface water and groundwater quality in the project area from accidental spills of hazardous materials occurring during construction. In order to ensure agency and qualified professional oversight of the handling of hazardous materials during construction, mitigation measures (MM) HAZ-1a and HAZ 1b are provided (see Section 5.8, Hazards and Hazardous Materials). With implementation of the required SWPPP and MM HAZ-1a and HAZ 1b, impacts due to potential hazardous substance spills during construction would be less than significant.

Dewatering Activities

Although no dewatering is anticipated during construction where localized shallow groundwater is encountered, dewatering may be required. Potentially significant impacts could occur to nearby water resources if sediment-laden water is discharged during excavation activities. Typically water produced by dewatering activities would be placed in a dewatering system and would either be discharged to a sanitary sewer system or in an upland location in accordance with San Diego RWQCB and the City's requirements. Mitigation Measures (MM) HY-1 and HY-2 include measures to ensure dewatering activities would be completed consistent with local dewatering requirements and would reduce impacts to a less-than-significant level.

MM HY-1 Prior to construction, SDG&E shall consult with the San Diego Regional Water Quality Control Board (RWQCB) to determine whether an individual discharge permit is required for dewatering at any of the project areas anticipated to encounter groundwater. A copy of the permit or a waiver from the RWQCB, if required, shall be provided to the California Public Utilities Commission prior to dewatering activities.

MM HY-2 SDG&E shall submit to California Public Utilities Commission prior to construction a typical dewatering drawing that shall be implemented during dewatering activities. The drawing shall include the location of pumps within secondary containment, fuel storage areas, anticipated discharge point, scour protection measures, intake hose screening, and monitoring procedures to ensure that hazardous materials spills are addressed in a timely manner and discharge hoses are frequently inspected for leaks.

Operation and Maintenance:

To accommodate and route site drainage during substation operation, the project site would be graded to direct flows to two separate water quality drainage basins (see Figure 4-3, Site Plan). These basins would be designed to retain surface flows, promote groundwater infiltration, and remove sediment and urban pollutants. Therefore, runoff would be accommodated through the proposed retention basins, and the potential for stormwater runoff and water quality impacts would be less than significant.

During operation and maintenance of the proposed project, impacts could occur as a result of the accidental release of mineral oil used in the proposed transformers. To prevent an accidental release of mineral oil, the project includes an oil containment basin designed to contain the total volume of oil in the proposed transformers (see Figure 4-3, Site Plan). In addition, as discussed in Section 5.8, Hazards and Hazardous Materials, SDG&E shall prepare a Spill Prevention, Control, and Countermeasure Plan that is intended to minimize the potential for spills and a Hazardous Substance Management and Emergency Response Plan (APM-HAZ-1) that provides an emergency response plan in the event of a spill. In order to provide agency oversight of these plans, MM HAZ-1b and HAZ 1c are provided. With implementation of these measures, along with development of the oil retention basin, impacts to water quality due to spill of hazardous materials would be less than significant as the potential for inadvertent release would be minimized and guidelines for containing and cleaning up spills should they occur would be in place.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

The project would not use groundwater resources, nor would it construct new structures that would affect groundwater recharge. Therefore, impacts would be less than significant.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site?

Upon completion of the proposed substation, impervious surfaces will comprise approximately 8,600 square feet (0.20 acre) of area, consisting of ditches, containment basin, control house roof areas, and other on-site electrical facilities having impervious surfaces.

The on-site drainage pattern within the substation will generally be north to south, over predominantly pervious surfaces.

The western portion of the on-site runoff will be conveyed to a water quality basin on the west side of the substation exterior, via an on-site grated catch basin and 20 feet (+/-) of storm drain to the basin, and then conveyed to the existing City storm drain system in Mira Sorrento Place. As such, runoff from the project would not alter natural drainage courses or substantially increase flow velocities so as to increase erosion or siltation, and therefore, impacts are considered less than significant.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?

As discussed in response 5.9.3 (c), runoff from the project site would be minimal, and would not alter existing drainage courses or substantially increase flow and therefore would not result in flooding. Impacts would be less than significant.

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

As discussed in response 5.9.3 (c), the project would not create or contribute runoff water that would exceed the capacity of the existing drainage system.

f) Otherwise substantially degrade water quality?

There is potential for minor erosion and siltation as well as discharge of pollutants to result from storm water runoff from disturbed areas during construction. The project would not result in alteration to existing drainage patters and, therefore would not result in substantial long-term erosion or siltation. To reduce impacts of construction-related activities that could affect water quality APM-HYD-1 and MM HY-1 and MM HY-2 would be implemented as discussed in

response 5.9.3 (a). As a result, the project would not result in a prohibited discharge as defined in the RWQCB Basin Plan or conflict with any of the water quality objectives.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No housing would be constructed as a result of the project. Therefore, there would be no flood hazard impacts to residents a result of the proposed project.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

No new structures would be constructed that would impeded or redirect flood flow within a 100-year flood hazard area. As a result, the project would not impact flood flows.

i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

All structures would be placed outside of the 100-year floodplain and therefore there is no risk of exposing structures to flooding hazards.

j) Inundation by seiche, tsunami, or mudflow?

Hydrologic and topographic conditions of the project site and surrounding area do not lend themselves to these conditions. The proposed project is not near any water body that would potentially be affected by a seiche, tsunami, or mudflow and therefore would not be susceptible to any of the above stated natural phenomena.

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5.10 LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) *Physically divide an established community?*	☐	☐	☐	☒
b) *Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?*	☐	☐	☒	☐
c) *Conflict with any applicable habitat conservation plan or natural community conservation plan?*	☐	☐	☐	☒

5.10.1 Environmental Setting

Information presented in this section was gathered from a review of San Diego Gas & Electric's (SDG&E's) Proponent's Environmental Assessment (PEA) (SDG&E 2011), as well as from site visits, review of aerial photographs, and review of the City of San Diego's (City's) General Plan and Mira Mesa Community Plan.

5.10.1.1 Existing Land Uses

As shown in Figure 4-2, the project site consists of undeveloped land bounded by Vista Sorrento Parkway to the south, Mira Sorrento Place to the west, Mira Mesa Boulevard to the southeast, and undeveloped areas on the north and east. Other surrounding land uses include office and retail commercial uses to the east, and undeveloped and landscaped areas, an office industrial complex, and Interstate 805 to the west. The closest residences to the proposed substation site are located approximately 800 feet north of the site.

5.10.1.2 Planned Land Uses

The proposed 3.7-acre Mira Sorrento Substation site is located in the Sorrento Mesa area within the Mira Mesa community plan area of the City. The Sorrento Mesa subarea has been designated an industrial employment area to accommodate research and development, office, and manufacturing uses. The project site is zoned residential (RS 1-8) and industrial (IL-2-1).

5.10.2 Regulatory Setting

Pursuant to Article 12, Section 8, of the California Constitution, the California Public Utilities Commission (CPUC) has sole land use jurisdiction over the proposed Mira Sorrento Distribution Substation Project (proposed project). Although the proposed project is not subject to local policies, plans, or regulations, state agencies are required to consider local land use policies and regulations when making decisions. The proposed project is located within the Mira Mesa community plan of the City. The City's General Plan provides a framework of policies, objectives, and land use designations to guide development within the City. The Mira Mesa Community Plan (adopted 1992; last amended 2011) constitutes the Mira Mesa portion of the City's General Plan.

5.10.3 Environmental Impacts

Significance Criteria

Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.) provides guidance for evaluating whether a development project may result in significant impacts. Appendix G suggests that a development project could have a significant impact on land use and planning if the project would:

a) Physically divide an established community
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect
c) Conflict with any applicable habitat conservation plan or natural community conservation plan.

Impact Discussion

a) Physically divide an established community?

The project site is undeveloped and is surrounded by roadways, industrial park, and commercial uses. The closest residences are approximately 800 feet north of the site. New circuits will be constructed underground to connect to the substation. Due to the small impact footprint and visual treatments described (see Section 5.2, Aesthetics), and the fact that the facility is unmanned, the project is considered consistent with the Mira Mesa Community Plan and the City's General Plan. Due to the foregoing factors, implementation of the proposed project would not physically divide an established community.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The project site is located within the Mira Mesa Community Plan of the City's General Plan. The City's General Plan designates the site as an industrial employment area to accommodate research and development, office, and manufacturing uses.

The Mira Mesa Community Plan (adopted 1992; last amended 2011) constitutes the Mira Mesa portion of the City's General Plan.

The Mira Mesa Community Plan has several goals and policies for current and future development. The substation project is consistent with the Public Facilities and Services Goal, from the Mira Mesa Community Plan, by providing infrastructure required to serve planned growth outlined in the City's General Plan.

The proposed substation would support growth in the area as envisioned by the Mira Mesa Community Plan, which includes additional research and development, office and manufacturing in the Sorrento Mesa area.

The proposed substation is located in an area surrounded by light industrial office and commercial uses. While placement of the proposed substation in a light industrial office and commercial zone may be viewed as a conflict with certain policies of the City's zoning ordinance, this impact is considered less than significant for the following reasons:

- Development of the proposed project is an allowed use under the City's zoning ordinance.
- The proposed substation location is in an area between light industrial, commercial and office. The closest residences would be located approximately 800 feet north of the substation perimeter wall.
- The project includes setbacks, design features and landscaping (see Section 5.2, Aesthetics) to ensure land use compatibility as identified in the Mira Mesa Community Plan.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

The project site is not within the boundaries of any Habitat Conservation Plan, Natural Community Plan, or other approved habitat conservation plans (see Section 5.5, Biological Resources, for further discussion).

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5.11 MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

5.11.1 Environmental Setting

There are no known mineral resources within the project area. As depicted on the California Division of Mines and Geology, Generalized Mineral Land Classification Map of Western San Diego County, 1996; the project site has not been designated as having any known mineral resources, or as having potential for mineral resources. The project site is categorized 'MRZ3', which is defined as areas containing mineral deposits of which the significance cannot be evaluated from available data (CDMG 1996).

5.11.2 Regulatory Setting

The California State Legislature enacted the Surface Mining and Reclamation Act (SMARA) in 1975 to limit new development in areas containing significant mineral deposits. SMARA calls for the California State geologist to classify the lands within California based on mineral resource availability.

5.11.3 Environmental Impacts

Significance Criteria

Appendix G of the California Environmental Quality Act (CEQA) (14 CCR 15000 et seq.) provides guidance for evaluating whether a development project may result in significant impacts. Appendix G suggests that a development project could have a significant impact on mineral resources if the project would:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

Impact Discussion

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

As discussed under the Environmental Setting section, the project site has not been designated as having any known mineral resources, or as having potential for mineral resources. Therefore, the project would not impact any known or expected mineral resources.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

As discussed in response 5.11.3 (a), the project site is not located in an area containing known mineral resources, and therefore would not result in the loss of availability of a mineral resource.

5.12 NOISE

Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

5.12.1 Environmental Setting

General Characteristics of Community Noise

Various noise descriptors have been developed to describe time-varying noise levels. The following are the noise descriptors most commonly used in community noise analysis.

- **Equivalent Sound Level (Leq):** Leq represents an average of the sound energy occurring over a specified period. In effect, Leq is the steady-state sound level containing

the same acoustical energy as the time-varying sound that actually occurs during the same period. The 1-hour, A-weighted, equivalent sound level (Leq(h)) is the energy average of A-weighted sound levels occurring during a 1-hour period and is the basis for noise abatement criteria used by California Department of Transportation (Caltrans) and the Federal Highway Administration.

- **Percentile-Exceeded Sound Level (Lxx):** Lxx represents the sound level exceeded for a given percentage of a specified period (e.g., L_{10} is the sound level exceeded 10% of the time, and L_{90} is the sound level exceeded 90% of the time).
- **Maximum Sound Level (Lmax):** Lmax is the highest instantaneous sound level measured during a specified period.
- **Day-Night Level (Ldn):** Ldn is the energy average of A-weighted sound levels occurring over a 24-hour period, with a 10 decibel (dB) penalty applied to A-weighted sound levels occurring during nighttime hours between 10:00 p.m. and 7:00 a.m.
- **Community Noise Equivalent Level (CNEL):** Similar to Ldn, CNEL is the energy average of the A-weighted sound levels occurring over a 24-hour period, with a 10 dB penalty applied to A-weighted sound levels occurring during the nighttime hours between 10:00 p.m. and 7:00 a.m., and a 5 dB penalty applied to the A-weighted sound levels occurring during evening hours between 7 p.m. and 10 p.m.

To describe environmental noise and to assess project impacts on areas that are sensitive to noise, a measurement scale that simulates human perception is customarily used. Sound (noise) levels are measured in decibels. Community noise levels are measured in terms of an A-weighted sound level. The A-weighted scale of frequency sensitivity accounts for the sensitivity of the human ear, which is less sensitive to low frequencies and correlates well with human perceptions of the annoying aspects of noise. The A-weighted decibel scale (dBA) is cited in most noise criteria.

Human activities cause community noise levels to be widely variable over time. For simplicity, sound levels are usually best represented by an equivalent level over a given time period (Leq). The Leq, or equivalent sound level, is a single value (in dBA) for any desired duration, which includes all of the time-varying sound energy in the measurement period, usually 1 hour.

