

Jennifer L. Kaminsky SOCRE Environmental Project Manager San Diego Gas & Electric Company (T) 858-503-5028

March 23, 2018

Andrew Barnsdale Project Manager California Public Utilities Commission 505 Van Ness Avenue San Francisco, CA 94102

# Re: Notice to Proceed Request No. 3 for the rebuild and upgrade of the San Juan Capistrano Substation as part of the South Orange County Reliability Enhancement Project.

Mr. Barnsdale:

On December 15, 2016, the California Public Utilities Commission (CPUC) voted to grant San Diego Gas & Electric Company (SDG&E) a Certificate of Public Convenience and Necessity (Decision D.16-12-064) for the South Orange County Reliability Enhancement Project (SOCRE or Project) contingent upon implementation of the Mitigation Monitoring, Compliance and Reporting Program (MMCRP). SDG&E is formally requesting approval of Notice to Proceed No. 3 (NTP-3) from the CPUC for construction of the San Juan Capistrano Substation as identified herein and described in the Final Environmental Impact Report (FEIR), dated April 25, 2016 (State Clearinghouse No. 2013011011).

Pursuant to the Project's MMCRP, the following information (Sections 1.0 to 11.0) is provided and organized as outlined in Section 3.2.2, Notice to Proceed Process Requirements, and contains all pertinent information required for the CPUC to authorize NTP-3 activities.

#### 1.0 Description of Work and Comparison to FEIR

As described in the Project's FEIR (Section 2.3.1 to 2.3.6, San Juan Capistrano Substation; page 2-8) and Capistrano Preservation Alternative report (SDG&E Comments on the Recirculated Draft Environmental Impact Report (DEIR), Exhibit 1C), SDG&E will rebuild and upgrade the future San Juan Capistrano Substation to a gas-insulated (GIS) substation. Demolition of the east wing and rehabilitation of the west wing of the former utility structure (as approved under NTP-2) was not originally included as part of the Project. As described in the Project's FEIR, the Project provided for complete demolition of the structure and implementation of Applicant Proposed Measure (APM) CUL-10 to mitigate for impacts associated with demolition of the structure. As part of the approved Project, the Preservation Alternative was incorporated into the FEIR as a way to mitigate impacts on the former utility structure. The Preservation Alternative included partial

preservation and partial demolition of the former utility structure and a redesign of the proposed San Juan Capistrano Substation to accommodate the preserved portion of the former utility structure. With the approval of the Preservation Alternative, Mitigation Measure (MM) CUL-8 was added to the FEIR (see FEIR Section 4.5-16,17.). As such, the layout of the substation that was included in the FEIR has changed to accommodate the Preservation Alternative. In addition to this change, the dimensions of the 138-kV and 230-kV control shelters, 230-kV GIS building, and the number of dead-end structures has been modified from the previous design of the substation (see below for additional details).

SDG&E is requesting full authorization to commence with rebuild and upgrade activities. The substation rebuild and upgrade Project components are described below and a description of the work activities associated with these Project components are provided in Section 2.0.

#### Capistrano Substation Rebuild and Upgrade

The San Juan Capistrano (SJC) Substation and its associated facilities will be constructed on SDG&E's existing 6.4-acre SJC Substation property. Please note that the City of SJC maintains a 12-foot easement for public right-of-way (ROW) facilities along Camino Capistrano (Camino Capistrano ROW). The existing SJC Substation site has upper and lower yard areas. For construction of the SJC Substation, the existing 138 kilovolt (kV) substation would be removed and the upper and lower yard areas will be excavated, graded, filled, and compacted into terraced pads. Existing overhead transmission facilities that are no longer supporting conductors will be removed from service and removed from the site and existing transmission and distribution facilities would be temporarily relocated until construction is completed. The 230-kV substation components will generally be constructed on the upper pads and the 138-kV and 12-kV substation components will be constructed on the lower pads. Please refer to Figure 2 in **Attachment A**, **NTP-3 Figures** for a depiction of the substation property, location and rebuild and upgrade plan.

The equipment and materials installed as part of the 230-kV yard will consist of the following:

- Two 138-kV cable poles (approximately 115-feet tall), and up to three temporary 138-kV wood poles (approximately 80-feet-tall)
- Up to three 230-kV transmission structures (approximately 85 to 118-feet tall).
- Two 230/138-kV 392 MVA transformers, with oil containment basins and a firewall (approximately 35-feet wide by 30-feet tall).
- Up to two steel dead-end structures (approximately 40-feet tall).
- GIS switchgear (operating buses and breakers) installed in a steel-framed, metal-sided GIS building (approximately 55-feet wide, 153-feet long, and 37-feet tall).
- 230-kV capacitor banks.
- A concrete masonry block control shelter (approximately 55-feet wide, 32-feet long, and 12-feet tall); and

• Other associated components, equipment and materials necessary for the operation of the 230-kV yard (e.g., sulfur hexafluoride gas, duct banks, conduit, transmission lines, batteries, control panels, etc.).

The equipment and materials installed as part of the 12-kV/138-kV yard will include:

- Three 138/12-kV 30 MVA transformers, with oil containment basins and firewalls (approximately 27 feet wide by 18 feet tall).
- GIS switchgear (operating buses and breakers) installed in a steel-framed, metal-sided GIS building (approximately 85-feet wide, 130-feet long, and 38-feet tall).
- A concrete masonry block control shelter (approximately 85-feet wide, 25-feet long, and 12 feet tall).
- Three termination stands (approximately 11-to 13-feet tall) to terminate the 12-kV bank leads.
- Three sections of 12-kV switchgear containers (approximately 35-feet long, 15-feet wide and 10-feet tall) and capacitor banks.
- Other associated components, equipment, and materials necessary for the operation of the 138-kV yard (e.g., sulfur hexafluoride gas, transmission lines, duct banks, conduit, batteries, control panels, etc.).

#### Other Work

In addition to the equipment and materials to be constructed as part of the new substation electrical facilities, construction will also include installations of perimeter screen/ security walls, retaining walls, fencing, gates, access roads, driveways, landscaping, stormwater control features, communication facilities, and substation security systems.

Along the eastern substation boundary, an 8-foot tall chain link fence topped with 2 feet of barbed wire (total of 10 feet) will be installed to replace the existing chain link fence located on SDG&E's property. The chain links will have privacy slats woven between the links. In addition, an approximately 8-foot-tall fence without barbed wire will be installed along the northern boundary (property line) of the substation site that is adjacent to private residences. In these areas, the masonry screening/ security wall will be set back approximately 10 feet from the property line to provide a landscaped buffer zone between the wall and fence. The screen/security wall, fencing, gates and landscaping will meet the requirements of MM AES-1.

Finally, the west wing of the former utility structure will be rehabilitated as part of NTP-3 activities in accordance with MM CUL-8 and MM AES-1. Also, refer to SDG&E Comments on Recirculated DEIR, Exhibit 1C – Capistrano Preservation Alternative, for additional details of the west wing rehabilitation.

Note that some of the above-mentioned work will take place within the Camino Capistrano ROW, but within the substation property including: curb, gutter and sidewalk work at north and south

driveways and installation of storm drain lines. The connection of the substation's storm drain system to the public storm drain system within Camino Capistrano is not included in this NTP.

#### Distribution Work (Within Substation Property)

#### 12-kV Segments A and B

All 12-kV circuits will originate at the 12-kV switchgear within the substation's property and continue underground to two (12' x 26') vaults. The 12kV circuits will then be distributed from these vaults.

Segment A consists of four circuits and will be installed in new underground conduit within the substation property. Two of the circuits will eventually exit the underground conduit to the north to a new cable-riser pole (not part of NTP-3) and then continue overhead on existing structures, and two circuits will exit the underground conduit to the west and then continue overhead on existing structures. A temporary re-alignment of the existing overhead facilities will be installed along the north perimeter of the property and extends into the site to re-connect to existing overhead facilities in the Camino Capistrano ROW. Only the Segment A work within the substation will be completed as part of NTP-3.

Segment B consists of three circuits and will be installed in new underground conduit within the substation. These circuits will eventually continue in new underground conduit along Calle Bonita to Calle Santa Rosalia (approximately 1,000 feet total after exiting the substation property). Only the Segment B work within the substation will be completed as part of NTP-3.

Please refer to Figure 3 in **Attachment A, NTP-3 Figures** for a depiction of the Segment A and Segment B distribution work within the substation property.

#### Comparison of Work to FEIR

The NTP-3 Project components described above are consistent with the descriptions contained within the Project's FEIR, Final Decision, and Preservation Alternative report; with the addition of specific design and engineering details that were not available during preparation of the FEIR. Design changes to the SJC Substation include the following:

- The size of the 138-kV GIS building was modified from 45 feet tall, 85 feet wide, and 150 feet long to approximately 38 feet tall, 85 feet wide, and 130 feet long.
- The size of the 138-kV control shelter was modified from 12 feet tall, 70 feet wide, and 32 feet long to approximately 12 feet tall, 85 feet wide, and 25 feet long.
- The size of the 230-kV GIS building was modified from 50 feet tall, 65 feet wide, and 180 feet long to approximately 38 feet tall, 55 feet wide, and 153 feet long.
- SDG&E may only install one 230-kV dead-end structure where the new 230-kV transmission lines terminate into the 230kV GIS building, instead of two structures (Structures 1 and 2 in the FEIR) as included in the approved Project.

#### 2.0 Description of Activities for Project Component

#### Capistrano Substation Rebuild and Upgrade

As described in the Project's FEIR (Section 2.4.4, Substation Construction Activities; page 2-44), SDG&E contractors will complete substation rebuild and upgrading work activities as described below. Please note that the activities described below illustrate the more substantial activities to occur during construction but are not comprehensive of every activity that must be performed to construct the substation, including those activities associated with construction mitigation and compliance described in the Project's MMCRP and approved Plans.

Site development will be performed in two phases and involve regrading most of the existing property to create four pads in a terraced configuration. The west side of the site will contain the lower yard (lower and lower-mid pad), where the 12-kV facility and 138/12-kV facilities will be located, and the upper yard (upper and upper-mid pads) where the 230-kV facilities will be located (refer to Figure 2 in Attachment A).