People are generally more sensitive to and annoyed by noise during the evening and nighttime. Thus, another noise descriptor used in community noise assessments, termed the Community Noise Equivalent Level (CNEL), was introduced. The CNEL scale represents a time-weighted, 24-hour average noise level based on the A-weighted sound level. CNEL accounts for the increased noise sensitivity during the evening (7:00 p.m. to 10:00 p.m.) and nighttime hours (10:00 p.m. to 7:00 a.m.) by adding 5 and 10 dBs, respectively, to the average sound levels occurring during these hours. Another noise descriptor termed the Day-Night Average Sound Level (Ldn) is also used. The Ldn is similar to CNEL except there is no penalty to the noise level occurring during the evening hours.

Human activities cause community noise levels to be widely variable over time. For simplicity, sound levels are usually best represented by an equivalent level over a given time period (Leq). The Leq, or equivalent sound level, is a single value (in dBA) for any desired duration, which includes all of the time-varying sound energy in the measurement period, usually 1 hour. The noise level that is

exceeded 50% of the time (L_{50}) is a level that is normally less than the Leq, except for especially steady noise levels, in which case, it may be similar to or slightly greater than the Leq.

Existing Noise Sources in Project Region

The project site is located within a relatively noisy environment associated with busy roadways in an industrial park area, and noise associated with a major transportation corridor, Interstate 805 (I-805). The site is located adjacent to the intersection of Mira Mesa Boulevard and Vista Sorrento Parkway. Both of these roadways are relatively busy providing connection from I-805 and existing industrial and commercial uses in the area. A park-and-ride facility is located across from the site on the west side of Vista Sorrento Parkway. Background noise associated with I-805, Vista Sorrento Parkway, and Mira Mesa Boulevard provide a substantial amount of constant background noise at the site. Table 5.12-1 provides results of noise monitoring in the project vicinity to determine the existing average noise level.

Table 5.12-1: Measured Noise Levels

Site No.	Location	Leq	Time
1	Back parking lot off of Director's Place	74	11:52 am – 12:02 pm
2	Sorrento Valley Road – Scripps Clinic	58	12:42 pm – 12:52 pm
3	Mira Mesa Boulevard – Canon Building	68	1:41 pm – 1:51 pm
4	Scranton Road – Courtyard Sorrento Mesa Hotel	56	2:05 pm – 2:15 pm

Source: SDGE 2012

Sensitive Receptors

Noise-sensitive receptors are facilities (e.g., residential areas, hospitals, schools) or activities for which excessive noise may cause annoyance or loss of business (e.g., work requiring a quiet environment for heavy telephone use). The closest sensitive receptors in the vicinity of the proposed substation site are guests at the Courtyard Sorrento Mesa Hotel, located approximately 800 feet north of the project site. Additional noise sensitive receptors are shown in Table 5.12-2.

Table 5.12-2: Sensitive Receptors

Type	Name	Distance from Project Site (miles)	Direction from Project Site
Proposed Mira Sorrento Substation (City of San Diego)			
Residential	Water Ridge Condominium Complex	0.3	North
Hotels	Courtyard Sorrento Mesa Hotel	0.16	North
	Country Inn and Suites	0.7	East
	Woodfin Hotel	0.9	East
	Homestead San Diego	1.0	East
	Holiday Inn Express	0.7	East
Schools	San Diego College of Ayurveda	0.3	West
	Children's World Living Center	1.0	Northeast

Table 5.12-2: Sensitive Receptors

Type	Name	Distance from Project Site (miles)	Direction from Project Site
	San Diego Chinese Institute	0.7	East
	Star Specialties	0.6	Northeast
Hospitals	Sharp Medical Offices	0.3	West
Places of Worship	Bread of Life Christian Church	0.6	Northwest
	The Celebration Center for Spiritual Living	0.6	East
Parks	San Diego Wildlife Refuge	1.0	South

Source: SDG&E 2012

Note:

1. Sensitive receptor populations utilized in this analysis are those within a 1-mile radius of the proposed Mira Sorrento Substation site.

5.12.2 Regulatory Setting

Regulating environmental noise is generally the responsibility of local governments. U.S. Environmental Protection Agency (EPA) once published guidelines on recommended maximum noise levels to protect public health and welfare (EPA 1974), and the State of California maintains recommendations for local jurisdictions in the General Plan Guidelines published by the Governor's Office of Planning and Research (OPR 1998). The following information summarizes federal and state recommendations and local requirements.

Federal

The EPA has indicated that residential noise exposure of 55 to 65 dB is acceptable when analyzing land use compatibility (EPA 1981*);* however, these guidelines are not regulatory. With regard to noise exposure and workers, the federal Occupational Safety and Health Administration (OSHA) establishes regulations to safeguard the hearing of workers exposed to occupational noise (29 CFR Section 1910.95). OSHA specifies that sustained noise over 85 dBA can be a threat to workers' hearing.

State

California Government Code Section 65302(f) requires each local jurisdiction to include a noise element in its general plan. Generally speaking, noise levels less than 60 Ldn are acceptable for all land uses, including residences, schools, and other noise sensitive receptors. Noise levels greater than 70 Ldn are normally unacceptable for most noise sensitive land uses, and levels between 60 and 70 Ldn are usually considered conditionally acceptable because the structures where the receptors reside normally provide some level of insulation (OPR 1998).

Local

City of San Diego General Plan Noise Element

The City of San Diego has adopted noise compatibility guidelines for various land uses that are contained in the Noise Element of the General Plan. The City of San Diego General Plan considers a noise environment of up to 75 CNEL to be conditionally compatible for office uses which is the category most similar to the Substation. This criterion applies to outdoor use areas such as lunch areas or similar types of outdoor gathering areas. The substation would not include noise-sensitive outdoor use areas.

City of San Diego Noise Ordinance

Chapter 5 of the City of San Diego Municipal Code regulates sound level limits from stationary noise sources within the City. Specifically, Section 59.5.0401 of the Municipal Code limits the noise level generated by stationary noise sources. The noise level limits are in terms of a 1-hour average sound level and are applied on or beyond the boundaries of the property on which the noise is produced. The sound level limits depend on the zoning district and time of day.

The existing zoning classifications on the project site are residential (RS-1-8) and industrial (IL-2-1). Apart from the Caltrans right-of-way, the project site is surrounded by industrial (IL-2-1 and IL-3-1), agricultural (AR-1-1), and residential (RS-1-8) designations. The land use of the IL-2-1 and IL-3-1 designations is commercial and industrial. The land use of the AR-1-1 designation is open space and residential. The RS-1-8 designation is the I-805 freeway and Caltrans freeway right-of-way.

Section 59.5.0401(c) of the Municipal Code states that "fixed-location public utility distribution or transmission facilities located on or adjacent to a property line shall be subject to the noise level limits of the Noise Ordinance, measured at or beyond six feet from the boundary of the easement upon which the equipment is located." The noise level limits at or beyond six feet from the boundary of the parcels on which the equipment associated with the proposed project are as follows: 75 dB at any time within the industrial (IL-2-1 and IL-3-1) and agricultural zones; and 50 dB between 7 a.m. and 7 p.m., 45 dB between 7 p.m. and 10 p.m., and 40 dB at between 10 p.m. and 7 a.m. within the residential (RS-1-8) zone. As noted previously, however, the adjacent parcels that are zoned residential comprise sections of I-805 freeway and Caltrans freeway right-of-way. These parcels do not contain any existing or proposed residential uses, and it is not anticipated that residential uses will ever be developed within these particular parcels, even though they are residentially zoned. Existing noise levels within these parcels already exceed the residential zone limits because of freeway noise.

Therefore, the industrial noise limit of 75 dB anytime is considered applicable to this project—notwithstanding the underlying residential zoning—for the following reasons: no residential uses exist or are proposed within these parcels, these parcels include and/or abut I-805, and these parcels are owned by Caltrans, and the ambient noise levels within these parcels already greatly exceed the residential noise limits.

Section 59.5.0404 of the City's Municipal Code permits construction noise as long as it occurs between the hours of 7 a.m. to 7 p.m., Monday through Saturday, and not on legal holidays.

Section 59.5.0404 of the City Municipal Code further states that construction activity at or beyond the property lines of any property zoned residential are prohibited to cause an average sound level greater than 75 dB from 7 a.m. to 7 p.m.

5.12.3 Environmental Impacts

Significance Criteria

Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) provides guidance for evaluating whether a development project may result in significant impacts. Appendix G suggests that a development project could have a significant impact from noise if the project would:

a) Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies
b) Expose persons to or generate excessive ground-borne vibration or ground-borne noise levels
c) Cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project
d) Cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels
f) For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.

Impact Discussion

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

The proposed project would generate noise from construction activities and operations. However, as explained below, noise levels would be kept within acceptable levels and time periods resulting in a less-than-significant impact.

Construction Noise: The proposed project would produce short-term noise during the construction stage of development of the facility. Construction activities associated with the proposed project would occur over a 2-year period. During the site grading phase, a total of 1.8 acres would be graded at a maximum of 0.50 acre per day. The proposed project would require approximately 65,500 cubic yards of cut and 67,000 cubic yards of fill for the grading, retaining wall backcut, and retaining wall backfill.

Portable cranes and heavy hauling trucks would be employed for equipment delivery and installation. Concrete trucks, backhoes, crew trucks, and pickup trucks would be coming and going to the site during installation of the foundations, ground grid, and underground ducts. Crew trucks, boom trucks, and pickup trucks would be going to and from the site daily for the

balance of the construction activities, testing and checkout, final transmission tie-ins, and circuit cabling until the station is energized.

The nearest noise sensitive receptors to the project site are guests at the Courtyard Sorrento Mesa Hotel, located approximately 800 feet north of the site. Table 5.12-3 lists typical noise levels (at 50 feet from the source) for commonly-used equipment. The earth-moving (grading) activities are the noisiest sources during construction, with equipment noise ranging from 70 to 95 dB at 50 feet from the source. For point sources such as construction equipment, noise decreases by approximately 6 dB for each doubling of distance for a hard, flat site (no intervening topography).

Table 5.12-3: Typical Construction Equipment Noise Levels at 50 Feet (dB)

Equipment	Noise Level at 50 feet
Earthmoving	
Front Loaders	79
Backhoes	85
Dozers	80
Tractors	80
Scrapers	88
Graders	85
Trucks	91
Pavers	89
Materials Handling	
Concrete Mixer	85
Concrete Pump	82
Crane	83
Derrick	88
Stationary	
Pumps	76
Generator	78
Compressors	81
Impact	
Pile Drivers	101
Rock Drills	98
Jack Hammers	88
Pneumatic Tools	86
Other	
Saws	78
Vibrators	76

Source: U.S. EPA 1971

Project construction activities would temporarily increase local noise levels in the vicinity of the project site. Although the Courtyard Sorrento Mesa Hotel is not zoned residential, to provide for a more conservative analysis, the residential threshold was utilized to determine construction noise impacts to this sensitive use. The calculated noise level of 66 dBA Leq at this location would not exceed the City's noise standard limiting construction activity at or beyond the property lines of any property zoned residential of a 12-hour average sound level greater than 75 dB from 7 a.m. to 7 p.m. Therefore, these construction noise impacts are less than significant.

Nighttime activities may consist of oil filling the transformers, which would require using a 300-kilowatt (kW) Whisper Watt generator. This generator would result in a noise level of less than 60 dB at the site and would be less than 40 dB at the nearest noise sensitive receptor. Other activities that may occur at night would be cutovers of transmission tie lines and distribution circuits, but this will be dependent upon outage requirements. The noise level associated with this activity would be from the start engineers and relay techs working in the control house, and from the operation of the 69-kilovolt (kV) circuit breakers. Nighttime construction activities would result in negligible noise at the nearest noise sensitive receptors; therefore, nighttime construction noise levels are considered less than significant.

Operation Noise: Operation of the proposed facilities will result in the production of long-term noise from transformers. The noise analysis prepared for the project assumed each transformer will generate a maximum sound level of 61 dB at approximately three feet. For point sources such as transformers, noise decreases by approximately 6 dB for each doubling of distance for a hard, flat site with no topography. Given the setback distance and topography of the project site, the maximum calculated noise levels from the substation at any point on the property line are calculated to be 50 dB or less. Operational noise from the substation would be well below the City limit of 75 dB along the property lines and therefore would be less than significant.

b) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?

Construction of the project would not involve activities that would cause excessive groundborne vibration such as blasting or pile-driving. Therefore impacts related to excessive groundborne vibration would not result.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

As discussed under Environmental Setting, the project site is located within a relatively noisy environment associated within busy roadways and I-805. Average daytime noise levels in the vicinity range between 56 and 74 dB. As discussed in response 5.12.3 (a), maximum calculated noise levels from the substation would be 50 dB or less at the property line and, therefore, would not result in a substantial permanent increase in ambient noise levels. Impacts to a permanent increase in ambient noise levels would be considered to be less than significant.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

As discussed under response 5.12.3 (a), intermittent maximum noise levels from construction equipment could range from 70 to 95 dB at 50 feet from the source. Although construction noise impacts are anticipated to be in compliance with the City's noise ordinance and therefore less than significant, Mitigation Measures (MM) NOI-1 and NOI-2, described below, would ensure that neighboring receptors would be given advance notice of construction activities and would provide the means for SDG&E to respond to concerns of those receptors.

MM NOI-1 SDG&E or its construction contractor shall provide advance notice, between 2 and 4 weeks prior to construction, by mail to all property owners within 500 feet of construction. The announcement shall state specifically the construction start date, anticipated completion date, and hours of construction.

MM NOI-2 SDG&E shall identify and provide a public liaison person before and during construction to respond to concerns of neighborhood receptors, including residents about construction noise disturbance. Procedures for reaching the public liaison office via telephone or in person shall be included in notices distributed to the public in accordance with MM NOI-1. SDG&E shall also establish a toll-free telephone number for receiving questions or complaints during construction and develop procedures for responding to callers (procedures to be approved by the California Public Utilities Commission).