#### Construction Phase 1

The following construction activities will generally occur within the lower yard of the substation property during Phase 1:

- Removal of the foundation and footings of the east wing of the former utility structure.
- Preservation and restoration of the west wing of the former utility structures in accordance with MM AES-1 and MM CUL-8.
- Reroute the existing 12-kV circuit that crosses the lower yard.
- Regrade the north side of the property and realign the northern access road off Camino Capistrano.
- Remove existing miscellaneous items, such as remnant foundations, fencing, concrete steps, water lines, sewer lines, septic tanks, and paving.
- Perform grubbing and root removal.
- Grade (fill, over-excavate and recompact) the existing lower yard area to create two terraced pads (the new raised lower pad and lower-mid pad).
- Construct interior access roads and reconstruct and widen driveways.
- Construct retaining walls in the interior of the site as needed.
- Construct the perimeter screening/ security masonry walls along the north, south, and west borders of the lower yard portion of the property.
- Construct stormwater control facilities.
- Install aggregate throughout the lower yard and pave the interior access roads after completion of Construction Phase 1 grading.
- Install below-grade foundations and other facilities (e.g., ground grid, ducts, conduit, cable)

for all facilities.

- Install 12-kV and 138-kV facilities as described in Section 1.0, including necessary conductor and cables.
- Install landscaping and permanent fencing and gates per MM AES-1 and approved Aesthetic Design Plan.
- Equipment testing and energization.

#### Construction Phase 2

Construction activities in the upper yard area of the substation property will occur following energization of the SJC Substation 138-kV facilities and de-energizing of the existing substation 138-kV facilities. The following construction activities will generally occur in the upper yard of the substation property during Phase 2, although some activities may occur within the lower yard during this final phase of work:

- Perform as needed abatement activities and remove old 138/12-kV air-insulated substation equipment, foundations and other overhead and subsurface facilities.
- Regrade the upper yard area into two pads: the upper-mid and upper pads.
- Construct remaining stormwater control facilities.
- Construct retaining walls in the interior of the site as needed.
- Construct interior access roads.
- Install aggregate throughout upper pads and pave the remaining access road areas.
- Complete construction of the substation security and screening walls.
- Install below-grade foundations and other facilities (e.g., ground grid, ducts, cable) for all facilities.
- Install 230-kV facilities as described in Section 1.0, including necessary conductor and cables.
- Install and wire control/protection panels, equipment, and batteries in the control shelter.
- Install substation lighting and associated electrical equipment to power the substation.
- Install remaining landscaping, permanent fencing per MM AES-1, and gates in upper and lower yards.
- Equipment testing and energization.

## 3.0 Staging

As authorized by CPUC in NTP-2, NTP-3 work activities will utilize the SJC Substation property for all construction staging. As such, all staging, laydown areas, equipment storage and Project vehicle parking necessary to support the activities included in NTP-3 will be conducted within the existing substation property as depicted in Figure 1 in **Attachment A**, **NTP-3 Figures**. No Project equipment parking will occur on Camino Capistrano unless authorized by the City of San Juan

Capistrano through the traffic control permitting process. Construction workers driving personal vehicles to the site may park in legal parking locations on City streets near the substation site in accordance with local parking restrictions.

## 4.0 Location of Project Component

Substation rebuild and upgrade activities included with NTP-3 will be conducted within both the lower and upper yards of the existing substation property. The approximately 6.4-acre substation is bounded by residential property to the north and streets to the west, east, and south (Camino Capistrano, Calle Santa Rosalia, and Calle Bonita, respectively). As mentioned in Section 1.0, the City of SJC maintains a 12-foot easement along Camino Capistrano for public ROW facilities; however, SDG&E maintains ownership and rights to install surface and subsurface facilities in this area. Please refer to Figure 1 in **Attachment A, NTP-3 Figures**, for a view of the substation Project components.

#### 5.0 Estimated Area of Land Disturbance

As described in the Project's FEIR, the substation is designated for approximately 6.4 acres of permanent disturbance, and construction of the SJC Substation will result in the disturbance to the entire property. In accordance with the Construction General Permit (2009-0009-DWQ (As amended by 2010-0014-DWQ and 2012-0006-DWQ)) effective soil cover (e.g., hydromulch or another effective soil stabilization technique) will be applied on disturbed, inactive areas in order to control erosion in compliance with the Project's Stormwater Pollution Prevention Plan (SWPPP). The site will also be landscaped as per MM AES-1.

## 6.0 Construction Schedule and Duration

Construction associated with NTP-3 activities is anticipated to begin within 7 days of issuance of NTP-3 and satisfaction of all preconstruction requirements, including necessary ministerial permits, and take approximately 5 years to complete. As described in MM NV-1, daily construction equipment operating used and staging hours are planned for daylight hours (7:00 A.M. to 6:00 P.M.), Monday through Friday. Work may occur on Saturdays as needed to meet schedule demands. If construction activities are necessary outside of these hours outlined in the City of San Juan Capistrano noise ordinance (e.g., nights, holidays, and Sundays), SDG&E will follow the terms and notifications outlined in MM NV-1 and the Project's approved Noise and Vibration Control Plan.

## 7.0 Construction Personnel

Approximately 35 to 45 construction personnel will typically be onsite for substation rebuild and upgrade work activities. Peak number of construction personnel, including SDG&E management and environmental compliance personnel, onsite at one time for NTP-3 activities will be approximately 80 personnel. Please see Attachment B, MMCRP Requirements Tracking Table for NTP-3 for further details on applicable monitoring requirements.

#### 8.0 Off-Road Diesel Equipment List

In addition to any hand tools, hand power tools or equipment rated less than 50 horsepower required for NTP-3 work activities, SDG&E anticipates conducting substation rebuild and upgrade activities (described in Section 2.0) using the equipment listed in the table below.

Equipment Description	Fuel Type	On-Road or Off-Road
Water Truck	Diesel	On-Road
Water Truck	Diesel	Off-Road
289 Skid Steer	Diesel	Off-Road
430 Backhoe	Diesel	Off-Road
930 Loader	Diesel	Off-Road
Chipper	Diesel	Off-Road
End Dump	Diesel	On-Road
Dozer	Diesel	Off-Road
Road Grader	Diesel	Off-Road
Compactor	Diesel	Off-Road
Loader	Diesel	Off-Road
Dump/Haul Truck	Diesel	On-Road
Excavator	Diesel	Off-Road
2-ton Flatbed Truck	Gasoline	On-Road
Aerial Bucket Truck	Diesel	On-Road
100 Ton Crane	Diesel	Off-Road
15-ton Crane	Diesel	Off-Road
Drill Rig with Auger	Diesel	On-Road
Concrete Truck	Diesel	On-Road
Backhoe	Diesel	Off-Road
Fork Lift	Diesel	Off-Road
Trencher	Diesel	Off-Road
Handheld Compactor	Gasoline	Off-Road
Boom Lift	Diesel	Off-Road

All equipment and vehicles anticipated to be used to complete NTP-3 construction activities are identified in the equipment list outlined in Appendix F, Detailed Construction Equipment Use tables, of the Project's FEIR. If equipment not listed in Appendix F or above is needed during construction, it will comply with the Tier rating and reporting requirements found in APM AQ-2 and actual emissions will be tracked and reconciled in compliance with MM AQ-1. In support of compliance with MM AQ-1, SDG&E provided estimated construction NOx emissions calculations to the CPUC for all construction activities anticipated to occur in 2017 and 2018, which includes activities identified in NTP-3. As required by MM AQ-1, SDG&E will submit additional NOx emissions calculations annually through the end of construction prior to continuing work at the beginning of each calendar year.

## 9.0 Preconstruction Requirements, Status and Mitigation Measures/Applicant Proposed Measures

During construction of the components described herein, SDG&E will implement all applicable APMs and MMs as identified in the Project's FEIR and in the MMCRP. The applicability and status of all APMs and MMs included within the Project's MMCRP is provided in Attachment **B**, MMCRP Requirements Tracking Table for NTP-3. The table is color coded for easy

reference by applicability, timing and the status (if the measure contains a preconstruction requirement). Pre-construction measures that are pending as noted in **Attachment B** include the following:

- *MM BR-3: Preconstruction Surveys*: A CPUC-approved, qualified biologist will perform a preconstruction survey within 14 days of the start of ground disturbance.
- *MM BR-8: Western Burrowing Owl Impacts Reduction Measures*: A CPUC-approved biologist will conduct preconstruction take-avoidance surveys for burrowing owls within 150 meters of Project areas in suitable habitat no more than 14 days prior to ground-disturbing activities.
- *MM AES-1: Architectural Review of San Juan Capistrano Substation*: CPUC approval of the aesthetic design and landscaping plan for the San Juan Capistrano Substation prior to the initiation of ground-disturbing activities.<sup>1</sup>
- *APM HAZ-1: Conduct Environmental Site Assessment:* Prior to the start of earth disturbing activities at the existing 138kV Capistrano Substation site, a Phase II Environmental Site Assessment will be performed and documentation submitted to the CPUC as required.

Prior to construction, SDG&E will communicate the environmental concerns and appropriate work practices to all SDG&E crews and contractors through a Safety Environmental Awareness Program (SEAP) training. The SEAP includes, but is not limited to, a review of air quality, archaeological and paleontological resources, biological resources, dust control measures, hazardous waste and spill prevention, construction fire control and emergency response measures, and noise control measures. SDG&E completed the first SEAP training on September 13, 2017 and will continue to provide training throughout construction.

#### 10.0 Permits and Approvals

Construction activities included in NTP-3 will require the local agency and state permits listed in the table below. SDG&E will obtain all necessary permits prior to initiating the specific Project activities triggering each permit requirement. Copies of all permits will be made available to the CPUC in accordance with the MMCRP Section 4.

Agency	Permit/Approval	Applicability to Project Component
City of San Juan Capistrano	Plan review/ No Permit Needed	Substation grading and site
		development.
City of San Juan Capistrano	Building/ Retaining Wall Permit	Construction of substation perimeter
		retaining walls.
City of San Juan Capistrano	Recycled Water Truck	Transportation of recycled water to
	Program/Recycled Water Use Permit	substation.
State Water Resources	Construction General Permit and	Ground disturbance of over 1 acre. The
Control Board	Stormwater Pollution Prevention Plan	Project's current SWPPP (WDID
		930C381897) covers the activities
		described in NTP-3.

<sup>&</sup>lt;sup>1</sup> Ground-disturbance is defined herein as activities that would alter the existing elevations of the site, involve site development, grading, grubbing or tree root removal.

Agency	Permit/Approval	<b>Applicability to Project Component</b>
California Department of	Transportation/Encroachment/Hauling	Use of oversized delivery trucks on a
Transportation and other	Permit	State highway and local roadways as
jurisdictions (i.e., City of		required, and any encroachment into
San Juan Capistrano		City ROW.

SDG&E submitted a Construction General Permit Notice of Intent and SWPPP by uploading the documents to the State Water Resources Control Board Storm Water\_Multiple\_Application and Report\_Tracking\_System on December 1, 2017. WDID number 930C381897 was issued for work on the substation property on December 4, 2017. If necessary, the SWPPP will be amended to fully cover all of the NTP-3 activities. A copy of the Project's SWPPP will be kept and maintained onsite and can be provided to the CPUC upon request. The Project's Notice of Intent and SWPPP can be accessed via the following link:

https://smarts.waterboards.ca.gov/smarts/faces/PublicDataAccess/PublicNoiSearchResults.xhtml

NTP-3 construction activities will be conducted within the substation property and will not directly impact a public roadway or trail under the jurisdiction of the City of San Juan Capistrano. As such, the need for a traffic control permit is not anticipated. Also, encroachment permits would not be necessary for work within the City of SJC Camino Capistrano ROW, as SDG&E maintains ownership and rights in this area. SDG&E will implement the Project's FEIR APM TR-1 (Avoid Traffic Near Schools), APM TR-2 (Avoid SR-74 Traffic), APM TR-3 (Emergency Access) and APM TR-4 (Off-Peak Deliveries) that will minimize potential impacts to public safety as described in **Attachment B**. If work activities do require traffic control/encroachment permit(s) (e.g., associated with a large delivery to the site), then the appropriate permits will be obtained prior to performance of those activities. In the event that construction activities (e.g., concrete pours, emergency events, etc.) require extended delivery windows during peak traffic times, SDG&E will notify the CPUC prior to the delivery and will document the reasons why the exception to APM TR-4 is required.

#### 11.0 Request for Approval

SDG&E respectfully requests authorization of NTP-3 to begin the rebuild and upgrade of the SJC Substation work located within the substation property as conditioned on any pending preconstruction requirements identified herein and in **Attachment B** by March 30, 2018. Should you have any questions or need additional information, please to not hesitate to contact me at (858) 503-5028 or by email at <u>jkaminsky@semprautilities.com</u>.

Sincerely,

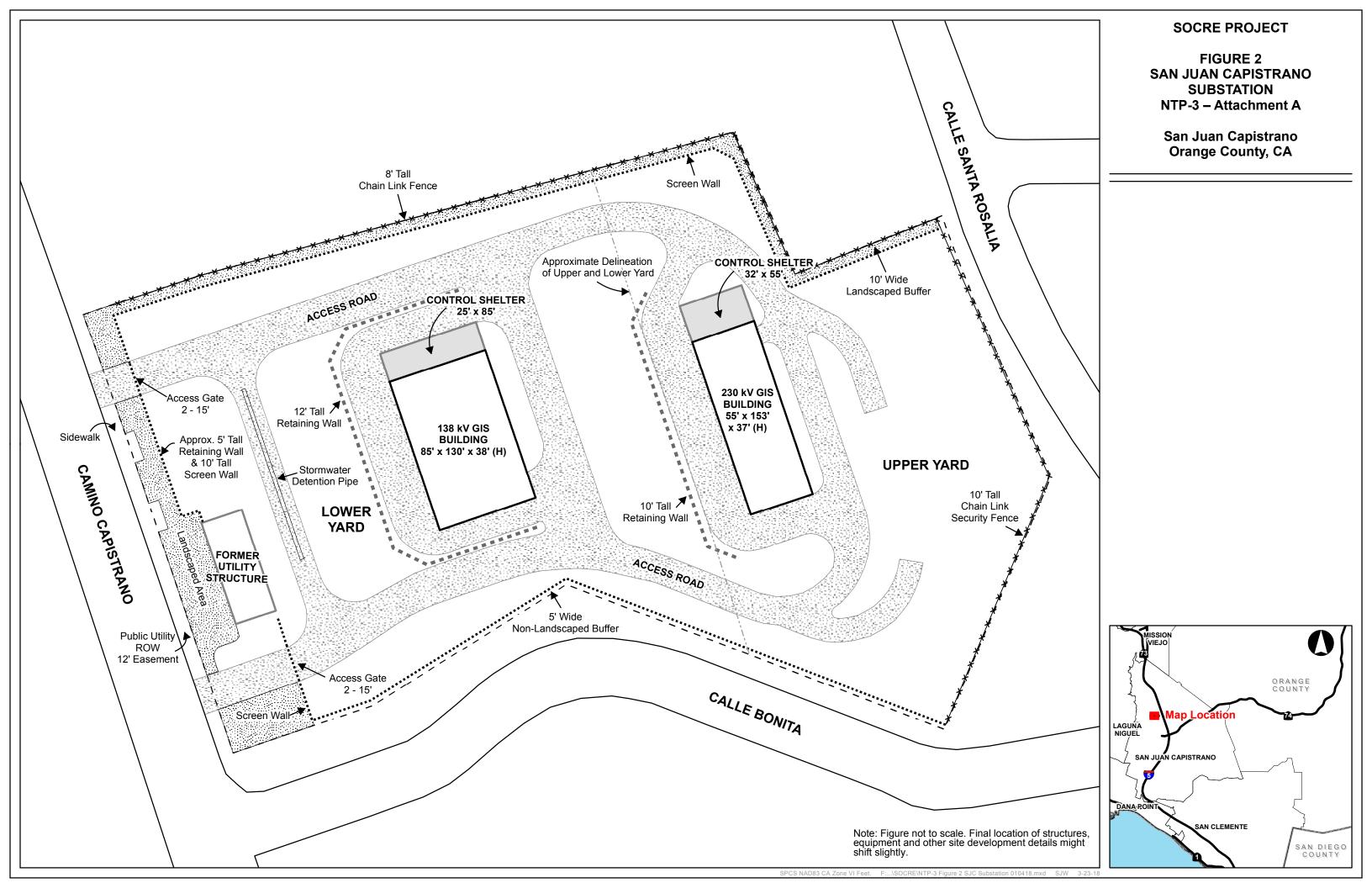
J.J.L.J

Jennifer L. Kaminsky SOCRE Environmental Project Manager

Attachment A: NTP-3 Figures Attachment B: MMCRP Requirements Tracking For NTP-3

cc: Joe Donaldson, Ecology and Environment, Inc. Keri Cuppage, SDG&E Kelly Stallings, SDG&E Mary Turley, SDG&E Kenda Pollio, KP Environmental ATTACHMENT A NTP-3 Figures







## ATTACHMENT B MMCRP Requirements Tracking Table For NTP-3

#### TIMING Applicability to **STATUS** APPLICANT PROPOSED MEASURE (APM) OR MITIGATION MEASURE (MM) NTP-3 AESTHETICS During APM AES-1: Clean Work Areas. During construction, SDG&E would keep construction activities Applicable SDG&E and its contractors will Construction and as clean and inconspicuous as practical. implement this measure during NTP-3 Restoration activities. APM AES-2: Restoring Disturbed Areas. When proposed project construction has been During Applicable Upon completion of NTP-3 activities, all completed all disturbed terrain would be restored through recontouring and revegetation in Restoration disturbed terrain within the substation order to reestablish a natural appearing landscape and reduce potential visual contrasts will be restored per the Project's between disturbed areas and the surrounding landscape. Aesthetic Design Plan (pending approval by the CPUC), landscaped plans and all other applicable restoration related requirements, including those mandated by MM AES-2 and MM BR-7. APM AES-3: Visual Screening - San Juan Capistrano Substation. The applicant would install Restoration and Applicable As part of NTP-3 work activities, SDG&E landscaping and a screening wall would be installed in key areas along the perimeter of San Juan will install landscaping and screening Operation Capistrano Substation to partially screen views of substation structures and to visually integrate walls in key areas as outlined in APM the new substation facilities with the existing setting. Figure 2-4 depicts the general location of AES-3 and described in the MM AES-1 new substation landscaping. Plant material would be appropriate to site-specific conditions and Aesthetic Design Plan, which is pending the local landscape setting. Landscaping would be consistent with technical requirements for approval by the CPUC. proposed project operations and maintenance and would incorporate input from the City of San Juan Capistrano, local residents, and SDG&E's facility security. Applicable MM AES-1: Architectural Review of San Juan Capistrano Substation. To ensure that the **Pre-construction Pending.** SDG&E submitted a revised aesthetic design of San Juan Capistrano Substation facilities, such as walls, buildings, and series of elevations and a landscape plan landscaping, are consistent with the City of San Juan Capistrano's aesthetic design criteria, the to the City's ARB on 12/21/2017 and are applicant shall submit a revised series of elevations and a landscape plan to the City's still awaiting comments from the City. Architectural Review Board (ARB) prior to filing for grading and building permits. The ARB shall Ground disturbing activities will not have the opportunity to provide input to the CPUC on whether the applicant's revised plans are commence until the CPUC approves the consistent with the City's aesthetic design criteria and if any modifications are appropriate. The aesthetic design plan for the San Juan CPUC will take into account the ARB's input in reviewing and approving the aesthetic design and Capistrano Substation. landscaping for the San Juan Capistrano Substation. The applicant shall not initiate grounddisturbing activities until the CPUC approves the aesthetic design and landscaping plan for the San Juan Capistrano Substation. MM AES-2: Minimize Clearing and Ground Disturbance and Restore Disturbed Areas to Pre-During Applicable NTP-3 activities will occur within the Project Conditions. Clearing and ground disturbance required for construction, operation, and Construction, substation site that is part of the Project's permanent impact area. At the maintenance, including, but not limited to, access roads, pulling sites, construction and

#### ATTACHMENT B: MMCRP REQUIREMENTS TRACKING TABLE

South Orange County Reliability Enhancement ProjectMeasure Not Applicable to NTP-3NTP-3 RequestApplicable to NTP-3 – Measure to be Implemented During<br/>Construction/Restoration/OperationMarch 2018Applicable to NTP-3 – Pre-Construction Status Pending/Ongoing<br/>Applicable to NTP-3 – Pre-Construction Status Complete/Approved