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The project is not located within 2 miles of a public or private airport; however, the project is located within 2 miles of MCAS Miramar. The project involves construction of an unmanned substation that would not expose people to excessive noise levels associated with MCAS Miramar.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

See response 5.12.3 (e), above.

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5.13 POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) *Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*	☐	☐	☐	☒
b) *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*	☐	☐	☐	☒
c) *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*	☐	☐	☐	☒

5.13.1 Environmental Setting

Population: The City of San Diego's (City's) population was estimated to be 1,376,173 in 2010, according to San Diego Association of Governments (SANDAG 2010). It is estimated that the population will increase by approximately18% to 1,542,324 by 2020 (SANDAG 2011).

Housing: According to SANDAG, the City had approximately 511,820 total housing units in 2010, with an estimated vacancy rate of 6.8% as of 2010 (SANDAG 2010).

Employment: In June 2010, the County and City of San Diego had an unemployment rate of 10.5% (SDG&E 2011).

5.13.2 Regulatory Setting

Federal/State

There are no applicable federal or state regulatory policies relating to population or housing.

Local

SANDAG Regional Comprehensive Plan (RCP)

The SANDAG RCP (2004) is the long-term planning framework for the San Diego region. The RCP is intended to provide a broad context in which local and regional decisions can be made to foster a healthy environment, a thriving economy, and a high quality of life for all residents.

5.13.3 Environmental Impacts

Significance Criteria

Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) provides guidance for evaluating whether a development project may result in significant impacts. Appendix G suggests that a development project could have a significant impact on population and housing if the project would:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Impact Discussion

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

SDG&E provides electrical power services to the Sorrento Mesa area of the City. In providing these services, SDG&E currently operates four substations, referred to as the Eastgate Substation, Mesa Rim Substation, Genesee Substation, and Torrey Pines Substation. All four substations are 69/12-kilovolt distribution substations, and each has been expanded to its ultimate capacity due to significant commercial growth in the area. Given SDG&E's load forecast, the proposed Mira Sorrento Distribution Substation is required in order to meet expected electrical load growth and prevent extended outages and disruption of services to existing customers in the Sorrento Mesa area, as well as to maintain reliable electric service to SDG&E customers.

No portion of the project would result in the generation of additional population. The project will not provide additional long-term employment opportunities. No residences are proposed as part of the proposed project, and no extension of services beyond that currently planned for is associated with the proposed project. Therefore, the proposed project would not generate additional population or cumulatively exceed official regional or local population projections, nor would it induce substantial growth in the area either directly or indirectly.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No housing would be displaced or otherwise affected by the proposed project.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No people would be displaced by construction or operation of the project.

5.14 PUBLIC SERVICES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	☐	☒	☐	☐
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

5.14.1 Environmental Setting

Fire Protection

The Mira Sorrento Distribution Substation Project (proposed project) is located within the City of San Diego (City). The San Diego Fire-Rescue Department provides the City with fire protection and emergency medical services. The project site would be serviced primarily by Fire Station 41 located at 4914 Carroll Canyon Road, approximately 0.3 mile from the site. Fire Station 35, located approximately 1.2 miles from the project site, can also serve the site.

Police Protection

Police services in the project area are provided by the San Diego Police Department. The San Diego Police Department has divided the neighborhoods of the City into regions. The project is located in the Sorrento Valley neighborhood, which is within the Northeastern Division of the City. The Northeastern Division serves the neighborhoods of Black Mountain Ranch, Carmel Mountain, Miramar, Miramar Ranch North, Mira Mesa, Rancho Bernardo, Rancho Encantada, Rancho Peñasquitos, Sabre Springs, Scripps Ranch, Sorrento Valley, and Torrey Highlands, and encompasses 103 square miles. The proposed project site is served by the Mira Mesa/Scripps Ranch station, located approximately 4 miles from the site.

Schools

City of San Diego Unified School District serves the project area. San Diego City Schools serve approximately 138,600 students and cover 200 square miles. San Diego City Schools consist of 187 total educational facilities. The closest San Diego City public school to the proposed site is the Challenger Middle School, located approximately 4 miles east of the site.

5.14.2 Regulatory Setting

There are no federal or state laws or policies related to public services that are applicable to the proposed project.

The General Plan for the City has a variety of goals and policies related to public service systems, and it generally describes the City's provision and management of fire and police protection services, schools, libraries, and park and recreation facilities.

5.14.3 Environmental Impacts

Significance Criteria

Appendix G of the California Environmental Quality Act (CEQA) Guidelines provides guidance for evaluating whether a development project may result in significant impacts (14 CCR 15000 et seq.). Appendix G states that a development project could have a significant impact on public services if the project would result in substantial, adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:

a) Fire protection
b) Police protection
c) Schools, parks, and other public facilities.

Impact Discussion

a) Fire Protection

The proposed project area is located within a wildland fire hazard area. Heat or sparks from construction equipment and vehicles, as well as the use of flammable hazardous materials, could potentially ignite the on-site vegetation and start a fire, resulting in an increase in fire response demand to the project site. Implementation of Mitigation Measure (MM) HAZ-2 (see Section 5.8, Hazards and Hazardous Materials) would ensure that wildfire impacts would be less than significant and therefore would not result in the need for new fire protection services.

The project is an unnamed facility and development of the substation pad would remove all flammable vegetation in a 400-foot by 200-foot area. The pad would be cleared, graded, paved, and then surrounded by a 10-foot-high masonry wall. No vegetation is proposed within the walled area. Because operation and maintenance activities at the substation facility would occur at the cleared and graded substation site and SDG&E would implement its Wildland Fire

Prevention and Fire Safety Electric Standard Practice, which alerts operators to existing fire conditions and measures to avoid fire hazards, the potential for maintenance activities to ignite vegetation would be extremely low. Therefore, wildland fire impacts associated with operation of the substation facility would be less than significant and would not result in the need for new fire protection services.

The project involves the loop-in of the existing 69-kilovolt transmission line (TL665) into the substation underground and the addition of underground distribution of circuits. Because the project only involves underground tie-in, no impacts related to increased fire hazard due to power lines would occur.

b) Police Protection

The proposed substation would be an unmanned facility and, as discussed under response Section 5.13(a) (Population and Housing), would not generate population growth; therefore, no new demand would be placed on police protection.

c) Schools, Parks, and other Public Facilities

The proposed substation would be an unmanned facility and, as discussed under response 5.13.3 (a) (Population and Housing), would be not generate population growth; therefore, no new demand would be placed on schools, parks, or other public facilities.

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5.15 RECREATION

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

5.15.1 Environmental Setting

The Mira Sorrento Distribution Substation Project (proposed project) is not located within the immediate vicinity of any neighborhood or regional parks. The closest regional park is the Los Peñasquitos Canyon Preserve, located approximately 1 mile north of the project and managed by the City of San Diego Parks and Recreation Department. Los Peñasquitos Canyon Preserve is located in the City of San Diego (City) between the Interstate (I)-5 and I-15 freeways. The preserve is composed of two large coastal canyons. When completed, it will cover over 4,000 acres and stretch approximately 7 miles.

5.15.2 Regulatory Setting

There are no federal or state laws or policies related to recreation facilities that are applicable to the proposed project.

The General Plan for the City has a variety of goals and policies related to recreation facilities, and it generally describes the City's provision and management of recreation facilities

5.15.3 Environmental Impacts

Significance Criteria

Appendix G of the California Environmental Quality Act (CEQA) Guidelines provides guidance for evaluating whether a development project may result in significant impacts (14 CCR 15000 et seq.). Appendix G indicates that a project could have a significant impact on recreational facilities if the project would:

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated

b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Refer to Section 5.16, Transportation and Traffic, for a discussion regarding potential impacts to bicycle facilities.

Impact Discussion

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

As discussed in Section 5.13, Population and Housing, the proposed project would not directly or indirectly induce growth and thus would not affect the use of or demand for existing parks and recreation facilities. Physical deterioration of recreation facilities would not occur because there would be no permanent increases in population as a result of the proposed substation.

b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Because there would be no population growth associated with SDG&E's proposed project, the project would not include recreation facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

5.16 TRANSPORTATION/TRAFFIC

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☒	☐	☐
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☒	☐	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☒	☐

5.16.1 Environmental Setting

The following summary of the existing environmental setting surrounding the Mira Sorrento Distribution Substation Project (proposed project) discusses the roadway network, rail and public transportation networks, air transportation network, and bicycle and pedestrian facilities. The study area for this analysis includes roadways directly affected by the proposed project. Existing roadway information is based on review of information presented in San Diego Gas & Electric's (SDG&E's) Proponent's Environmental Assessment (PEA) (SDG&E 2011) and supplemental information provided (SDG&E 2012).

Existing Roadway Network

Figure 4-2, Vicinity Map, illustrates the study area roadway network that could be potentially affected by the proposed project, including the following roadways:

Freeways – Interstate 805 (I-805): The project is located less than 500 feet east of I-805. I-805 is an eight-lane freeway providing a major north-south transportation corridor from near the Mexican border through central San Diego, and linking with Interstate 5 (I-5) in Sorrento Valley.

Arterial and Local Roads: The proposed project site is bounded by Mira Mesa Boulevard to the southeast, Vista Sorrento Boulevard to the south and Mira Sorrento Place to the west.

Mira Mesa Boulevard. The southeastern border of the project site is adjacent to Mira Mesa Boulevard. Mira Mesa Boulevard is a prime arterial with eight lanes providing east–west connection from I-805 to industrial, commercial, and residential areas in the Sorrento Mesa and Mira Mesa areas, and eventually connecting with Interstate 15 (I-15).

Vista Sorrento Boulevard. The southern border of the project site is adjacent to Vista Sorrento Boulevard. Vista Sorrento Boulevard is four-lane collector providing north–south connection between the intersection of Mira Mesa Boulevard/I-805 and Sorrento Valley Boulevard.

Mira Sorrento Place. The western border of the project site is adjacent to Mira Sorrento Place.

Table 5.16-1 lists affected roadways and includes general roadway classification, number of lanes, daily traffic volumes, and level of service.[1]

Table 5.16-1: Public Roadways Adjacent to the Project Area

Roadway	Roadway Segment	Classification	Number of Lanes in the Project Area	Average Weekday Traffic olume[1]	A.M. Peak[1]	P.M. Peak[1]	LOS D
Interstate 805	North/South of Mira Mesa	Freeway	Four Lanes Each	163,000[3]	N/A	N/A	70,000

[1] LOS is based on traffic congestion, measured by dividing traffic volume by roadway capacity. The resulting number, known as the volume-to-capacity (V/C) ratio, usually ranges from 0 to 1.0. The V/C ratings are divided into six LOS categories, A through F, representing conditions ranging from unrestricted traffic flow (A) to extreme traffic congestion (F).

Table 5.16-1: Public Roadways Adjacent to the Project Area							
Roadway	**Roadway Segment**	**Classification**	**Number of Lanes in the Project Area**	**Average Weekday Traffic olume[1]**	**A.M. Peak[1]**	**P.M. Peak[1]**	**LOS D**
	Boulevard		Direction				
Mira Sorrento Place	Vista Sorrento Parkway to Scranton Road	Collector	Two Lanes Each Direction	10,809	1,425	1,457	13,000
Vista Sorrento Parkway	Lusk Blvd to Sorrento Valley Blvd	Major Arterial	Two Lanes NB/2 Lanes SB	14,404	2,033	1,829	35,000
Vista Sorrento Parkway	Lusk Blvd to I-805 Ramp	Major Arterial	Two Lanes NB/1 Lane SB	18,640[3]	N/A	N/A	35,000
Vista Sorrento Parkway	I-805 Ramp to Mira Mesa Blvd	Major Arterial	Three Lanes Each Direction	22,820[3]	N/A	N/A	45,000
Mira Mesa Blvd	Vista Sorrento Parkway and Scranton Road	Primary Arterial	Four Lanes Each Direction	64,000	6,061	5,103	55,000
Mira Mesa Blvd	Scranton Road and Lusk Blvd	Primary Arterial	Three Lanes Each Direction	42,943	3,527	3,188	55,000

Source: SDG&E 2011

Table 5.16-2 lists existing intersections in the project area and includes a.m. and p.m. levels of service.

Table 5.16-2: Existing Intersection Operations			
Intersection	**AM/PM Peak Hour**	**Existing Delay[1]**	**LOS**
Mira Mesa Blvd/Vista Sorrento Pkwy/I-805 NB Off-Ramp	**AM**	**>1002**	**F**
	PM	34.5	C
Mira Mesa Blvd/Scranton Rd	**AM**	**>100**	**F**
	PM	**>100**	**F**
Mira Sorrento Pl/Scranton Rd	AM	12.8	B
	PM	19.5	B
Vista Sorrento Pkwy/I-805 NB Ramps	**AM**	**56.1**	**E**
	PM	39.7	D
Morehouse Dr/Scranton Rd	AM	27.9	C
	PM	40.7	D

Source: SDG&E 2011

Notes:

[1] Delay measured in seconds.

[2] Bold text indicates deficient intersection operations.

Air Transportation: San Diego International Airport is located approximately 14 miles to the south of the project in downtown San Diego. MCAS Miramar, located approximately 2 miles south of the project, is nearly 24,000 acres in size and accommodates approximately 225,000 flight operations per year. Montgomery Field is the closest public airport to the project site and is located in the Kearny Mesa area of San Diego, approximately 9 miles southeast of the project.