APPLICANT PROPOSED MEASURE (APM) OR MITIGATION MEASURE (MM)	TIMING	Applicability to NTP-3	STATUS
maintenance pads, and construction laydown areas, will be the minimum required, and the applicant will consult with the CPUC to identify and implement methods to restore disturbed areas to pre-construction conditions for all areas not required for operation and maintenance. The applicant will consult with the CPUC to identify and implement methods to restore disturbed areas to conditions that would blend with the overall landscape character, to the extent feasible. Areas around new or rebuilt transmission structures that must be cleared during the construction process or other areas of ground disturbance will be regraded and revegetated to restore these areas to an appearance that will help blend them into the overall landscape character.	Restoration, and Operation		completion of construction activities, the substation will be restored per the Aesthetic Design Plan (pending approval by the CPUC) and all other applicable restoration related requirements.
MM AES-3: Screen or Effectively Locate Laydown Areas. Laydown areas within view of residences, scenic roads, and recreational facilities will be effectively located to limit views (aesthetic effects) of materials, equipment, vehicles, and other items used during construction. Staging and laydown areas that cannot be located away from public views will be screened using opaque fencing or landscaping to limit aesthetic effects. Where laydown areas are visible from publicly accessible areas and roads, any associated signage will be kept to the minimum necessary to communicate information about the project, safety, and security. All laydown areas will be effectively reclaimed immediately following completion of their use.	During Construction and Restoration	Applicable	A temporary construction fence (with tan mesh screening) will be installed as part of NTP-2 and would effectively screen views of NTP-3 work activities. The temporary screened construction fence may be removed following construction of the permanent screening wall.
<b>MM AES-4: Glare and Color Contrast Reduction for Transmission Structures and Conductors</b> . To reduce potential glare and color contrast for components of the project, the finish on all new transmission structures will be non-reflective (e.g., steel that has been galvanized and treated to create a dulled finish) to reduce light reflection and color contrast and help blend the structures into the landscape setting. All new transmission conductors will be non-specular to minimize conductor reflectivity and help blend them into the landscape setting.	During Construction	Applicable	Transmission poles constructed within the substation property will have a dulled steel finish and conductor connected to the transmission poles leaving the substation and dropping into the substation will be non-specular. All other structures, equipment and conductor within the substation fenceline will comply with standard substation specifications.
<b>MM AES-5: Shield or Downcast Construction Lighting.</b> To reduce the potential for visual impacts associated with construction lighting, lighting for construction activities will be limited to an amount required for safety of construction personnel and security of construction equipment. In order to minimize the effect of light pollution in the surrounding area, all construction lighting will be operated and oriented to mostly or fully eliminate off-site light spill at all times.	During Construction and Restoration	Applicable	SDG&E will implement MM AES-5 during NTP-3 activities, specifically for any lighting associated with the substation facilities and other equipment.

South Orange County Reliability Enhancement Project	Measure Not Applicable to NTP-3
NTP-3 Request	Applicable to NTP-3 – Measure to be Implemented During
	Construction/Restoration/Operation
March 2018	Applicable to NTP-3 – Pre-Construction Status Pending/Ongoing
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AIR QUALITY			
<ul> <li>APM AQ-1: Control Fugitive Dust Emissions. The applicant would minimize fugitive dust by:</li> <li>Using a gravel apron to reduce mud/dirt track-out from unpaved truck exit routes.</li> <li>Applying water to disturbed areas within a construction site.</li> <li>Limiting the onsite vehicles to a 15-mph speed limit on unpaved roads. If necessary, SDG&amp;E or its contractor(s) can install speed monitoring equipment at strategic locations and along project roads.</li> <li>Requiring all trucks hauling dirt, sand, soil, or other loose material to be covered with a fabric tarp and maintain a freeboard height of 12 inches.</li> <li>Applying a cover to storage piles when wind events are declared.</li> </ul>	During Construction and Restoration	Applicable	SDG&E will implement this measure during NTP-3 activities.
Requiring local streets to be swept by Rule 1186-compliant PM10 efficient vacuum units a minimum of once per month.			
<ul> <li>APM AQ-2: Minimize NOX and Particulate Matter (PM) Emissions from Off-Road Diesel-Powered Construction Equipment. Where available, SDG&amp;E will ensure that all off-road diesel-powered construction equipment with engines greater than 50 horsepower are compliant with Tier 4 interim or Tier 4 off-road emissions standards, as specified by the phase-in schedule below:</li> <li>2015: 5% Tier 4 interim engines</li> <li>2016: 10% Tier 4 engines</li> <li>2017: 20% Tier 4 engines</li> <li>2018: 30% Tier 4 engines</li> <li>2019: 40% Tier 4 engines</li> <li>2020: 50% Tier 4 engines</li> <li>2020: 50% Tier 4 engines</li> <li>2020: 50% Tier 4 engines shall be operated with tailpipe retrofit controls that reduce exhaust emissions of NOx and PM to no more than Tier 3 emission levels.</li> <li>Equipment with an engine not compliant with the Tier 4/Tier 4 interim standard will be allowed only when the applicant has performed (and documented) a good faith effort (due diligence) to locate Tier 4 and/or Tier 4 interim equipment in the Project vicinity (defined as within 200 miles of the Project site). Use of older equipment (operated with tailpipe retrofit controls that reduce exhaust emissions of NOx and PM to no more than Tier 3 emission levels) would be allowable following due diligence and associated documentation that no Tier 4/Tier 4 interim equipment (or emissions equivalent retrofit equipment) is available for a particular equipment type. Each</li> </ul>	During Construction and Restoration	Applicable	NTP-3 activities will utilize off-road diesel-powered construction equipment with engines greater than 50 horsepower and that are compliant with Tier 4 interim or Tier 4 off-road emissions standards as specified in the phase-in schedule for years 2018 through 2020. Construction occurring after 2020 will continue to meet a minimum 50% Tier 4 usage. In the event SDG&E cannot achieve the Tier 4 equipment minimum usage requirements provided, documentation of due diligence will be submitted to the CPUC per APM AQ-2.

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case shall be documented with written correspondence (or signed statement and ele mail) by the appropriate construction contractor, along with documented correspond at least two construction equipment rental firms providing equipment within the def project vicinity (200 miles). Documentation of due diligence will be submitted to CPU before equipment is used on the project. The applicant will make available to CPUC staff and/or construction monitors a copy piece of construction equipment's certified tier specification, BACT documentation, a CARB or SCAQMD operating permit, as applicable, at the time of mobilization of each unit of equipment.	dence from fined UC staff for of each and/or			
MM AQ-1: Oxides of Nitrogen (NO <sub>x</sub> ) Credits. The emissions of NO <sub>x</sub> due to construction of the proposed project will be mitigated through the purchase of Regional Clean Air Incentive Market Trading Credits (RTCs) for every pound of NO <sub>x</sub> emissions in excess of the SCAQMD regional significance threshold of 100 pounds per day. The total amount of NO <sub>x</sub> RTCs to be purchased will be calculated when the construction schedule is finalized. The applicant will purchase and submit the required RTCs to the SCAQMD at least 60 days prior to the start of each construction year for the upcoming year of construction. The applicant will also track actual daily emissions during construction according to a monitoring plan that includes records of equipment and vehicle usage.		Pre-construction and during Construction	Applicable	Complete. As per the 2017 and 2018 NOX Construction Emissions Mitigation Analysis Memo submitted to the CPUC on 11/3/2017, estimated emissions for 2017 and 2018 construction activities, including NTP-3 activities, are below the 100 pounds per day threshold. Therefore, no credits need to be purchased for work associated with this NTP. SDG&E will track actual daily emissions during construction as required by the Project's monitoring plan. Furthermore, given that NTP-3 work activities extend beyond 2018, SDG&E will submit estimated NOx emissions calculations (and purchase credits if required) for future construction years prior to continuing construction into 2019 and beyond.
BIOLOGICAL RESOURCES				
SDG&E Subregional Natural Community Conservation Plan (NCCP)/Habitat Conservation Plan (HCP) Operational Protocols: See Appendix O.		Pre-construction, during Construction, and Operation	Not Applicable	NTP-3 activities will not occur within natural areas subject to the requirements of the NCCP/HCP. Refer to NTP-2, Attachment A, San Juan
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			Capistrano Substation – Biological Field Survey Report for additional details.
<ul> <li>MM BR-1: Limit Construction to Designated Areas and Protect Riparian, Aquatic, and Wetland Areas. In all project locations, vehicular traffic (including movement of all equipment) will be restricted to established construction areas indicated by flagging and signage. CPUC notification and approval will be required for any additional disturbance areas already identified and evaluated for the project pursuant to CEQA. As feasible, the applicant shall use disturbed or low habitat value areas before using undisturbed or higher quality habitat areas, as determined by a qualified biologist. Prior to ground disturbing activities, sensitive resources, such as waterbodies, oak trees, special status plant populations, and natural communities, will be clearly marked and avoided.</li> <li>All aquatic features, including vegetated washes, creeks, drainages (ephemeral and perennial), and riparian areas, will be spanned by the 230-kV transmission and 12-kV distribution line where possible. If construction will occur within 200 feet of an aquatic feature, biological monitors will establish and maintain a minimum exclusionary buffer of 50 feet from the delineated extent of all jurisdictional wetland features. If the applicant cannot maintain the 50-foot exclusionary buffer, the applicant will submit best management practices (BMPs) to the CPUC for review and approval prior to construction. In addition, if the applicant is unable to maintain the 50-foot buffer, the applicant shall consult with USACE and CDFW regarding potential impacts to streams or wetlands.</li> </ul>	Pre-construction, during Construction, and Operation	Applicable	All NTP-3 activities will be limited to the substation site that is part of the Project's permanent impact area. There are no riparian, aquatic or wetlands areas and no occurrences of state or federally listed species within NTP-3 work limits.
If nighttime lighting is necessary adjacent to aquatic areas, lighting shall be shielded away from these areas to prevent impacts on aquatic wildlife.			
<b>MM BR-2: Biological Monitoring.</b> CPUC-approved, qualified biological monitors will be present during construction and restoration activities in areas where sensitive resources identified by a CPUC-approved biologist may be impacted by construction of the project. Biological monitors will be assigned to the project in areas of sensitive biological resources. The monitors will be responsible for ensuring that impacts on special status species, native vegetation, wildlife habitat, or unique resources will be avoided to the fullest extent possible. Where appropriate, monitors will flag the boundaries of areas where activities will need to be restricted in order to protect native plants and wildlife or special status species. Those restricted areas will be monitored to ensure their protection during construction. The applicant shall submit the biological monitors' daily monitoring reports and monthly biological monitoring reports to the CPUC, CDFW and USFWS.	During Construction and Operation	Applicable	While the substation site is not identified as an area where sensitive resources are present, biological monitors may be onsite during NTP-3 activities as needed to monitor compliance with biological mitigation measures and applicable Plans.

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<ul> <li>MM BR-3: Preconstruction Surveys.</li> <li>a. Preconstruction surveys will be conducted by CPUC-approved, qualified biologists act to standardized methods. Surveys will encompass all construction areas. Existing baselin vegetation data will be used during post-construction restoration efforts, as outlined in 7 of the SDG&amp;E Subregional NCCP/HCP. Preconstruction surveys will take place for each work area within 14 days of the start of ground disturbance, or if work has lapsed for lo than 14 days.</li> <li>b. Additionally, a CPUC-approved, qualified biologist will conduct preconstruction clear sweeps for special status species at all access, staging, and work areas where suitable h present within approximately 24 hours of construction and restoration activities each d c. In addition to these preconstruction surveys, a CPUC-approved biologist will conduct protocol-level surveys for coastal California gnatcatcher and least Bell's Vireo along the proposed 12-kV distribution line where surveys have not yet taken place. A CPUC-approbiologist will also perform protocol-level southwestern willow flycatcher and rare plant throughout the entire project area, where suitable habitat exists.</li> <li>If a special status species is found at any time, the CPUC will be notified within 48 hours CPUC will determine the need for additional consultation with the appropriate resource or agencies.</li> </ul>	ne days). Section discrete nger rance abitat is ay. t byed surveys , and the	Applicable	Ongoing. a. Resumes for qualified biologists were approved by the CPUC on June 16, 2017. SDG&E will continue to provide additional resumes for approval throughout construction as needed. CPUC approval of the resume is required prior to a new biologist starting work on the Project. Preconstruction surveys will be performed prior to start of NTP-3 activities as required; however, NTP-3 activities will not impact any areas covered by the NCCP/HCP. b. Suitable habitat is not present within NTP-3 work areas; therefore, this portion of the measure is not applicable. c. Suitable habitat is not present within NTP-3 work areas; therefore, this portion of the measure is not applicable. If special status species are found during construction, the CPUC will be notified and surveys will be performed as required.
<b>MM BR-4: Limit Removal of Native Vegetation Communities and Trees.</b> The removal of vegetation and trees will be limited to the minimum practicable area required for const of the project. To the extent feasible, grading, grubbing, graveling, or paving will only or permanent project components. Temporary staging areas will be used in such a way that facilitates post-construction restoration, per Section 7 of the SDG&E Subregional NCCP/Drive-and-crush methods will be employed, with the exception of those areas where th method is not feasible for temporary staging areas for safety reasons and placement of temporary structures, such as construction trailers and drop tanks.	ruction Construction and ccur for Restoration at it HCP. is	Applicable	SDG&E will implement MM BR-4 during construction. Please note that per NTP-2, the majority of vegetation and trees have been removed from the substation property.
MM BR-5: Avian Safe Building Standards. The applicant will design all transmission struinstalled as part of the proposed project to be consistent with the Suggested Practices f Raptor Protection on Power Lines: The State of the Art in 2006 (APLIC 2006).		Applicable	<b>Complete</b> . The transmission structures being constructed within the substation footprint have been designed and will be constructed in accordance with Avian Safe Building Standards.
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<ul> <li>MM BR-6: Migratory Birds and Raptors impact Reduction Measures. The applicant will develop a Nesting Bird Management Plan in consultation with the USFWS, CDFW, and CPUC that outlines protective measures and BMPs that will be employed to prevent disturbance to active nests of both special status and Migratory Bird Treaty Act (MBTA) -protected bird species with the potential to occur in the project area. The Nesting Bird Management Plan will include the following components:</li> <li>Appropriate survey timing, extents, and methods, including dates of local breeding season when surveys must take place; monitoring and reporting protocol; protocol for determining whether a nest is active; and protocol for documenting, reporting, and protecting active nests within construction and restoration areas will be included in the Nesting Bird Management Plan. If preconstruction survey protocols exist for a-special status avian species with a potential to be impacted by the project, the plan will outline the implementation of these protocols. The survey area will include the construction area, plus an additional distance large enough to accommodate the protective buffer of MBTA-protected bird species likely to occur in proximity to the construction area. The plan will also specify approved nest deterrent methods, inactive nest management, and state that project-related nest failures will be reported to the USFWS and CDFW.</li> <li>Appropriate and effective buffer distances, including horizontal buffers from mests, horizontal buffers from territories, if appropriate, and vertical buffer of nesting birds, but will be specific to the site and species/guil and account for specific sage of nesting birds, but will be specific to the site and species/guil and account for specific sage of nesting birds, but will be Specific to the site and species and raptors shall be determined upon consultation with USFWS, CDFW, and the CPUC. Buffer reductions for common species must be approved by the CPUC-approved avian biologist and USF</li></ul>	Pre-construction, during Construction, and Restoration	Applicable	Complete. The Nesting Bird Management Plan was approved by the CPUC on 8/16/2017, and a revised version of the plan was submitted and is pending comment by the USFWS and CDFW and approval by the CPUC. SDG&E will implement the 8/16/2017 approved Plan as required during construction until a revised version is approved.

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The Nesting Bird Management Plan will be submitted to the USFWS, CDFW, and CPUC for review and comment no more than six months prior to the start of construction, with the intent that the plan will be finalized no more than two months prior to the start of construction. The final plan will be implemented during construction and restoration activities. A Nesting Tracker will be maintained and updated weekly during the nesting bird season, and will be submitted to USFWS, CDFW, and CPUC on a monthly basis. This Nesting Tracker will contain data such as species, location, buffer, monitor name, and status of the nest.			
<ul> <li>MM BR-7: Coastal Cactus Wren Avoidance.</li> <li>a. Preconstruction Surveys. CPUC-approved biologists will perform preconstruction surveys in potential coastal cactus wren habitat within 200 feet of each discrete work area and record the location and quality. Preconstruction surveys will take place within two weeks prior to the start of ground disturbance or when work has lapsed for longer than two weeks.</li> <li>b. Conservation. Should suitable coastal cactus wren habitat patches be identified in or within 200 feet of work areas, the areas will be avoided to the greatest extent possible during construction. Habitat includes, but is not limited to, mature cholla or prickly-pear cactus typically less than 1 meter in height, interspersed with California sagebrush, California buckwheat, and blue elderberry. Habitat patches may be as small as approximately 1 acre. Habitat patches located in close proximity to construction activities should be protected by physical barriers, such as rope or signage.</li> <li>c. Habitat Restoration Plan for Coastal Cactus Wren Habitat. Prior to construction of the proposed project, and with the coordination and review of USFWS and CDFW, SDG&amp;E will prepare a habitat restoration plan for coastal cactus wren habitat. Details of the restoration plan will be finalized pending consultation between the applicant, SDG&amp;E, USFWS, and CDFW. The restoration plan will be prepared by a qualified botanist familiar with this vegetation association. The plan will include the following elements: planting/reseeding species mentioned above in correct ratios so as to be suitable for coastal cactus wren; monitoring plan and schedule, including duration and performance criteria; and any specific measures that will be required to ensure success of the restoration effort. Suitable habitat will be replaced at a 1:1 ratio, and if SDG&amp;E chooses to implement the restoration effort outside the project area, it must be no more than 3 miles away from the project area.</li> <li>d. Take Avoidance. Should bi</li></ul>	Pre-construction and during Construction and Restoration	Not Applicable	Coastal Cactus Wren habitat assessment was included in the Nesting Bird Management approved by the CPUC on 8/16/2017. Per the habitat assessment it has been determined that no suitable habitat for this species occurs within 200 feet of the NTP-3 work area.

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<ul> <li>MM BR-8: Western Burrowing Owl Impacts Reduction Measures.</li> <li>a. Preconstruction Surveys for Burrowing Owls. Prior to ground disturbance, a CPUC-approved biologist will conduct preconstruction take-avoidance surveys for burrowing owls within 150 meters of project areas in suitable habitat no more than 14 days prior to ground-disturbing activities according to methods outlined in the CDFW's 2012 (or most recent) Staff Report on Burrowing Owl Mitigation (CDFG 2012). Surveys will provide data on whether burrowing owls occupy the site and, if so, whether the owls are actively nesting.</li> <li>b. Burrowing Owl Impact Avoidance. If pre-construction take-avoidance surveys detect the presence of any active burrowing owl burrows during breeding season, the burrows will be avoided, and construction activities within 150 meters will be enclosed by construction fencing. Buffer sizes are outlined in the CDFW's Staff Report on Burrowing Owl Mitigation. Active burrowing owl burrows should be monitored regularly according to methods outlined in the Nesting Bird Management Plan, and buffers should remain in place until the nest fledges or fails.</li> <li>c. Eviction. If, in consultation with the CDFW, it is determined that project activities require removal of occupied burrows, or burrows potentially occupied by burrowing owls, eviction and burrow closure may be required to ensure against "take" of owls or nests. However, eviction is required, it will occur only after consulting with CDFW and CDFW approval of a Burrowing Owl Exclusion Plan. Monitoring will be conducted to ensure take is avoided during eviction procedures. Owls may not be evicted or captured without prior authorization from the CDFW.</li> </ul>	Pre-construction and during Construction and Restoration	Applicable	<ul> <li>Pending. A preconstruction take- avoidance survey will be conducted no more than 14 days prior to the start of construction and the measure will be Implemented during construction as required.</li> <li>Note that Appendix D of the 2012 Staff Report on Burrowing Owl Mitigation states that surveys should be conducted "no less than 14 days", but implementation of the surveys will conform to the requirements stated in this mitigation measure (i.e., "no more than 14 days") because that approach precludes the possibility of burrowing owls re-colonizing a site after the surveys are conducted.</li> </ul>
<ul> <li>MM BR-9: Invasive Plant Control Measures. The applicant will use standard BMPs to avoid the introduction and spread of controllable invasive plant species such as tamarisk (<i>Tamarix</i> sp.) and giant reed (<i>Arundo donax</i>) during construction of the project. Proper handling during construction will include the following:</li> <li>All vehicles and equipment will be cleaned prior to arrival at the work site.</li> <li>Crews, with construction inspector oversight, will ensure that vehicles and equipment are free of soil and debris capable of transporting noxious weed seeds, roots, or rhizomes before the vehicles and equipment are allowed use of access roads.</li> <li>Straw or hay bales used for sediment barrier installations or mulch distribution will be obtained from state-cleared sources that are free of invasive weeds.</li> <li>The applicant will develop an Invasive Plant Management Plan to outline the methods that will be employed to prevent the spread of invasive plants on site. This plan will be submitted to the CDFW and CPUC for review and comment no more than six months prior to the start of construction, with the intent to produce a final draft of the plan no later than two months prior to the start of construction.</li> </ul>	Pre-construction, during Construction and Restoration	Applicable	<b>Complete.</b> The Invasive Plant Management Plan was approved by the CPUC on 8/14/2017. CDFW stated they had no comments on the Plan on 7/19/2017. SDG&E will implement the Plan as required during construction.