Rail and Public Transit Transportation: The North San Diego County Transit District's Coaster rail service operates in the project vicinity providing public transit between coastal northern San Diego County and the City of San Diego (City). The Sorrento Valley Coaster Rail Station is located approximately 1 mile northwest of the proposed project site located at 11170 Sorrento Valley Road. Eight AMTRAK trains operate between San Diego, Los Angeles, Santa Barbara, San Luis Obispo, and other Southern California cities in between. AMTRAK trains stop at three San Diego County Stations: the Santa Fe Depot in Centre City San Diego; Solana Beach; and the Oceanside Transit Center.

Public Transportation: Bus service in the Mira Mesa community is provided by San Diego Metropolitan Transit Service. A Park and Ride is located immediately west of the project site, adjacent to northbound I-805. An additional Park and Ride is located at the northwest corner of I-15 and Mira Mesa Boulevard.

Bikeways: Bikeways in the immediate project area include Vista Sorrento Parkway and Mira Mesa Boulevard. Vista Sorrento Parkway is designated as a Class II Bikeway, which is a restricted right-of-way (bike lane) located on the paved road surface alongside the traffic lane nearest the curb, and identified by special signs, lane striping, and other pavement marking. Mira Mesa Boulevard is designated as a Class III Bikeway in the vicinity of the project between I-805 and Scranton Road before changing into a Class II Bikeway. A Class III Bikeway includes a shared right-of-way designated by signs only, with bicycle traffic sharing the roadway with motor vehicles.

5.16.2 Regulatory Setting

Federal

Airports and navigable airspace not administered by the Department of Defense are under the jurisdiction of the Federal Aviation Administration (FAA). Federal Regulation Title 14, Section 77, establishes the standards and required notification for objects affecting navigable airspace. In general, construction projects exceeding 200 feet in height above ground level, or extending at a ratio greater than 50 to 1 (horizontal to vertical) from a public or military airport runway less than 3,200 feet long, out to a horizontal distance of 20,000 feet are considered potential obstructions and require FAA notification. In addition, the FAA requires a Helicopter Lift Plan for operating a helicopter within 1,500 feet of residential dwellings. All helicopter construction activities would be required to comply with all appropriate regulations of the FAA.

State

California Department of Transportation (Caltrans) is the state agency tasked with improving and maintaining roads in the state of California. In areas with designated state routes, the state has the responsibility to maintain these roadways, while the local jurisdiction is responsible for

maintaining local roads. Local jurisdictions work with Caltrans to designate transportation network requirements and critical areas in need of improvement.

Local

Construction of the proposed project could potentially affect access, traffic flows, curbside parking, and transit routes on public streets and highways. Therefore, it will be necessary for SDG&E and/or the construction contractor to obtain encroachment permits or similar legal agreements from the public agencies responsible for each affected roadway or other transportation right-of-way (ROW). Such permits are needed for ROWs that would be crossed by the underground transmission line as well as for transmission line construction activities that would require the use of public ROW for a parallel installation. For the proposed project, these encroachment permits would be issued by the City of San Diego.

5.16.3 Environmental Impacts

Significance Criteria

Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.) provides guidance for evaluating whether a development project may result in significant impacts. Appendix G suggests that a development project could have a significant impact on traffic and transportation if the project would:

a) Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)
e) Result in inadequate emergency access
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Impact Discussion

a) Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

During operation, the proposed project is expected to generate approximately one or two vehicle trips per day. This limited number of vehicle trips would result in less than significant impacts to traffic or traffic congestion.

During construction, testing and energizing the station (approximately 18 to 24 months), traffic will be generated by construction crews and equipment/material deliveries as shown in Table 4-2.

All construction equipment, vehicles, personnel, and material staging areas would be accommodated within the property lines of the proposed substation property. Construction traffic would access the site using Mira Sorrento Place and would primarily utilize Mira Mesa Boulevard and Vista Sorrento Parkway between the project site and I-805. Typically, from 8 to 20 workers and approximately 10 to15 truck trips would travel to and from the site daily during construction. It is expected that this short-term, construction-related traffic would not exceed an established level of service (LOS) standard or create a substantial impact on traffic volumes nor change traffic patterns in such a way that congestion and delay would be substantially increased on street segments or intersections because the change in traffic volume would not be enough to change existing volumes to capacity ratios.

During peak construction an estimated 50 to 60 personnel vehicle trips and over 50 truck trips per day associated with the 6-month grading phase would occur at the site. Peak construction-related traffic would create a short-term and limited impact on traffic volumes and may change traffic patterns in a manner that would affect the LOS or vehicle-to-congestion ratio on the study area roadways. In addition, as seen in Tables 5.16-1 and 15.16-2, a number of project area roadways and intersections are currently operating at a failing LOS in the AM/PM peak hours. Therefore Mitigation Measures (MM) TT-1, TT-2, and TT-3 are provided.

MM TT-1 Prior to the start of construction, SDG&E shall submit traffic management plans (TMPs) to the City of San Diego as part of the required traffic encroachment permits. Input and approval from the City shall be obtained, and copies of an approval letter from the City must be provided to the California Public Utilities Commission (CPUC) prior to the start of construction. The TMPs shall define the use of flag persons, warning signs, lights, barricades, cones, etc., according to standard guidelines outlined in the California Department of Transportation (Caltrans) *Traffic Manual for Construction and Maintenance Work Zones* (Caltrans 1996), the *Standard Specifications for Public Works Construction* (Caltrans 2009a), and the *Work Area Traffic Control Handbook (WATCH)* (Caltrans 2009b). Documentation of the approval of these plans, consistency with SDG&E's utility franchise agreements, and issuance of encroachment permits (if

applicable) shall be provided to CPUC prior to the start of construction activities that require temporary closure of a public roadway.

MM TT-2 SDG&E shall stagger work shifts during the peak period of construction activity, and construction shifts shall be staggered to the degree possible, such that employee arrivals and departures from the site will avoid the project area peak hours (7:30–8:30 a.m. and 4:30–5:30 p.m.). Construction-related truck traffic shall also be scheduled to avoid travel during peak periods of traffic on the surrounding roadways.

MM TT-3 Construction workers shall be encouraged to carpool to the job site to the extent feasible.

With implementation of MM TT-1, MM TT-2, and MM TT-3, it is expected that short-term, construction-related traffic would neither create a substantial impact on traffic volume nor change traffic patterns in such a way that congestion and delay would be substantially increased on street segments or intersections.

b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

As discussed in response 5.16.3 (a) above, although the project would result in a temporary increase in traffic, short-term and limited construction-related traffic would not result in a substantial impact on traffic volumes nor change traffic patterns in such a way as to affect the LOS or vehicle to congestion ratios on study area roadways. Therefore, a less than significant impact would result.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?

The project is not located within an airport land use plan or within 2 miles of a public airport. The project is located within 2 miles of MCAS Miramar. The low profile of the substation would not affect flight activities at MCAS Miramar.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No long-term changes to circulation patterns are proposed as part of the project. The proposed substation would be unmanned and would not permanently increase hazards related to existing traffic patterns in the area. Short-term construction-related activities, such as trenching and delivery of heavy equipment, would temporarily interfere with traffic patterns and safe pedestrian and cyclist access. Implementation of MM TT-1 (Traffic Management Plans) would ensure that temporary construction related impacts would be less than significant.

e) Result in inadequate emergency access?

The project will not close access to any property or existing roads; therefore, less-than-significant impacts to emergency access to access or to nearby uses are expected due to the project.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Implementation of the proposed project would not conflict with adopted policies or involve elimination of facilities supporting alternative transportation such as bus turnouts or bicycle facilities.

During construction, SDG&E would obtain encroachment permits to conduct work within the public ROW and would ensure that access for motorists and bicyclists remains open during construction, and therefore, less-than-significant impacts on alternative transportation modes are expected due to project construction.

The operation and maintenance of the proposed project would generate less than one vehicle trip per day on average. As such, no off-site rail, bus, or bicycle traffic or circulation patterns would be altered or adversely affected by long-term operation and maintenance activities.

5.17 UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

5.17.1 Environmental Setting

Water Service: The City of San Diego Water Department provides water service to the project area.

Wastewater Service: The Metropolitan Wastewater Department of the City of San Diego provides wastewater treatment service to the project area.

Solid Waste Service: The City of San Diego Collection Services Department provides solid waste collection to the project area.

5.17.2 Regulatory Setting

Federal

Clean Water Act

Increasing public awareness and concern for controlling water pollution led to enactment of the Federal Water Pollution Control Act Amendments of 1972. As amended in 1977, this law became commonly known as the Clean Water Act (CWA) (33 U.S.C. 1251 et seq.). The CWA established basic guidelines for regulating discharges of pollutants into the "waters of the United States." The CWA requires that states adopt water quality standards to protect public health, enhance the quality of water resources, and ensure implementation of the CWA.

State

Utilities

The responsibilities of utility operators and other excavators working in the vicinity of utilities are detailed in Section 1, Chapter 3.1 "Protection of Underground Infrastructure," Article 2, of California Public Utilities Code. This law requires that an excavator must contact a regional notifications center at least 2 days prior to excavation of any subsurface installations. The notifications center for the project area is Underground Service Alert. Any utility provider seeking to begin an excavation project can call Underground Service Alert's toll-free hotline. Underground Service Alert, in turn, will notify the utilities that may have buried lines within 1,000 feet of the excavation. Representatives of the utilities are required to mark the specific location of their facilities within the work area prior to the start of excavation. The excavator is required to probe and expose the underground facilities by hand prior to using power equipment.

Water

The State Water Resources Control Board adopted Water Quality Order No. 2006-0008-DWQ for the reissuance of general National Pollutant Discharge Elimination System permit (CAG990002) on July 19, 2006. This general permit covers short-term and intermittent discharges from the dewatering of utility vaults and underground structures to surface waters.

Solid Waste

Assembly Bill (AB) 939 established an integrated waste management hierarchy to guide the California Integrated Waste Management Board and local agencies in the implementation of programs geared at (1) source reduction, (2) recycling and composting, and (3) environmentally safe transformation and land disposal. AB 939 also included waste diversion mandates that require all cities and counties to divert 50% of all solid waste through source reduction, recycling, and composting activities (California Integrated Waste Management Board 2008).

AB 75 was passed in 1999 and added new provisions to the Public Resources Code, mandating that all state agencies and large state facilities develop and implement an integrated waste management plan. In addition, the provisions of AB 75 required all state agencies and large state facilities to divert at least 25% of their solid waste from landfills by January 1, 2002, and at least 50% on and after January 1, 2004. As of January 1, 2006, extensions to the diversion requirements were no longer available (California Integrated Waste Management Board 2009).

The project is required to comply with Title 14 of the California Code of Regulations (CCR), which established minimum standards for solid waste handling and disposal (the current regulations of the California Integrated Waste Management Board are found within Title 14). The California Department of Toxic Substances Control issues permits for the transport of hazardous wastes.

5.17.3 Environmental Impacts

Significance Criteria

Criteria for determining the significance of impacts on utilities were based on the environmental checklist form in Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.). On the basis of the checklist questions, a project may have a significant effect on the environment if it would result in any of the following outcomes:

a) Exceed wastewater treatment requirements of the applicable RWQCB
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
d) Not have sufficient water supplies available to serve the project from existing entitlements and resources, or would need new or expanded entitlements
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project, that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments
f) Be served by a landfill without sufficient permitted capacity to accommodate the project's solid waste disposal needs
g) Conflict with federal, state, and local statutes and regulations related to solid waste.

Impact Discussion

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Project implementation would not impact wastewater treatment. Wastewater treatment facilities are neither required nor part of the proposed project.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The proposed project would not require the use of wastewater facilities. Irrigation water for the landscaping proposed to screen the facility would be provided via a metered service from the City of San Diego's 12-inch water main in Mira Sorrento Place. Landscaping would consist of drought-tolerant plants that become naturalized after irrigating for two or three growing seasons. This minimal usage of water would have a less-than-significant impact on water resources and would not require the construction of new water facilities.

c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Development of the project site would not significantly increase impervious areas within the local drainage basin. Drainage improvements would be engineered to accommodate minor flows from the project and would not require or alter existing off-site drainage systems (also see Section 5.9, Hydrology and Water Quality).

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

See response 5.17.3 (b) above.

e) Result in a determination by the wastewater treatment provider, which serves or may serve the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

See response 5.17.3 (a) above.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

The project will generate a limited amount of solid waste during construction. It is anticipated that the solid waste generated by project construction would have a less than significant impact on local solid waste facilities. No regular solid waste disposal is proposed as part of the substation project. Wastes produced at the substation by maintenance and repair activities would be transported back to the central San Diego Gas & Electric maintenance facility in San Diego for disposal. The amount of solid waste generated by the proposed substation would not be substantial or interfere with the sufficient permitted capacity of nearby landfills.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

See response 5.17.3 (f). All solid waste would be disposed of at an approved site in compliance with federal, state, and county regulations.

5.18 MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

Biological Resources: The proposed substation would be developed within a 2.8-acre impact area that is predominantly disturbed habitat. The project would result in permanent impacts to 0.9 acre of coastal sage scrub and 0.1 acre of native grassland habitat. While no sensitive species were observed on the site, the federally threatened California gnatcatcher was observed near the site in 2003 and was determined to have a moderate potential to nest on the site.