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<b>MM BR-10: Mitigation Plan Development.</b> To ensure that the project is consistent wit SDG&E Subregional NCCP/HCP, the applicant will prepare and implement a Mitigation the project. The Mitigation Plan will:	Plan for	Pre-construction and during Construction	Not Applicable	There is no habitat within the substation property that is subject to the SDG&E Subregional NCCP/HCP; therefore, a
<ul> <li>Detail a consultation process in accordance with Section 6.2.1 of SDG&amp;E's NCCP/HC Alternatively, an updated process and timeline can be developed as allowed by both and CDFW.</li> </ul>				Mitigation Plan is not applicable to NTP- 3 activities. Refer to NTP-2, Attachment A, San Juan Capistrano Substation – Biological Field Survey Report for
<ul> <li>Require SDG&amp;E to provide the CPUC with written confirmation from USFWS and CD the consultation process has been carried out to the satisfaction of the agency and consistent with the SDG&amp;E Subregional NCCP/HCP.</li> </ul>				additional details.
<ul> <li>Include a summary of the policies and procedures in the SDG&amp;E Subregional NCCP/I are relevant to other HCPs/NCCPs, conservation plans, and public or private conserv preserve areas, including, but not limited to:</li> </ul>				
<ul> <li>Operational protocols used in sensitive habitat areas;</li> </ul>				
<ul> <li>Mitigation for temporary and permanent impacts, including habitat enhancemer mitigation credits;</li> </ul>	nt and			
<ul> <li>Coordination and consultation procedures with the USFWS and CDFW;</li> </ul>				
<ul> <li>Definition of preserve area according to the SDG&amp;E Subregional NCCP/HCP;</li> </ul>				
<ul> <li>Identification and mapping of areas that may qualify as a preserve area within 10 any project component; and</li> </ul>	00 feet of			
<ul> <li>A review of locations where there may be potential conflicts among conservation</li> </ul>	n plans.			
• This plan will be submitted to the USFWS, CDFW, and CPUC for review and commer the intent to produce a final draft of the plan, approved by the CPUC, no less than t months prior to the start of construction. Implementation of the Mitigation Plan, es any restoration or other physical habitat improvements that are required as a resul agency consultation, will be implemented prior to the start of construction.	two xcluding			
CULTURAL RESOURCES				
<b>APM CUL-1: Worker Training for Cultural Resources.</b> Prior to the initiation of construct ground-disturbing activities, all SDG&E, contractor, and subcontractor personnel would training regarding the appropriate work practices necessary to effectively implement t and to comply with the applicable environmental laws and regulations, including the p for exposing subsurface cultural resources and paleontological resources and to recogn possible buried resources. Training would inform all construction personnel of the anti-	d receive the APMs ootential nize	Pre-construction, during Construction and Restoration	Applicable	<b>Ongoing</b> . Worker Training (SEAP) has been developed and submitted to the CPUC on 07/07/2017. The SEAP training was first administered on September 13, 2017. All Project personnel will be required to participate in the SEAP prior
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procedures that would be followed upon the discovery or suspected discovery of arch materials, including Native American remains, and their treatment, as well as of paleo resources.				to starting work on the Project. SEAP administration will remain ongoing throughout construction for all new Project personnel.
<b>APM CUL-2: Cultural Resource Monitoring.</b> A qualified archaeologist would attend preconstruction meetings, as needed, and a qualified archaeological monitor would m ground disturbing activities in the vicinity of all known cultural resources within the pr project area. The requirements for archaeological monitoring would be noted on the construction plans. The archaeologist's duties would include monitoring, evaluation or analysis of collected materials, and preparation of a monitoring results report conform Archaeological Resource Management Reports guidelines.	roposed of any finds,	During Construction and Restoration	Applicable	A qualified archeologist will be present as necessary for ground disturbing activities, defined as activities that would alter the existing elevations of the site, involve site development, grading, grubbing or tree root removal. NTP-3 activities will be performed in compliance with the Project's Cultural Resources Construction Monitoring Plan approved by the CPUC on 6/26/2017.
<b>APM CUL-3: Avoid Known Cultural Resources.</b> Known cultural resources that can be a would be demarcated as Environmentally Sensitive Areas. Construction crews would be instructed to avoid disturbance of these areas.		Pre-construction and during Construction	Applicable	Known cultural resources will be demarcated as Environmentally Sensitive Areas in compliance with the Project's Cultural Resources Construction Monitoring Plan approved by the CPUC on 6/26/2017.
APM CUL-4: Unanticipated Cultural Finds. In the event that cultural resources are discovered, the archaeologist would have the authority to divert or temporarily halt ground disturbance to allow evaluation of potentially significant cultural resources. The archaeologist would contact SDG&E's Cultural Resource Specialist and Environmental Project Manager at the time of discovery. The archaeologist, in consultation with SDG&E's Cultural Resource Specialist, would determine the significance of the discovered resources. SDG&E's Cultural Resource Specialist and Environmental Project Manager must concur with the evaluation procedures to be performed before construction activities are allowed to resume. For significant cultural resources, a Research Design and Data Recovery Program would be prepared and carried out to mitigate impacts.		During Construction and Restoration	Applicable	SDG&E will implement APM CUL-4 if unanticipated cultural resources are discovered in compliance with the Project's Cultural Resources Construction Monitoring Plan approved by the CPUC on 6/26/2017.
<b>APM CUL-5: Curate Cultural Discoveries</b> . All collected cultural remains would be catal permanently curated with an appropriate institution. All artifacts would be analyzed to function and chronology as they relate to the history of the area. Faunal material would identified as to species.	to identify	During Construction and Restoration	Applicable	If necessary, SDG&E will collect, catalog, and curate cultural discoveries in compliance with the Project's Cultural Resources Construction Monitoring Plan approved by the CPUC on 6/26/2017.
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APM CUL-6: Archeological Monitoring Results Report. An archaeological monitoring report (with appropriate graphics), which describes the results, analyses, and conclust monitoring program, would be prepared and submitted to SDG&E's Cultural Resource SDG&E's Environmental Project Manager, and the CPUC. Any new cultural sites or ferencountered would be recorded with the SCCIC or SCIC.	sions of the ce Specialist,	During Construction and Restoration	Applicable	APM CUL-6 will be implemented by SDG&E as necessary and in compliance with the Project's Cultural Resources Construction Monitoring Plan approved by the CPUC on 6/26/2017.
<b>APM CUL-7: Monitoring by Native Americans.</b> Native American monitoring may be implemented if transmission line construction has the potential to impact identified mapped traditional locations and places. The role of the Native American monitor we represent tribal concerns and communicate with the tribal council. Appropriate repr would be identified based on the location of the identified traditional location or placed or the location of the identified traditional location or placed.	ould be to esentatives	During Construction and Restoration	Applicable	APM CUL-7 will be implemented by SDG&E as necessary.
<b>APM CUL-8: Paleontological Monitoring.</b> A paleontological monitor would work und direction of a qualified project paleontologist and would be on site to observe excave operations that involve the original cutting of previously undisturbed deposits with h paleontological resource sensitivity. A paleontological monitor is defined as an individual has experience in the collection and salvage of fossil materials.	ation Nigh	During Construction and Restoration	Applicable	A paleontological monitor may be onsite for NTP-3 excavation and ground- disturbing activities, defined as activities that would alter the existing elevations of the site, involve site development, grading, grubbing or tree root removal. Furthermore, all NTP-3 activities will be performed in compliance with the Project's approved Paleontological Monitoring and Treatment approved on 08/29/2017.
<b>APM CUL-9: Discovery of Fossils.</b> In the event that fossils are encountered, the paleor monitor would have the authority to divert or temporarily halt construction activities of discovery to allow recovery of fossil remains in a timely fashion. The paleontologis contact SDG&E's Cultural Resource Specialist and Environmental Project Manager at discovery. The paleontologist, in consultation with SDG&E's Cultural Resource Special determine the significance of the discovered resources. SDG&E's Cultural Resource Special and Environmental Project Manager must concur with the evaluation procedures to performed before construction activities are allowed to resume. Because of the poter recovery of small fossil remains, it may be necessary to set up a screen-washing open site. When fossils are discovered, the paleontologist (or paleontological monitor) wo them along with pertinent stratigraphic data. In most cases, this fossil salvage can be in a short period of time. Because of the potential for recovery of small fossil remains isolated mammal teeth, recovery of bulk sedimentary matrix samples for off-site we from specific strata may be necessary, as determined in the field. Fossil remains coller monitoring and salvage would be cleaned, repaired, sorted, cataloged, and deposited	s in the area st would the time of alist, would opecialist be ential for ration on uld recover e completed s, such as t screening ected during	During Construction and Restoration	Applicable	APM CUL-9 will be implemented as necessary in compliance with the Project's Paleontological Monitoring and Treatment Plan which was approved by the CPUC on 08/29/2017.
South Orange County Reliability Enhancement Project NTP-3 Request	Applicable	Not Applicable to to NTP-3 – Meas	sure to be Imple	mented During

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APPLICANT PROPOSED MEASURE (APM) OR MITIGATION MEASURE (MM	1)	TIMING	Applicability to NTP-3	STATUS
scientific institution with permanent paleontological collections, and a paleontologic monitoring report would be written.	al			
<ul> <li>APM CUL-10: Building of Distinction Requirements. The applicant proposes to take to following steps found in Council Policy 602, which applies to the alteration, modificated demolition of "significant" structures:</li> <li>1. Advertise, for a period of three months, that the former utility structure may be a relocation.</li> <li>2. Prepare a photographic record of the former utility structure. Photographs will in a. Each elevation;</li> <li>b. Close-ups of any unusual or unique architectural features; and</li> <li>c. Views of the structure from a distance.</li> <li>In addition, measured drawings or plans will be included.</li> <li>If not relocated, allow the removal of any architectural elements of the former utility for a period of two weeks at the expense of any local historic interest group or organ removing the element.</li> </ul>	tion, or available for nclude: y structure	Pre-construction	Applicable	<b>Complete</b> . SDG&E completed all Building of Distinction Requirements as outlined by APM CUL-10, and demolition of the East Wing of the former utility structure was included in SDG&E's NTP-2 request, which was approved by the CPUC on 12/18/2017.
<ul> <li>MM CUL-1: Supplemental Worker Training for Cultural Resource. As a supplement t CUL-1, this measure requires the applicant to incorporate the following specific topic pre-construction cultural resource training for all on-site personnel:         <ul> <li>Describe the role of cultural and paleontological resources monitors and the role of American monitors;</li> <li>Describe the types of cultural and paleontological resources that may be found in tarea;</li> <li>Describe the potential for human remains to be discovered during ground disturbin activities; and</li> <li>Describe the penalties associated for breaking the laws relevant to the protection of and paleontological resources.</li> </ul> </li> <li>The cultural and paleontological resources training components will be developed by approved cultural resources consultant (see MM CUL-3) and CPUC-approved paleont consultant (see MM CUL-6). The applicant shall provide a copy of the training material trainee sign-in sheets to the CPUC prior to construction.</li> </ul>	cs into the of Native the project ing of cultural y a CPUC- tological	Pre-construction, during Construction, and Restoration	Applicable	<b>Complete</b> . Worker Training has been developed and submitted to the CPUC on 07/07/2017. Trainee sign-in sheets were provided to the CPUC on 10/04/2017. All Project personnel will be required to participate in the SEAP prior to starting work on the Project. SEAP administration will remain ongoing throughout construction for all new Project personnel.
<b>MM CUL-2: Construction Monitoring Plan.</b> Prior to construction, the applicant will su Construction Monitoring Plan for the proposed project, prepared by the approved co (MM CUL-3) for review and approval by the CPUC. The final Construction Monitoring	onsultant(s)	Pre-construction, during Construction, and Restoration	Applicable	<b>Complete</b> . The Construction Monitoring Plan was approved by the CPUC on 06/26/2017. The Construction
South Orange County Reliability Enhancement Project NTP-3 Request	Applicable	lot Applicable to to NTP-3 – Meas	sure to be Imple	mented During
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be implemented, as specified, throughout construction and restoration. The Construct Monitoring Plan shall, at a minimum:	ion		Monitoring Plan will be implemented during construction.
<ul> <li>Identify areas where native soil will be disturbed by construction or restoration of the proposed project or where known cultural resources (APM CUL-2) occur in the project as areas that will be monitored by a CPUC-approved archaeologist.</li> </ul>			
<ul> <li>Confirm that archeological monitoring will be performed during all ground disturbin activities along Segment 1a of the 230-kV transmission line, Segment A of the 12-kV distribution line, and within the proposed San Juan Capistrano Substation to preven potential damage to buried Juaneño/Acjachemen deposits.</li> </ul>			
• Describe monitoring procedures that will take place for each project component are required.	ea, as		
• Describe how often monitoring will occur (e.g., full time, part time, spot checking).			
Describe monitoring reporting requirements (APM CUL-6).			
<ul> <li>Describe the Testing and Evaluation Plans and Data Recovery Plans (APM CUL-4 and CUL-5).</li> </ul>	APM		
Include contact information for those to be notified or reported to.			
<b>MM CUL-3: Qualified Cultural Resources Consultants.</b> The applicant will retain the ser qualified professional (CPUC-approved) cultural resources consultants who meet or exe United States Secretary of the Interior qualification standards for professional archaeo published in 36 Code of Federal Regulations (CFR) 61 and who have experience workin jurisdictions traversed by components of the proposed project sufficient to identify the range of cultural resources that may be found in the proposed project area. The consu also have knowledge regarding the cultural history of the proposed project area. The ro and supporting information for each cultural resource consultant will be submitted to the for approval. At least one qualified cultural resources consultant must be approved by prior to start of construction.	ceed the logists g in the e full ltants will esumes the CPUC	Applicable	<b>Complete</b> . The CPUC approved a qualified cultural resource consultant on 04/27/2017 and on 09/12/2017.
<b>MM CUL-4: Native American Consultation and Participation Planning.</b> As a supplement CUL-7, prior to construction, the applicant will provide evidence to the CPUC that tribe requesting consultation with the applicant regarding the project design and impacts or resources were consulted. In addition, the applicant will provide evidence to the CPUC tribes that express interest in the project during any phase (i.e., project application thr of construction and restoration) have been given the opportunity to participate in addition.	s during cultural Construction, that and Restoration ough end	n, Applicable	<b>Complete</b> . SDG&E submitted a Native American Monitoring Plan (NAMP) to the CPUC on 07/26/2017 and submitted to the tribes on 07/27/2017. A copy of the 8/14/2017 response received from the Juaneno Band of Acjachemen Nation indicating that they had no comments on
South Orange County Reliability Enhancement Project	Measure Not Applicable	to NTP-3	
	Applicable to NTP-3 – M		emented During
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APPLICANT PROPOSED MEASURE (APM) OR MITIGATION MEASURE (MM)	TIMING	Applicability to NTP-3	STATUS
cultural resources surveys (MM CUL-5) and/or cultural resources monitoring when performed by a CPUC-approved cultural resources consultant (MM CUL-3). To outline the expected duties and responsibilities of all parties involved, the applicant and a CPUC-approved cultural resources consultant will submit a Native American Participation Plan prior to construction. The final Native American Participation Plan shall be implemented, as specified, throughout construction and restoration. Tribes that have expressed interest in the project prior to construction will be given the opportunity to participate in development of the plan. At a minimum, the plan will specify that:			the NAMP was submitted to the CPUC on 8/17/2017. The NAMP will be implemented during construction.
<ul> <li>Native American monitors, if approved by a tribe, are expected to participate in worker environmental awareness and health and safety training and follow all health and safety protocols.</li> </ul>			
• Attendance by Native American monitors during construction and restoration of the proposed project is at the discretion of the tribe, and the absence of a Native American monitor, should the tribes choose to forgo monitoring for some reason, will not delay work.			
• The Native American monitors will have the ability to notify a CPUC-approved cultural resources consultant who has the authority to temporarily stop work (MM CUL-3) if they find a cultural resource that may require recordation and evaluation.			
• Interpretation of a find will be requested from Native American monitors involved with the discovery, evaluation, or data recovery of unanticipated finds for inclusion in the final Cultural Resources Report.			
• The tribes involved with preparation of the Native American Participation Plan will be given the opportunity to participate in the development of Testing and Evaluation Plans and Data Recovery Plans (MM CUL-2) if the development of these plans is required.			
• Native American monitors approved by a tribe for monitoring work on the project will be notified 30 days prior to start of construction of the various project components.			
• The Native American monitors will be compensated for their time. If more than one tribal group wishes to participate in the monitoring, SDG&E will work out an agreement for sharing of monitoring compensation.			
• Define a process to inform tribes of completed cultural surveys and to provide a copy of the survey to interested tribes.			

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APPLICANT PROPOSED MEASURE (APM) OR MITIGATION MEASURE (MM)	TIMING	Applicability to NTP-3	STATUS
<b>MM CUL-5: Additional Cultural Resources Surveys.</b> Prior to issuance of the notice to proceed, the applicant will ensure that qualified archaeological consultants, as specified in MM CUL-3, will conduct intensive-level cultural resources surveys (transects no greater than 10 meters) for all areas to be disturbed that have not already been surveyed for cultural resources and that, prior to the project, had been undisturbed. Surveys shall also include a California Historic Resources Information System search and Native American Heritage Commission Sacred Lands file database search. Reports that specify the research design, methods, and survey results will be submitted to the CPUC for review and must be accepted by the CPUC prior to the start of ground disturbance in the previously unsurveyed areas.	Pre-construction	Not Applicable	The San Juan Capistrano Substation has been previously surveyed; therefore, MM CUL-5 does not apply.
<b>MM CUL-6: Qualified Paleontological Consultants</b> . The applicant will retain the services of qualified professional paleontological consultants with knowledge of the local paleontology and the minimum levels of experience and expertise, as defined by the Society of Vertebrate Paleontology's Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (2010). The resumes and supporting information for each paleontological consultant will be submitted to the CPUC for approval. At least one qualified paleontological consultant must be approved by the CPUC prior to start of construction.	Pre-construction	Applicable	<b>Complete</b> . The CPUC approved SDG&E's qualified paleontological consultant on 04/27/2017 and on 09/12/2017.
<b>MM CUL-7: Paleontological Monitoring and Treatment Plan</b> . Prior to start of construction, the applicant will submit a Paleontological Monitoring and Treatment Plan for the proposed project that is prepared by a CPUC-approved paleontological consultant (MM CUL-6) to the CPUC for approval. This plan will be adapted from the Society of Vertebrate Paleontology's Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (2010) to specifically address each project component. In addition, the plan will, at a minimum:	Pre-construction, during Construction, and Restoration	Applicable	<b>Complete</b> . The Paleontological Monitoring and Treatment Plan (PMTP) was approved by the CPUC 08/29/2017. The approved PMTP will be implemented during construction.
• Describe the criteria used to determine whether an encountered resource is significant and if it should be avoided or recovered.			
• Identify construction and restoration impact areas of moderate to high sensitivity for encountering paleontological resources and the shallowest depths at which those resources may be encountered.			
• Describe methods of recovery, preparation, and analysis of specimens, final curation of specimens at a federally accredited repository, data analysis, and reporting.			
• Briefly identify and describe the types of paleontological resources that may be encountered.			
• Describe monitoring procedures that will take place for each component of the project that requires monitoring.			
• Describe how often monitoring will occur (e.g., full time, part time, spot checking), as well as			

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APPLICANT PROPOSED MEASURE (APM) OR MITIGATION MEASURE (MM)	TIMING	Applicability to NTP-3	STATUS
<ul> <li>the circumstances under which monitoring will be increased or decreased.</li> <li>Describe the circumstances that will result in the halting of work.</li> <li>Describe the procedures for halting work and for notifying construction and restoration crews when work is to be halted and to be resumed.</li> <li>Include testing and evaluation procedures for resources encountered.</li> <li>Describe procedures for curating any collected materials.</li> <li>Outline coordination strategies to ensure that the CPUC-approved paleontological consultant (MM CUL-6) conducts full-time monitoring of all grading activities in sediments determined to have a moderate to high sensitivity.</li> <li>Include reporting procedures.</li> <li>Include contact information for those to be notified or reported to.</li> <li>For sediments of low or undetermined sensitivity, the Paleontological Monitoring and Treatment Plan will specify the level of monitoring necessary. Sediments with no sensitivity will not require paleontological monitoring. The plan will define specific conditions in which monitoring of earthwork activities could be reduced and/or depth criteria established to trigger monitoring. These factors will be defined by an approved (MM CUL-6) paleontologist.</li> <li>MM CUL-8: Preservation of Former Utility Structure at Capistrano Substation. The applicant shall incorporate the following design specifications at Capistrano Substation and features shown in Appendix S of this EIR with the purpose to rehabilitate the west wing of the former utility structure at Capistrano Substation and features show in Appendix S of this EIR with handscaping that returns the existing utility structure's setting to an earlier appearance.</li> <li>Construction of an approximately 5-foot-tall retaining wall parallel to the northerm and eastern walls of the retained west wing.</li> <li>Construction of a masonry wall approximately 10 feet tall on the inside of the western perimeter walls would remain at approximately 10 feet in height.</li> <li>The</li></ul>	Pre-construction, and during Construction	Applicable	<b>Complete</b> . Demolition of the East Wing of the former utility structure was included in NTP-2, which was approved by the CPUC on 12/18/2017. SDG&E will incorporate the design specifications identified in MM CUL-8 at the San Juan Capistrano Substation. In addition, as outlined in MM CUL-8, SDG&E will implement the CPUC approved Historic Architect Monitoring Plan during West Wing rehabilitation activities.