SDG&E has proposed APM-BIO 1 and APM-BIO-2 (see Table 1) to reduce impacts to coastal sage scrub and California gnatcatcher which generally breed and forage in coastal sage scrub. Mitigation for impacts to 0.9 acre of coastal sage scrub will be in accordance with SDG&E's approved Section 10(a) permit and NCCP, USFWS and CDFG requirements and is described in Mitigation Measure BIO-6. Mitigation Measure BIO-1 ensures that impacts to special status plant species are reduced to less than significant levels. Additional or supplementary Mitigation Measures (MM) BIO-2 through BIO-5, described in Section 5.5., Biological Resources, provides further details on procedures to ensure avoidance and minimization of potential impacts to biological resources. Implementation of these measures would mitigate potential impacts on biological resources to less than significant levels.

Cultural Resources: As further described in Section 5.6, Cultural Resources, and based on a records search and field survey, the project site does not contain any historical or archaeological resources. Therefore, construction of the proposed project would not contribute to the potential for loss of known significant cultural resources. However, construction of the proposed project may contribute to the potential loss of yet to be discovered significant cultural resources. Development of the proposed project would require excavation activities that may have the potential to disturb unknown resources. With implementation of Mitigation Measure CUL-1, the proposed project would successfully preserve significant cultural resources, if present. Therefore, the potential to eliminate significant historical and/or archaeological resources due to implementation of the project would be less than significant.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

As revealed by the previous discussions in Sections 5.2 through 5.17, impacts from the Mira Sorrento Distribution Substation Project (proposed project) are considered to be less than significant or no impact after incorporation of APMs and supplementary mitigation measures. When considered in a cumulative impacts context, the project must be analyzed in accordance with other developments within the area, which may themselves cause environmental impacts. As discussed in preceding Sections 5.2 through 5.17, many of the potential impacts of the proposed project would occur during construction with few lasting operational effects. Because the construction-related impacts of the proposed project would be temporary and localized, they would only have the potential to combine with similar impacts of other projects if they occur at the same time and in close proximity. Construction impacts caused by the proposed project (primarily related to air quality, biological resources, noise, and traffic) could combine with similar effects of other projects being built in the project area at the same time. The only current and probable future projects that would cause cumulative impacts within the cumulative study area are the Mira Sorrento Light Industrial Park (includes construction of three buildings adjacent to the easterly boundary of project) and the Interstate 805 High-Occupancy Vehicle (HOV)/Carroll Canyon Roadway. Both of these projects could be constructed during the same time period as the proposed project.

With regard to construction and operation, individually and cumulatively, the proposed project would not result in any significant long-term impacts that would substantially combine with other current and probable future impacts in the following resources areas:

- Agricultural Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gases
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Utilities and Service Systems

As a result, these resource areas are not further analyzed with regard to cumulatively considerable impacts.

Cumulative impacts to the following resources could occur as a result of construction of the proposed project in conjunction with the other planned projects:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise
- Transportation and Traffic

These topics are discussed in detail as follows.

Aesthetics

To the extent that the proposed project would be visible during construction along with one or more of the cumulative projects, adverse cumulative impacts may occur from the construction equipment, vehicles, materials, staging areas, and personnel. These construction impacts, however, would be temporary and would not create significant cumulative effects.

The long-term visual character of the proposed project site will change from undeveloped to a man-made urban landscape, supporting energy facilities. While this landscape character change will be noticeable from surrounding land uses with views to the site, the conversion of the landscape for this use is consistent with the Mira Mesa Community Plan and zoning, would be a less-than-significant impact, and would not be cumulatively considerable to the existing visual character of the site and surrounding area.

Air Quality

The emissions of all criteria pollutants associated with the construction of the proposed project, including ozone precursors (volatile organic compounds and oxides of nitrogen (NO_x)), PM_{10}, and $PM_{2.5}$, would be below the emission-based significance levels. The pollutants generated from construction of the cumulative projects could result in a short-term, localized impact on ambient air quality that would overlap with those of the proposed project if the construction work were to occur in proximity and at the same time. However, the proposed project would not include any permanent, stationary sources of air pollution and would not induce population and/or employment growth, and therefore, the proposed project would not contribute in a cumulatively considerable manner to cumulative air quality impacts associated with the nonattainment status of the San Diego Air Basin.

Biological Resources

The proposed project, along with the cumulative projects, is located within an area that is primarily a previously disturbed and developed urban area. Since the project area is mostly developed, there is only a slight potential to impact the same sensitive biological resources as the proposed project during construction activities. Site-specific impacts would be mitigated through avoidance of sensitive habitats and species, implementation of site-specific reseeding programs, purchase of upland mitigation credits, and compliance with appropriate conditions determined by the California Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife Service (USFWS). Additionally, SDG&E is involved in project-specific mitigation and subregional mitigation programs through its subregional Natural Community Conservation Plan (NCCP) that implements the regional biological conservation goals of the NCCP Act of 1991. With the disturbed nature of the cumulative project sites and the continued participation by SDG&E in their subregional NCCP and other project proponents within the study area in regional conservation planning such as the Multiple Species Conservation Program (MSCP), impacts are not considered cumulatively considerable.

Hazards and Hazardous Materials

The proposed project, as well as the past, current, and future surrounding development in the study area, may increase the opportunity and likelihood for exposure of people to hazardous materials. Compliance with applicable laws and regulations identified in Section 5.8.2, Regulatory Setting, would reduce the potential health and safety impacts associated with implementation of the project to less-than-significant levels. With adherence to applicable federal, state, and local county laws, and regulations associated with other projects in the area, the cumulative risk or adverse public health effects associated with the hazards and hazardous materials impacts would be reduced to less than significant and would not be cumulatively considerable.

Hydrology and Water Quality

Future and proposed construction projects in proximity to the proposed project could result in cumulative hydrologic and water quality impacts on the study area. The pollutants generated from construction of the cumulative projects could result in a significant cumulative impact on water quality if the construction work occurs in proximity and at the same time as the proposed project. At the individual project level, hydrological impacts can be mitigated to a less-than-

significant level by incorporating mitigation measures that would ensure that the proposed project would comply with federal, state, and local water pollution control laws; that project-specific stormwater and erosion control plans are prepared and implemented; and dewatering activities would be completed consistent with local dewatering requirements (as described in Section 5.9, Hydrology and Water Quality). For the proposed project SDG&E would prepare a Stormwater Pollution Prevention Plan to comply with the NPDES General Construction Activity Stormwater, which requires implementation of Best Management Practices. In addition, the project proposes to construct two drainage basins on the site that would be designed to ensure stormwater flows would not exceed the capacity of the storm drain system. Therefore, with implementation of mitigation measures identified for the proposed project, the project's potential cumulative impacts to hydrology and water quality would be reduced to a level that would be less than significant and not cumulatively considerable.

Land Use

The construction for the proposed project combined with the cumulative projects may create significant short-term construction-related cumulative impacts to existing land uses (e.g., businesses adjacent to study area). It is anticipated that cumulative impacts to existing land uses resulting from ongoing development can be mitigated to a level of less than significant at the individual project level by providing construction notification and minimizing construction disturbance, providing continuous access to properties, and coordinating with local businesses on planned construction activities. Additional mitigation measures are described to mitigate short-term construction impacts to traffic as described in Section 5.16, Transportation and Traffic. These measures would reduce the proposed project's cumulative construction impacts to a level that would be less than significant and not cumulatively considerable.

Noise

Potential adverse noise impacts during construction of the proposed project would be localized and would occur intermittently for varying periods of time throughout the estimated 18- to 24-month construction period. There are no sensitive receptors closer than 800 feet to the proposed project site.

Short-term impacts from construction noise can be mitigated to a level of less than significant by limiting construction activities per local noise ordinances as described in Section 5.12, Noise. Providing advanced notice of construction and a public liaison to minimize construction noise nuisances would further minimize impact due to short-term construction noise.

Operations at the Mira Sorrento Substation are not expected to be above daytime ambient noise levels in the project area and/or in excess of standards in the local noise ordinances for adjacent properties. Therefore, in the absence of significant impacts, incremental accumulation of significant effects due to the proposed project would not occur.

Transportation and Traffic

As discussed in Section 5.16, Transportation and Traffic, construction of the proposed project would contribute to short-term impacts to traffic circulation on local roadways. Significant cumulative traffic circulation impacts may result over the short term with the Mira Sorrento Light

Industrial Park and I-805 Carroll Canyon Roadway extension improvements since these projects are anticipated to be conducted simultaneously and in the same general area. Short-term traffic impacts caused by construction of these projects proposed within the study area would result from increased truck traffic and disruption of local traffic to local businesses. It is anticipated that short-term impacts to project area roads can be mitigated to a level of less than significant by incorporating mitigation measures as described in Section 5.16, including preparation and implementation of a traffic control plan, staggering work shifts, and carpooling, as well as providing detours or safe areas along the construction zone for pedestrians and bicyclists. These measures will ensure that access will be maintained to individual properties and businesses, that emergency access will not be restricted, and that congestion and delay of traffic resulting from ongoing development are not substantially increased and will be of a short-term nature in accordance with the City's traffic control and engineering guidelines. These measures would reduce the proposed project's cumulative construction impacts to a level that would be less than significant and not cumulatively considerable.

The operation of the proposed project would generate minimal traffic only required for routine patrolling and maintenance, and, therefore, the project would not contribute to long-term cumulative impacts to traffic.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

The preceding sections of this Initial Study/Mitigated Negative Declaration (IS/MND) discuss the various types of impacts that could have adverse effects on human beings. During construction of the project, temporary adverse impacts to humans related to dust, noise, and traffic may occur. The proposed construction would also result in potentially hazardous conditions, largely from the possible release of hazardous substances during site development and grading activities. SDG&E has proposed APMs (see Table 4-5 in Section 4 of this IS/MND) that would reduce potentially adverse impacts on humans. In addition, mitigation measures that would mitigate the project's potential adverse impacts have been provided. A complete description of mitigation measures along with the applicant's proposed measures is provided in Section 6, Mitigation Monitoring and Reporting Program, of this document. This IS/MND concludes that potential adverse effects to humans are either less than significant or can be mitigated to a less-than-significant level with the implementation of measures presented herein. Therefore, the proposed project does not involve any activities, either during construction or operation that would cause significant adverse effects on human beings that cannot be readily mitigated to a less-than-significant level.

6.0 MITIGATION IMPLEMENTATION AND MONITORING PLAN

This Initial Study/Mitigated Negative Declaration (IS/MND) includes a mitigation monitoring, compliance, and reporting program (MMCRP) for the mitigation measures proposed for the project. This section provides the recommended framework for effective implementation of the MMCRP by the California Environmental Quality Act (CEQA) lead agency, the California Public Utilities Commission (CPUC), and it describes the roles of responsible parties in carrying out and enforcing adopted mitigation measures.

6.1 AUTHORITY FOR THE MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM

The California Public Utilities Code confers authority upon the CPUC to regulate the terms of service and the safety, practices, and equipment of utilities subject to its jurisdiction. It is the standard practice of the CPUC, pursuant to its statutory responsibility, to protect the environment, to require that mitigation measures stipulated as conditions of approval are implemented properly, and monitored and reported on. In 1989, this requirement was codified statewide as Section 21081.6 of the California Public Resources Code (PRC) (CEQA). Section 21081.6 requires a public agency to adopt an MMCRP when it approves a project that is subject to preparation of an IS/MND and where the IS/MND for the project identifies significant adverse environmental effects. CEQA Guidelines Section 15097 (14 CCR 15000 et seq.) was added in 1999 to further clarify agency requirements for mitigation monitoring or reporting.

The purpose of an MMCRP is to ensure that measures adopted to mitigate or avoid significant impacts of a project are implemented. The CPUC views the MMCRP as a working guide to facilitate not only the implementation of mitigation measures by the project proponent, but also the monitoring, compliance, and reporting activities of the CPUC and any monitors it may designate.

6.2 ORGANIZATION OF THE FINAL MITIGATION MONITORING PROGRAM

If the project is approved, the MMCRP should serve as a self-contained general reference for the mitigation monitoring program adopted by the CPUC for the project. To accomplish this, the final mitigation monitoring program (final plan) should contain the following elements. If and when a project has been approved by the CPUC, it will compile the final plan from the mitigation monitoring program in the final IS/MND, as adopted. The elements of the mitigation monitoring program are as follows:

MMCRP Introduction

- Authority and purpose of the program
- Program adoption process
- Organization of the MMCRP

Roles and Responsibilities

- Monitoring responsibility
- Enforcement responsibility

- Mitigation compliance responsibility
- Dispute resolution

General Monitoring Procedures

- Environmental monitor
- Construction personnel
- General reporting requirements
- Public access to records.

Project Description

In the final plan, this section will contain a concise overview and reference description of the approved project and will clearly outline its physical locations and timetable, including construction segments. This section will also specify the "master" reference(s) that the monitors and San Diego Gas & Electric (SDG&E) will use in carrying out the program (e.g., the final IS/MND, but also more detailed working maps and plans). The applicant proposed measures (APMs) to which SDG&E has committed to reduce potential impacts will also be listed in this section. This section will also include requirements for the submittal of plans/documentation to be prepared by SDG&E as outlined in the project description.

Agency Jurisdictions

In the final plan, this section will include the list of agencies with jurisdiction over the project (Section 1, Initial Study Environmental Checklist Form, Table 1-1) and a description of where their respective jurisdictions exist. For example, for a given construction segment, information about each jurisdictional agency's contact person (including name, address, and telephone and fax numbers) should be provided.

Mitigation Monitoring Programs

The final plan will incorporate the organization and display of the individual issue area mitigation measures presented in the final IS/MND, as well as all APMs applicable to the project. Each mitigation measure will be numbered and described briefly. The final IS/MND should be consulted for an in-depth discussion of each mitigation measure. The final plan will also include the following information:

- Responsible parties, schedule, and reporting requirements for carrying out the monitoring activity for each mitigation measure
- Effectiveness criteria for evaluating implementation of the mitigation measure.

6.3 ROLES AND RESPONSIBILITIES

As the lead agency under CEQA, the CPUC is required to monitor this project to ensure that the required mitigation measures and APMs are implemented. The CPUC will be responsible for ensuring full compliance with the provisions of this monitoring program and has primary responsibility for implementation of the monitoring program. The purpose of the monitoring program is to document that the mitigation measures required by the CPUC are implemented and that mitigated environmental impacts are reduced to the level identified in the program.

The CPUC may delegate duties and responsibilities for monitoring to other environmental monitors or consultants as deemed necessary, and some monitoring responsibilities may be assumed by responsible agencies (such as affected jurisdictions). The number of construction monitors assigned to the project will depend on the number of concurrent construction activities and their locations. However, the CPUC will ensure that each person who is assigned monitoring duties or responsibilities is qualified to monitor compliance.

Any mitigation measure study or plan that requires approval from the CPUC must allow for adequate review time, as stipulated in MMCRP. Other agencies and jurisdictions may require longer review periods. It is the responsibility of the environmental monitors assigned to the project to ensure that appropriate agency reviews and approvals are obtained.

The CPUC and its environmental monitors will also ensure that any variance process or deviation from the procedures identified under the monitoring program is consistent with CEQA requirements; no project variance will be approved by the CPUC if it creates new significant impacts. A variance should be strictly limited to minor project changes that will not trigger other permit requirements; the changes must neither increase the severity of an impact nor create a new impact, and they must clearly and strictly comply with the intent of the mitigation measure. A proposed project change that has the potential for creating significant environmental effects will be evaluated to determine whether supplemental CEQA review is required. Any proposed deviation from the approved project, adopted mitigation measures, and APMs, and correction of such deviation, shall be reported immediately to the CPUC and the environmental monitors assigned to the project for their review and approval. In some cases, a variance may also require approval by a CEQA-responsible agency.

6.4 ENFORCEMENT RESPONSIBILITY

The CPUC is responsible for enforcing the procedures adopted for monitoring through the environmental monitors assigned to the project. The environmental monitors shall note problems in the field, notify appropriate agencies or individuals about issues, and report compliance status to the CPUC project manager.

The CPUC has the authority to halt any construction, operation, or maintenance activity associated with the project if the activity is determined to be a deviation from the approved project, adopted mitigation measures, or APMs. The CPUC may delegate this authority to third-party environmental monitors assigned to the project.

6.5 MITIGATION COMPLIANCE RESPONSIBILITY

The applicant, SDG&E, is responsible for successfully implementing all the adopted mitigation measures in the MMCRP. The MMCRP will contain criteria that define whether mitigation is successful. Standards for successful mitigation also are implicit in many mitigation measures that include requirements such as obtaining permits or avoiding a specific impact entirely. Other mitigation measures include success criteria that are listed in the mitigation measure. Additional mitigation success thresholds may be established by applicable agencies with jurisdiction through the permit process and through the review and approval of specific plans for the implementation of mitigation measures.

6.6 DISPUTE RESOLUTION

It is expected that the final MMCRP will reduce or eliminate many potential disputes. However, even with the best preparation, disputes may occur. In such event, these procedures will be followed:

- **Step 1.** Disputes and complaints (including those of the public) should be directed first to the CPUC's designated project manager for resolution. The project manager will attempt to resolve the dispute.
- **Step 2.** Should this informal process fail, the CPUC project manager may initiate enforcement or compliance action to address deviations from the proposed project or adopted mitigation monitoring program.
- **Step 3.** If a dispute or complaint regarding the implementation or evaluation of the program or the mitigation measures cannot be resolved informally or through enforcement or compliance action by the CPUC, any affected participant in the dispute or complaint may file a written "notice of dispute" with the CPUC's executive director. This notice should be filed in order to resolve the dispute in a timely manner, with copies concurrently served on other affected participants. Within 10 days of receipt, the executive director or designee(s) shall meet or confer with the filer and other affected participants for purposes of resolving the dispute. The executive director shall issue an executive resolution describing his/her decision and serve it on the filer and other affected participants.
- **Step 4.** If one or more of the affected parties is not satisfied with the decision as described in the resolution, such party/parties may appeal to the CPUC via a procedure to be specified by the CPUC.

Parties may also seek review by the CPUC through existing procedures specified in the CPUC's rules of practice and procedure for formal and expedited dispute resolution, although a good faith effort should first be made to use the foregoing procedures.

6.7 GENERAL MONITORING PROCEDURES

6.7.1 Environmental Monitors

The CPUC and the environmental monitors are responsible for integrating the mitigation monitoring procedures into the construction process in coordination with SDG&E. To oversee the monitoring procedures and to ensure success, the environmental monitors assigned to the project must be on site during construction activities that have the greatest potential to create a significant environmental impact or other impact for which mitigation is required. The environmental monitors are responsible for ensuring that all procedures specified in the monitoring program are followed.

6.7.2 Construction Personnel

A key component of a successful mitigation monitoring program will be obtaining the full cooperation of construction personnel and supervisors. Many of the mitigation measures require action on the part of the construction supervisors or crews for successful implementation. To ensure success, the following actions, detailed in specific mitigation measures included in the final plan, will be taken:

- Procedures to be followed by construction companies hired to do the work will be written into contracts between SDG&E and any construction contractors. Procedures to be followed by construction crews will be written into a separate agreement that all construction personnel will be asked to sign, denoting agreement.

- One or more preconstruction meetings will be held to inform and train construction personnel about the requirements of the monitoring program (as detailed in the final plan).
- A written summary of mitigation monitoring procedures will be provided to construction supervisors for all mitigation measures requiring their attention.

6.7.3 General Reporting Procedures

Site visits and specified monitoring procedures performed by other individuals will be reported to the environmental monitors assigned to the relevant construction segment. A monitoring record form will be submitted to the environmental monitor by the individual conducting the visit or procedure so that details of the visit can be recorded and progress traced by the environmental monitors. A checklist will be developed and maintained by the environmental monitors to track all procedures required for each mitigation measure and to ensure that the timing specified for the procedures is adhered to. The environmental monitors will note any issues that may occur and take appropriate measures to bring a situation back into compliance. SDG&E shall provide the CPUC with written weekly reports of the project, which shall include progress of construction, resulting impacts, mitigation implemented, and all other noteworthy elements of the project. Weekly reports shall be required as long as mitigation measures are applicable.

6.7.4 Public Access to Records

The public is allowed access to records and reports used to track the monitoring program. Monitoring records and reports will be made available for public inspection by the CPUC on request. The CPUC and SDG&E will develop a filing and tracking system. For additional information about mitigation monitoring and reporting for the proposed project, the Energy Division of the CPUC will maintain an Internet website, accessible at:

http://www.cpuc.ca.gov/environment/info/dudek/MiraSorrento/MiraSorrentoSub.htm.

To facilitate public awareness, the CPUC will make weekly reports available on the website.

6.8 CONDITION EFFECTIVENESS REVIEW

To fulfill its statutory mandates to mitigate or avoid significant effects on the environment and to design a mitigation monitoring program that will ensure compliance during project implementation (PRC 21081.6), the CPUC may conduct a comprehensive review of conditions that are not effectively mitigating impacts at any time it deems appropriate, including as a result of the dispute resolution procedure outlined in Section 6.6.

If in either review the CPUC determines that any conditions are not adequately mitigating significant environmental impacts caused by the project, then the CPUC may impose additional reasonable conditions to effectively mitigate these impacts. These reviews will be conducted in a manner consistent with the CPUC's rules and practices.

6.9 MITIGATION MONITORING PROGRAM TABLE

Table 6-1, along with the full text of the mitigation measures themselves, will form the basis for implementation of the mitigation monitoring program.

Table 6-1: Mitigation Monitoring Program Table

Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
Aesthetics						
Operation of the proposed project could result in long-term visual impacts.		APM-AES-1	PEA Figure 3-8: Conceptual Landscape Plan (IS/MND, Figure 4-4) provides the conceptual landscape mitigation plan for the Mira Sorrento Substation. The landscape plan would be implemented as part of the proposed project following construction of the substation components. The conceptual landscape plan would provide partial screening of views of the substation site from view locations to the west, south, and east. Landscaping would include plantings within the retaining walls and small, informal groupings of small shrubs and trees on the flatter areas created by the walls. The Conceptual Landscape Plan includes a list of recommended plant species. All suggested trees appear on the City of San Diego Street Tree Selection Guide. Drought-tolerant plants, including California native species, are suggested. Proposed project landscaping would receive regular watering during the initial two years following installation in order to ensure the establishment of the plants. All planting would be consistent with SDG&E operational requirements for landscaping in proximity to electric transmission facilities.	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	CPUC to verify proposed shrub and tree planting locations through review of preconstruction plans. CPUC to verify measure implementation in the field. Effectiveness measure is that the visibility of the substation is partially screened by surrounding landscaping.	During and following construction. Measure applies to landscaping installed at the Mira Sorrento Substation.
Operation of the proposed project could result in long-term visual impacts.		APM-AES-2	The color of the substation perimeter wall would be chosen to blend with the existing site features (i.e., a dull grey, light brown, or dull green) in order to minimize visual contrast with the landscape setting.	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	CPUC to verify proposed color palette of substation perimeter wall through review of preconstruction plans. CPUC to verify in the field. Effectiveness criteria – wall color blends with the existing site features and is consistent with the existing landscape setting.	During and following construction. Measure applies to Mira Sorrento perimeter wall.

Table 6-1: Mitigation Monitoring Program Table

Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
Biological Resources						
Construction of the proposed project could result in temporary and/or permanent loss of native vegetation, direct or indirect loss of listed/ sensitive plants or habitat for sensitive plants, and direct or indirect loss of listed/sensitive wildlife or habitat of sensitive wildlife.		APM-BIO-1	SDG&E will conduct activities in accordance with NCCP Operational Protocols to avoid, minimize, or mitigate impacts to biological resources. See APM-BIO-2.	SDG&E to implement NCCP Operational Protocols as defined and incorporate commitments into construction contracts.	CPUC to inspect periodically during construction to ensure SDG&E is conducting activities in accordance with NCCP Operational Protocols.	Prior to and during construction at the Mira Sorrento Substation project site.
Construction of the proposed project could result in direct or indirect loss of listed/sensitive plants or habitat for sensitive plants and direct or indirect loss of listed/sensitive wildlife or habitat for sensitive wildlife.		APM-BIO-2	In accordance with the NCCP, SDG&E will conduct the following: • Whenever practicable, all grading or brushing occurring within occupied CAGN habitat shall be conducted from September 1st through February 28, which is outside of the CAGN breeding season. • When conducting all other project construction activities during the CAGN breeding season of March 1 through August 31 within habitat in which CAGN are known to or have a high potential to occur, the following avoidance measures shall apply: o A qualified biologist will conduct a preconstruction survey for CAGN within 1 week prior to initiating project construction activities in an area. If CAGN are present but not nesting, a qualified biologist will survey for nesting CAGN approximately once per week in the vicinity of project activities for the duration of the activity in that area.	SDG&E to implement measure as defined and incorporate commitments into the construction contracts.	SDG&E to provide survey report documentation to CPUC regarding avoidance and USFWS/CDFG concurrence as necessary. CPUC to inspect periodically during construction in order to ensure successful avoidance if possible/or if not possible implementation of USFWS/CDFG-approved measures deemed necessary.	Prior to and during construction for all areas identified as having CAGN.

Table 6-1: Mitigation Monitoring Program Table

Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			o If an active CAGN nest is located in the vicinity of project activities, a biologist qualified for CAGN nest monitoring will monitor the nest daily until: (1) Project activities are no longer in the vicinity of the nest, or (2) the fledglings become independent of their nest. o If the CAGN nest monitor determines that the project activities are disturbing or disrupting the nesting activities, the monitor will make practicable recommendations to reduce the noise or disturbance in the vicinity. This may include recommendations such as (1) turning off vehicle engines and other equipment whenever possible to reduce noise, and (2) working in other areas until the young have fledged. With these avoidance and minimization measures in place, any incidental take of coastal California gnatcatcher is covered by the SDG&E NCCP.			
Construction activities could impact rare plants species.	BIO-1		Prior to construction, SDG&E shall retain a qualified biologist to conduct a focused rare plant survey for the entire proposed impact area within the project area during the time period when the special-status plant species are detectable. Locations of rare/special-status plants shall be identified and inventoried. If special-status plants are identified during surveys, then SDG&E shall retain a qualified biologist to supervise construction activities within the vicinity of the special-status plant species. If impacts to special-status plant species are unavoidable, the biologists shall recommend avoidance or mitigation approaches. Alternatively, if the special-status plant species in question is a covered species within the SDG&E Subregional NCCP, mitigation consistent with measures established in the NCCP shall be provided. The results of the focused plant surveys and measures	SDG&E to implement measure as defined.	CPUC to review and verify completion of rare plant survey. If rare plants are identified, CPUC to inspect periodically during construction to ensure on-site monitor presence and successful avoidance of sensitive species. Alternatively, if special-status plant in question is a covered species within the SDG&E Subregional NCCP,	CPUC to review survey prior to construction and if rare plants are identified and a monitor is required, CPUC to inspect site periodically during construction.

Table 6-1: Mitigation Monitoring Program Table

Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			outlined above that will be implemented by SDG&E in the event special-status plant species are identified on site shall be provided to CPUC prior to any construction activities including clearing, staging, grading, etc.		CPUC to inspect periodically during construction to ensure SDG&E is conducting activities in accordance with NCCP Operational Protocols.	
Construction activities could impact sensitive wildlife species.	BIO-2		SDG&E shall retain qualified biologists and other qualified resource specialists, as necessary, to monitor project construction. Monitors shall be hired and trained prior to construction and shall be responsible for preconstruction surveys, work area delineations (i.e., staking, flagging, etc.), on-site monitoring, documentation of violations and compliance, coordination with construction inspectors, and post-construction documentation. The SDG&E on-site biological monitors shall prepare weekly reports during ground-disturbance activities and send them to the CPUC and the CPUC monitors. The SDG&E on-site biological monitors shall prepare a post-construction compliance report within 60 days of the end of ground-disturbance activities and send it to the CPUC. SDG&E's monitors shall be responsible for obtaining clearance from the CPUC and, if necessary, resource agencies for project modifications. All project modifications variances will be documented and none will be allowed with verbal approval only. Project modifications that are considered minor with little risk to sensitive resources by the SDG&E on-site biological monitors and the CPUC biological monitors may be approved on the site but will be documented. Project modifications that could affect sensitive resources but are required to ensure the health and safety of work crews shall also be documented.	SDG&E to implement measure as defined.	CPUC to inspect periodically during construction to ensure on-site monitor presence and successful avoidance of sensitive species. SDG&E to provide weekly reports to CPUC and CPUC monitors regarding avoidance of sensitive species. SDG&E to provide post-construction compliance report to CPUC within 60 days of end of ground-disturbing activities.	Prior to and during construction.

Table 6-1: Mitigation Monitoring Program Table

Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
Construction of the proposed project could impact sensitive wildlife species.	BIO-3		SDG&E shall conduct Worker Environmental Awareness Program (WEAP) training for construction crews (primarily crew and construction foremen) before construction activities begin within any of the sensitive habitat areas. The WEAP shall include a brief review of the special-status species and other sensitive resources that could occur in the proposed project area (including their habitat requirements and an identification of portions of the project site and adjacent areas where they might be found) and their legal status and protection. The program shall cover all mitigation measures; environmental permits and proposed project plans, such as best management practices (BMPs); erosion control and sediment plan; reclamation plan; and any other required plans. The designated biological monitor shall be responsible for ensuring that construction personnel adhere to the guidelines and restrictions. WEAP training sessions shall be conducted as needed for new personnel brought onto the job during the construction period. A list of all personnel who have attended the WEAP training shall be kept by the biological monitor and shall be available for CPUC review in the field at all times, and a copy shall be submitted to the CPUC. During WEAP training, construction personnel shall be informed of the importance of avoiding ground-disturbing activities outside of the designated work area.	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	SDG&E to provide a copy of the worker training program for review and approval at least 30 days prior to start of construction. SDG&E to provide verification to CPUC of implementation of worker training program and compliance with measure as defined through providing sign-in sheets from each scheduled training session. All construction personnel that have been trained shall receive a sticker for their hard hat indicating they have completed environmental awareness training.	Prior to and during construction.
Construction of the proposed project could result in the potential for wildlife to be trapped in ditches during trenching activities.	BIO-4		At the end of each workday, any open holes shall be fully covered, after they have been inspected by the on-site biologist, with steel plates or other effective coverings to prevent entrapment of wildlife species. If fully covering the excavations is impractical, ramps will be used to provide a means of escape for wildlife that enter the excavations, or open holes will be securely fenced with exclusion	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	SDG&E to provide verification to CPUC of measure including submittal of construction contract. Survey efforts will	Prior to and during construction.

Table 6-1: Mitigation Monitoring Program Table

Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			fencing. If common wildlife species are found in a hole, the designated biological monitor shall immediately be informed and the animal(s) shall be removed. If the animal(s) is/are a sensitive species that require(s) special handling authorization, a qualified biologist (agency-permitted or approved to handle a specific species) shall remove the animal before resumption of work in that immediate area. SDG&E shall specify this requirement in its agreements with all construction contractors.		be documented by the biologist in the daily log and reported to the CPUC at the end of each week.	
Construction of the proposed project could impact nesting birds.	BIO-5		If construction activities including but not limited to grading or site disturbance are to occur between February 15 and September 15, a nesting bird survey shall be conducted by a qualified biologist to determine the presence of nests or nesting birds within 200 feet of the construction activities. The nesting bird surveys shall be completed no more than 72 hours prior to any construction activities. The survey will focus on special-status species known to use the area as well as other nesting birds that are protected under the MBTA. No grading or site disturbance shall occur within a 200-foot buffer of an active nest except as provided below. If work cannot be delayed until after the breeding season, a qualified biologist shall monitor the nest daily until project activities are no longer occurring within 200 feet of the nest or until the fledglings become independent of the nest. The monitoring biologist shall halt construction activities if he or she determines that the construction activities are disturbing the nesting activities. The monitor shall make practicable recommendations to reduce the noise or disturbance in the vicinity of the nest. This may include recommendations such as (1) turning off vehicle engines and other equipment whenever possible to reduce noise, (2) working in other areas until the young have fledged, or (3) placing noise barriers to maintain the noise at the nest to 60 dBA	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	SDG&E to provide survey report documentation to CPUC regarding avoidance and CDFG concurrence as necessary. CPUC to inspect periodically during construction in order to ensure successful avoidance if possible/or if not possible, implementation of additional mitigation shall occur.	Prior to and during construction for all areas within 200 feet of construction activities.

Table 6-1: Mitigation Monitoring Program Table

Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			leq hourly or less or to the preconstruction ambient noise level if that exceeds 60 dBA leq hourly. The on-site biologist will review and verify compliance with these nesting boundaries and will verify that the nesting effort has finished. Unrestricted construction activities can resume when no other active nests are found. Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to the California Public Utilities Commission.			
Construction of the proposed project could impact sensitive habitat.	BIO-6		Where impacts to Diegan coastal sage scrub and native grasslands cannot be avoided, SDG&E shall restore temporarily disturbed areas to preconstruction conditions following construction and deduct credits from the SDG&E Mitigation Credits for permanent impacts to sensitive communities, as stated in the SDG&E NCCP. Where on-site restoration is planned for mitigation of temporary impacts to sensitive vegetation communities, the applicant shall identify a habitat restoration specialist to be approved by the CPUC or that the resource agencies have indicated is acceptable to determine the most appropriate method of restoration. Restoration techniques can include hydroseeding, handseeding, imprinting, and soil and plant salvage, as discussed in Section 7.2.1 of the NCCP. Monitoring will include visual inspection of restored areas after 1 year. A second application may be made. If, after the second year, restoration is deemed unsuccessful, the USFWS and CDFG, in cooperation with SDG&E, shall determine whether the remaining loss shall be mitigated through a deduction from the SDG&E Mitigation Credits, or whether a third application would better achieve the intended purpose. The mitigation objective for impacted sensitive vegetation communities shall be restoration to preconstruction conditions as measured by species cover, species diversity, and	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	SDG&E to provide documentation of habitat credit deductions to CPUC. CPUC to ensure that commitments have been incorporated into contract specifications. CPUC to inspect periodically to ensure that disturbed areas have been restored to preconstruction conditions. SDG&E to provide documentation to CPUC regarding revegetation status and USFWS/CDFG concurrence as necessary. Effectiveness criteria: temporarily disturbed areas are revegetated and	Prior to, during, and following construction. This measure applies to all areas where impacts to sensitive natural communities are unavoidable and to all areas where habitat restoration is proposed.

Table 6-1: Mitigation Monitoring Program Table

Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			exotic species cover. The cover of native species should increase while the cover of non-native or invasive species should decrease. Success criteria shall be established by comparison with reference sites. If, however, roots are not grubbed during temporary impacts, restoration/hydroseeding may not be necessary. This applies to impacts greater than 500 square feet, and only where grubbing occurred. For all temporary impacts greater than 500 square feet, acreage not meeting success criteria shall be deducted from SDG&E's mitigation credits at a 1:1 ratio. In addition, SDG&E shall mitigate for permanent impacts to Diegan coastal sage scrub (all subtypes) and native grassland at a ratio of 1:1 for all permanent impacts that would result from construction activities. Evidence shall be provided to the CPUC that 0.9 acre of coastal sage scrub and 0.1 acre of native grasslands have been deducted from NCCP credits.		meet identified success criteria. Permanent impacts to sensitive natural communities are mitigated through deduction of habitat credits.	
Cultural Resources						
Construction of the proposed project could affect paleontological resources.		APM-CUL-1	A qualified paleontologist shall attend preconstruction meetings, as needed, to consult with the excavation contractor concerning excavation schedules, paleontological field techniques, and safety issues. A qualified paleontologist is defined as an individual with a Master of Science or Doctor of Philosophy in paleontology or geology who is experienced with paleontological procedures and techniques, who is knowledgeable in the geology and paleontology of Southern California, and who has worked as a paleontological mitigation project supervisor in the region for at least one year. The requirements for paleontological monitoring shall be noted on the construction plans.	SDG&E to provide a qualified paleontologist and incorporate monitoring requirements into construction plans.	SDG&E to provide CPUC documentation demonstrating qualifications of identified paleontologist.	Prior to and during construction.

Table 6-1: Mitigation Monitoring Program Table

Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
Construction of the proposed project could affect paleontological resources.		APM-CUL-2	A paleontological monitor shall work under the direction of the qualified project paleontologist and shall be on site to observe excavation operations that involve the original cutting of previously undisturbed deposits with high or moderate paleontological resource sensitivity. A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials.	SDG&E to provide a qualified paleontologist and incorporate monitoring requirements into construction plans.	CPUC to inspect periodically during construction to ensure on-site monitor presence.	Prior to and during construction.
Construction of the proposed project could affect paleontological resources.		APM-CUL-3	In the event that fossils are encountered, the project paleontologist shall have the authority to divert or temporarily halt construction activities in the area of discovery to allow recovery of fossil remains in a timely fashion. The paleontologist shall contact SDG&E's cultural resource specialist and environmental project manager at the time of discovery. The paleontologist, in consultation with SDG&E's cultural resource specialist, shall determine the significance of the discovered resources. SDG&E's cultural resource specialist and environmental project manager shall concur with the evaluation procedures to be performed before construction activities are allowed to resume. Because of the potential for recovery of small fossil remains, it may be necessary to set up a screen-washing operation on site. When fossils are discovered, the paleontologist (or paleontological monitor) shall recover them along with pertinent stratigraphic data. Because of the potential for recovery of small fossil remains, such as isolated mammal teeth, recovery of bulk-sedimentary-matrix samples for off-site wet screening from specific strata may be necessary, as determined in the field. Fossil remains collected during monitoring and salvage shall be cleaned, repaired, sorted, cataloged, and deposited in a scientific institution with permanent paleontological collections.	SDG&E to provide a qualified paleontologist and incorporate monitoring requirements into construction plans.	CPUC and SDG&E monitor to ensure work is diverted/temporarily suspended upon discovery of resources to allow timely recovery of fossil remains. CPUC to review the evaluation of significance and ensure implementation of evaluation procedures. SDG&E to provide summary report of mitigation program to CPUC.	During construction in all work areas where fossils are encountered.

Table 6-1: Mitigation Monitoring Program Table

Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
Construction of the proposed project could affect undiscovered cultural resources.	CUL-1		In the event that any prehistoric or historic subsurface cultural resources are discovered during ground-disturbing activities, such as chipped or ground stone, historic debris, building foundation, or human bones, all work within 50 feet of the resources shall be halted, and a qualified archaeologist shall be consulted to assess the significance of the find. If any find is determined to be significant, representatives of SDG&E, California Public Utilities Commission (CPUC), and the qualified archaeologist shall meet to determine the appropriate avoidance measures or other appropriate mitigation, with the ultimate determination to be made by the CPUC. All significant cultural materials recovered shall be subject to scientific analysis; professional museum curation, as necessary; and a report prepared by a specialist according to current professional standards. In considering any suggested mitigation proposed by the consulting archaeologist to mitigate impacts to historical resources or unique archaeological resources, the CPUC and SDG&E shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while mitigation for historical resources or unique archaeological resources is carried out. If the CPUC, in consultation with the qualified archaeologist, determines that a significant archaeological resource is present and that the resource could be adversely affected by the proposed project, SDG&E will: • Redesign the project to avoid any adverse effect on the significant archaeological resource • Implement an Archaeological Data Recovery Program (ADRP), unless the qualified	If necessary during monitoring, SDG&E's archaeologist to prepare Archaeological Data Recovery Program (ADRP) and meet with and submit to CPUC for review within 2 weeks of discovery. SDG&E to implement data recovery as specified in ADRP.	CPUC and SDG&E monitor to ensure work is suspended upon discovery of resources to ensure avoidance of all significant cultural resources. CPUC to review completed ADRP. SDG&E to provide summary report of mitigation program to CPUC. The qualifications of the archaeologist shall be approved by the CPUC.	During construction in all work areas where prehistoric or historic subsurface cultural resources are discovered during ground-disturbing activities.

Table 6-1: Mitigation Monitoring Program Table

Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			archaeologist determines that the archaeological resource is of greater interpretive use than research significance, and that interpretive use of the resource is feasible. If the circumstances warrant an ADRP, such a program shall be conducted. The project archaeologist and the CPUC shall meet and consult to determine the scope of the ADRP. The archaeologist shall prepare a draft ADRP that shall be submitted to the CPUC for review and approval. The ADRP shall identify how the proposed ADRP would preserve the significant information the archaeological resource is expected to contain. That is, the ADRP shall identify the scientific/historical research questions that are applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to portions of the historical property that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practical.			
Construction of the proposed project could affect undiscovered Native American human remains.	CUL-2		If human remains are discovered, there shall be no further excavation or disturbance of the discovery site or any nearby area reasonably suspected to overlie adjacent human remains until the project applicant has immediately notified the county coroner and otherwise complied with the provisions of State CEQA Guidelines, Section 15064.5(e). If the remains are found to be Native American, the county coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours. The most likely descendant of the deceased Native American shall be notified by the NAHC and given the opportunity to make proper disposition of human	SDG&E to provide qualified archaeologist to monitor during ground-disturbing activities. SDG&E to contact county coroner if human remains are found. Coroner to contact NAHC if appropriate.	CPUC and NAHC to review extraction plan if needed. CPUC and SDG&E monitor to ensure work is suspended upon discovery of resources to ensure avoidance of all significant cultural resources. If avoidance is not possible upon	During groundbreaking activities in all construction areas.

Table 6-1: Mitigation Monitoring Program Table

Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			remains. If the NAHC is unable to identify the most likely descendant, or if no recommendations are made within 24 hours, remains may be reinterred with appropriate dignity elsewhere on the property in a location not subject to further subsurface disturbance. If recommendations are made and not accepted, the NAHC will mediate.		conclusion of evaluations, data recovery research program exhausts potential of site to yield further important information. The qualifications of the qualified archaeologist shall be provided to the CPUC.	
Geology and Soils						
Construction of the proposed project could expose people or structures to potential substantial adverse seismic effects and the proposed project would be located on unstable and expansive soils.		APM-GEO-1	SDG&E will consider the recommendations and findings of the final Geotechnical Investigation Reports prepared by Kleinfelder Inc. and the contractor's geotechnical engineer in the final design of all project components to ensure that the potential for landslides, expansive soils, and slope instability is compensated for in the final design and construction techniques. In addition, SDG&E will comply with all applicable codes and seismic standards, as appropriate, to minimize the potential for damage from a seismic event. The final project design will be reviewed and approved by a professional engineer registered in the State of California, prior to commencement of construction.	SDG&E to implement measure as defined and incorporate commitments into construction contracts. SDG&E to provide copies of geotechnical investigation reports to the CPUC prior to construction of the proposed project.	CPUC to verify incorporation of recommendations and findings on preconstruction plans (if necessary).	Prior to construction. This measure applies to all components of the proposed project.

Table 6-1: Mitigation Monitoring Program Table

Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
Hazards and Hazardous Materials						
Construction of the proposed project could result in hazardous substance spills during transport, use or disposal, and construction could create a significant hazard to the public through accident conditions involving the release of hazardous material.		APM-HAZ-1	SDG&E would prepare a project-specific Hazardous Substance Management and Emergency Response Plan during the construction period to reduce or avoid potentially hazardous materials, for the purposes of worker safety, protection from groundwater contamination, and proper disposal of hazardous materials.	Plans to be submitted to CPUC, County of San Diego Department of Environmental Health, and City of San Diego Fire Department – Hazardous Materials Division.	CPUC to verify submittal of plans. CPUC to verify and ensure that potential exposure of workers, the public, or the environment to hazardous materials in contaminated soil and/or groundwater has been minimized.	Prior to and during construction.
Construction of the proposed project could result in hazardous substance spills during transport, use or disposal, and construction could create a significant hazard to the public through accident conditions involving the release of hazardous material.	HAZ-1a		Prior to construction, all SDG&E, contractor, and subcontractor project personnel would receive training regarding the appropriate work practices necessary to effectively implement hazardous materials procedures and protocols and to comply with the applicable environmental laws and regulations, including, without limitation, hazardous materials spill prevention and response measures. A sign-in sheet of contractor and subcontractor project personnel who have received training shall be provided to California Public Utilities Commission on a regular basis depending on the level of construction activity.	SDG&E to conduct training program as described and incorporate measure into construction contracts. SDG&E to provide documentation of contractor and subcontractor training to the CPUC.	SDG&E to submit evidence of training in order for CPUC to verify.	Prior to construction.

Table 6-1: Mitigation Monitoring Program Table

Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
Construction of the proposed project could result in hazardous substance spills during transport, use or disposal and construction could create a significant hazard to the public through accident conditions involving the release of hazardous material.	HAZ-1b		The hazardous substance management and emergency response plan proposed by APM-HAZ-1 shall be reviewed and approved by the California Public Utilities Commission (CPUC) and San Diego County Department of Environmental Health (DEH), Hazardous Materials Division. The plan shall meet the requirements identified in California Health and Safety Code §25503.4, §25503.5, and §25504 and specifically addressed for the County of San Diego in the County of San Diego DEH, Hazardous Material Division, guidance on Hazardous Materials Business Plans.	Plans to be submitted to CPUC and San Diego County Department of Environmental Health.	SDG&E to submit plans in order for CPUC and San Diego County DEH to verify.	Prior to construction.
Construction of the proposed project could result in hazardous substance spills during transport, use or disposal, and construction could create a significant hazard to the public through accident conditions involving the release of hazardous material.	HAZ-1c		SDG&E shall prepare and submit a copy of the Spill Prevention, Control, and Countermeasure plan, as required by Title 40 CFR, Section 112.7, to the California Public Utilities Commission for review and approval at least 60 days before the start of operation of the Mira Sorrento Substation.	Plan to be submitted to CPUC and San Diego County DEH.	SDG&E to prepare plan and submit in order for CPUC and San Diego County DEH to verify.	Plan submitted 60 days prior to the start of operation of the Mira Sorrento Substation.

Table 6-1: Mitigation Monitoring Program Table

Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
Construction of the proposed project could result in significant risk of loss, injury, or death involving wildland fires.	HAZ-2		Wildfires shall be prevented or minimized by exercising care when operating utility vehicles within the right-of-way and access roads and by parking vehicles away from dry vegetation where hot catalytic converters can ignite a fire. In times of high fire hazard, it may be necessary for construction vehicles to carry water and shovels or fires extinguishers. Fire protective mats or shields would be used during grinding or welding to prevent or minimize the potential for fire.	SDG&E to implement measure as defined and incorporate compliance requirements into construction contracts.	CPUC to verify through review of preconstruction plans. CPUC to verify in the field.	Prior to and during construction.
Hydrology and Water Quality						
Construction of the proposed project could result in a violation of water quality standards or waste discharge requirements.		HYD-1	SDG&E will prepare an SWPPP under the State General Construction Permit, and implement BMPs from the SDG&E Water Quality Construction Best Management Practices Manual in order to avoid and minimize potential impacts to water quality.	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	CPUC to ensure that commitments have been incorporated into construction contracts. CPUC to inspect periodically to ensure minimization of disturbance and erosion. SDG&E to submit SWPPP to CPUC in order to verify.	Prior to and during construction. This measure applies to grading activities and substation operations.
Potential dewatering activities during construction of the proposed project could result in a violation of water quality standards or waste discharge requirements.	HY-1		Prior to construction, SDG&E shall consult with the San Diego Regional Water Quality Control Board (RWQCB) to determine whether an individual discharge permit is required for dewatering at any of the project areas anticipated to encounter groundwater. A copy of the permit or a waiver from the RWQCB, if required, shall be provided to the California Public Utilities Commission prior to dewatering activities.	SDG&E to implement measure as defined.	CPUC to review documentation of coordination with RWQCB. If necessary, SDG&E to provide applicable permit/waiver to CPUC to verify.	Prior to construction.

Table 6-1: Mitigation Monitoring Program Table

Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
Potential dewatering activities during construction of the proposed project could result in a violation of water quality standards or waste discharge requirements.	HY-2		SDG&E shall submit to California Public Utilities Commission prior to construction a typical dewatering drawing that shall be implemented during dewatering activities. The drawing shall include the location of pumps within secondary containment, fuel storage areas, anticipated discharge point, scour protection measures, intake hose screening, and monitoring procedures to ensure that hazardous materials spills are addressed in a timely manner and discharge hoses are frequently inspected for leaks.	SDG&E to implement measure as defined and incorporate into construction plans. Monitoring procedure to be incorporated into construction contracts.	SDG&E to provide dewatering drawing to CPUC in order to verify.	Prior to construction.
Noise						
Construction of the proposed project could result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity.	NOI-1		SDG&E or its construction contractor shall provide advance notice, between 2 and 4 weeks prior to construction, by mail to all property owners within 500 feet of construction. The announcement shall state specifically the construction start date, anticipated completion date, and hours of construction.	SDG&E shall conduct public notification as defined.	SDG&E to provide CPUC with construction notices for review and approval to ensure advance notice has been given.	Notification provided prior to construction to all property owners within 500 feet of construction.
Construction of the proposed project could result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity.	NOI-2		SDG&E shall identify and provide a public liaison person before and during construction to respond to concerns of neighborhood receptors, including residents, about construction noise disturbance. Procedures for reaching the public liaison office via telephone or in person shall be included in notices distributed to the public in accordance with MM NOI-1. SDG&E shall also establish a toll-free telephone number for receiving questions or complaints during construction and develop procedures for responding to callers (procedures to be approved by the California Public Utilities Commission).	SDG&E to implement measure as defined.	CPUC to verify SDG&E employ of public liaison person and ensure procedures for reaching the public liaison are in place. SDG&E to provide CPUC with construction notices for review and approval to ensure advance notice has been given.	Prior to and during construction. Notification provided to CPUC prior to construction.

Table 6-1: Mitigation Monitoring Program Table

Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
Transportation/Traffic						
Construction of the proposed project could conflict with an applicable plan, ordinance, or policy regarding the performance of the circulation system, and construction activities could increase hazards due to a design feature or incompatible use.	TT-1		Prior to the start of construction, SDG&E shall submit traffic management plans (TMPs) to the City of San Diego as part of the required traffic encroachment permits. Input and approval from the City shall be obtained, and copies of an approval letter from the City must be provided to the California Public Utilities Commission (CPUC) prior to the start of construction. The TMPs shall define the use of flag persons, warning signs, lights, barricades, cones, etc., according to standard guidelines outlined in the California Department of Transportation (Caltrans) *Traffic Manual for Construction and Maintenance Work Zones* (Caltrans 1996), the *Standard Specifications for Public Works Construction* (Caltrans 2009a), and the *Work Area Traffic Control Handbook (WATCH)* (Caltrans 2009b). Documentation of the approval of these plans, consistency with SDG&E's utility franchise agreements, and issuance of encroachment permits (if applicable) shall be provided to CPUC prior to the start of construction activities that require temporary closure of a public roadway.	SDG&E to prepare TMPs as defined.	SDG&E to provide documentation of coordination with the City of San Diego as stipulated in the measure and SDG&E confirmation with all required conditions to ensure traffic flows would be generally maintained without severe congestion. Documentation of plan consistency, consistency with SDG&E franchise agreements, as well as documentation of encroachment permit issuance (if applicable) provided to CPUC in order to verify.	Prior to construction.
Construction of the proposed project could conflict with an applicable plan, ordinance, or policy regarding the performance of the circulation system.	TT-2		SDG&E shall stagger work shifts during the peak period of construction activity, and construction shifts shall be staggered to the degree possible, such that employee arrivals and departures from the site will avoid the project area peak hours (7:30–8:30 a.m. and 4:30–5:30 p.m.). Construction-related truck traffic shall also be scheduled to avoid travel during peak periods of traffic on the surrounding roadways.	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	CPUC to verify commitments have been incorporated into construction contracts. CPUC to inspect periodically to ensure truck traffic avoids peak traffic periods on surrounding roadways.	Prior to and during construction.

Table 6-1: Mitigation Monitoring Program Table

Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
Construction of the proposed project could conflict with an applicable plan, ordinance, or policy regarding the performance of the circulation system.	TT-3		Construction workers shall be encouraged to carpool to the job site to the extent feasible.	SDG&E to implement measure as defined.	CPUC to verify.	During construction.

MM = Agency Mitigation Measure

APM = Applicant Proposed Measure

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7.0 LIST OF PREPARERS

7.1 LEAD AGENCY

Michael Rosauer, CPUC Project Manager, Energy Division

7.2 PREPARERS

Dudek – Primary Consultant

John Porteous, CEP, Principal in Charge

Rica Nitka, Project Manager

Anita Hayworth, PhD, Ecologist (Biology)

Brian Grover, Environmental Planner

David Deckman, Air Quality

David Stone, RPA, Cultural Resources

Dee Bakker, Technical Editor

Hannah Westwood, Publications Assistant

Josh Saunders, Environmental Analyst

Leslie Terry, GIS, Graphics

Mark McGinnis, GIS

Mike Komula, Noise

Peter Quinlan, RG, Hazardous Materials/Geology

Phil Behrends, PhD., Biological Resources – Mammals

Sherri Miller, Biological Resources – Botany

Subcontractors

Asher Sheppard Consulting

Asher Sheppard, PhD, Public Safety (EMF)

Gresham Savage Nolan & Tilden, PC

Aaron Gettis, CEQA Legal Support

Scheuerman Consulting

Paul Scheuerman, PE, Technical Advisor/Transmission/Substation Engineering Issues

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8.0 REFERENCES

MITIGATED NEGATIVE DECLARATION

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1–3. INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

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4. EXPANDED DESCRIPTION OF THE PROJECT

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5. EVALUATION OF ENVIRONMENTAL IMPACTS

5.1 Introduction

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5.2 Aesthetics

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SDG&E. 2012. San Diego Gas & Electric PEA Completeness Review Response. Submitted January 17, 2012.

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5.4 Air Quality/Greenhouse Gas Emissions

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