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• The southern and western walls of the retained portion of the existing substation shall be located outside of the secured substation facility and will be visible from Camino Capistrano. The northern and eastern walls of the existing utility structure shall effectively act as part of the substation security wall.			
• Installation of new steel doors to replace the doors in the southern, eastern, and northern walls of the existing utility structure. The northern and eastern doors will serve as part of the security wall.			
• Construction of a driveway from the main substation access to the structure's southern door.			
• Set back the southern driveway vehicle access gate by approximately 80 feet from Camino Capistrano.			
<ul> <li>Set back the northern driveway access gate by approximately 35 feet from Camino Capistrano.</li> </ul>			
• The northern and southern vehicular access gate shall be approximately 30 feet wide. Each pair of gates will be made of black wrought iron and be approximately 15 feet in width.			
• Grading and the phased site development would be similar to that of the Proposed Project Substation.			
Modifications to the existing utility structure shall include:			
• East Wing Demolition: Retain 12 inches of roof and walls where the east wing intersects the west wing of the existing structure. This will allow the remaining portion of the roof and wall visually to read as a "ghost" of the east wing once it is removed.			
West Wing Rehabilitation:			
<ul> <li>Western Wall: the exterior wall, concrete wall iron jacking, and windows will be repaired.</li> <li>Security bars will be installed on all interior windows.</li> </ul>			
<ul> <li>Northern Wall: Deteriorated, non-original, sidelights, and transom windows shall be replaced to match the original. Those that are replaced shall be made from steel rather than wood for increased security. Door assembly does not require glazing, but shall be constructed exclusively of steel following the original pattern. This wall and replacement door will only be accessible from the interior.</li> </ul>			
- Eastern Wall: The interior door shall be replaced with a new exterior door that matches the original but is designed for exposure to the elements. Glazing is not required for the door or existing windows, but design should follow the original pattern. The eastern wall, window, and door will only be accessible from the interior.			
- Southern Wall: Deteriorated, non-original, sidelights, and transom windows shall be replaced to match the original. Those that are replaced shall be made from steel rather			

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than wood for increased security. Door assembly does not require glazing, but shall be constructed exclusively of steel following the original pattern. Due to visibility from the street, the door. should include translucent wire glass at the transom. Where glazing occurs at the transom, security bars shall be installed on the interior.			
- Interior Window Sills: Where water damage has occurred, windows sills shall be repaired.			
- Interior Crane: The movable crane shall be retained.			
<ul> <li>Lighting: A lighting plan shall be developed and implemented. It will include manually operating exterior wall sconces on the north and south walls.</li> </ul>			
The applicant shall prepare and implement a historic architect monitoring plan. The plan shall include, but shall not be limited to, the following information:			
<ul> <li>Qualifications of the historic architect monitor (must meet the Secretary of the Interior's Professional Qualifications Standards);</li> </ul>			
Activities that shall be monitored by the historic architect monitor;			
• Authority given to the historic architect monitor to halt construction on the former utility structure in order to prevent damage to the structure;			
<ul> <li>Procedures that the historic architect monitor will follow to halt construction and the procedures to restart construction; and</li> </ul>			
Reporting procedures for the historic architect.			
The historic monitoring plan shall be submitted to the CPUC for approval at least six weeks prior to start of construction on the former utility structure.			
• The applicant shall also prepare a Historic American Building Survey (HABS) photographic documentation for the utility structure before the east wing is removed. The applicant shall provide the HABS documentation to the CPUC at least six weeks prior to start of construction on the former utility structure.			

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GEOLOGY, SOILS, AND MINERAL RESOURCES			
APM GEO-1: Conduct an Engineering-level Geotechnical Investigation for Liquefaction Potential and Implement Recommended Design Measures. A geologic hazard evaluation was conducted by URS in 2008 to evaluate the pole locations along the Proposed Project transmission line route for the presence of geologic hazards that may affect the new towers and poles. The geologic hazard evaluation indicated the presence of geologic conditions potentially susceptible to liquefaction at the locations of proposed Pole Nos. 8, 9 and 10. Prior to construction, an engineering-level geotechnical investigation would be performed at these locations under the supervision of a California Certified Engineering Geologist or California licensed Geotechnical Engineer to further evaluate the liquefaction potential at each of these pole locations and to develop design measures to minimize the potential for damage to Proposed Project structures in the event of strong ground shaking. Recommendations of the geotechnical investigation would be incorporated into the final design for these structures. These recommendations would include augmented grading practices, expanded erosion control measures and deeper foundations.	Pre-construction, during Construction, and Restoration	Not Applicable	The construction of Pole Nos. 8, 9 and 10 are not included in NTP-3.
APM GEO-2 Conduct an Engineering-level Geotechnical Survey for Landslides and Implement Recommended Design Measures to Ensure Slope Stability is not Impacted and the Potential for Damage to Protect Structures is Minimized. A geologic hazard evaluation was conducted by URS in 2008 to evaluate the structure locations along the Proposed Project transmission line route for the presence of geologic hazards that may affect the new towers and poles. The geotechnical hazard evaluation identified areas with recent and ancient landslides along the Proposed Project transmission line route due to unstable slope conditions in portions of both the Capistrano and Monterey formations Prior to construction, an engineering-level geotechnical investigation would be performed at each pole location along the transmission line route that is in or near a mapped landslide or other unstable slope condition. This investigation would be performed under the supervision of a California Certified Engineering Geologist or California licensed Geotechnical Engineer, and would identify protection measures to be designed and implemented to ensure that the Proposed Project does not materially increase slope stability risks and to minimize potential for damage to Proposed Project structures in the event of landslides. These recommendations would include augmented grading practices, expanded erosion control measures and deeper foundations.	Pre-construction, during Construction, and Restoration	Not Applicable	The construction of poles and towers that are in or near a mapped landslide or other unstable slope condition are not included in NTP-3.
MM GEO-1: Conduct an Engineering-level Geotechnical Investigation for Liquefaction Potential and Implement Recommended Design Measures. Prior to construction, an engineering-level geotechnical investigation shall be performed at Pole Nos. 1a through 5a under the supervision of a California Certified Engineering Geologist or California licensed Geotechnical Engineer to further evaluate the liquefaction potential at each of these pole	Pre-construction, during Construction, and Restoration	Not Applicable	The construction of Pole Nos. 1a through 5a are not included in NTP-3.

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locations and to develop design measures to minimize the potential for damage to proposed project structures in the event of strong ground shaking. Recommendations of the geotechnical investigation shall be incorporated into the final design for these structures.			
GREENHOUSE GASES			
<ul> <li>APM GHG-1: Operations Emissions Controls. SDG&amp;E developed this APM to ensure that sulfur hexafluoride is properly managed. SDG&amp;E would implement its existing sulfur hexafluoride mitigation strategies during the operation and maintenance of sulfur hexafluoride-containing equipment installed as part of the proposed project. These strategies include:</li> <li>Recording company-wide sulfur hexafluoride purchases, use, and emissions rates to comply</li> </ul>	During Operation	Applicable	SDG&E will implement this APM during construction. Equipment containing sulfur hexafluoride will be operated in compliance with this measure following energization of the SJC Substation.
with the USEPA's requirements for Electrical Transmission and Distribution Equipment Use (Mandatory Reporting of Greenhouse Gases, 40 CFR Part 98, Subpart DD) and the CARB's Regulation for Reducing Sulfur Hexafluoride Emissions from gas-insulated switchgear (Code Regs. Tit. 17, § 95350-95359);			
Implementing a sulfur hexafluoride recycling program;			
Training employees on the safety and proper handling of sulfur hexafluoride;			
Continuing to report GHG emissions with the Climate Registry; and			
<ul> <li>Implementing SDG&amp;E's sulfur hexafluoride leak detection and repair program. This program includes monthly visual inspections of each GCB, which includes checking pressure levels within the breaker and recording these readings in SDG&amp;E's Substation Management System. During the installation or major overhaul of any GCB, the unit is tested over a 24-hour period to ensure no leaks are present. Minor overhauls of each GCB are conducted every 36 to 40 months to check overall equipment health. This process includes checking gas pressure, moisture ingress, and sulfur hexafluoride decomposition. If the GCB fails any of these checks, the unit is checked for leaks and repaired. In addition, all GCBs are equipped with a gasmonitoring device and alarm that automatically alerts SDG&amp;E's Grid Operations Center. If gas pressure approaches minimum operating levels, an alarm is immediately reported to SDG&amp;E's Substation Construction and Maintenance Department. The GCB is usually inspected for leaks within 24 hours of such an alarm. SDG&amp;E's leak detection practice includes the following three methodologies:</li> </ul>			
<ul> <li>Spraying a leak-detection agent onto common leak points—including O rings, gaskets, and fittings;</li> </ul>			
<ul> <li>Using a field-monitoring device (sniffer) to detect the presence of sulfur hexafluoride gas; and</li> </ul>			

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APPLICANT PROPOSED MEASURE (APM) OR MITIGATION MEASURE (MM	))	TIMING	Applicability to NTP-3	STATUS
<ul> <li>Using a laser-detection camera to detect the presence of sulfur hexafluoride ga above two methods are unsuccessful in finding a leak.</li> </ul>	as when the			
HAZARDS AND HAZARDOUS MATERIALS				
<b>APM HAZ-1: Conduct Environmental Site Assessment.</b> Prior to the start of earth dist activities at the upper yard portion of the existing Capistrano Substation site, a Phase Environmental Site Assessment (soil sampling) would be performed and, if any conta soil is found to be present, contaminated soils would be managed, removed, transpo disposed of in accordance with all applicable laws, ordinances and safety standards. Tenvironmental Site Assessment would be completed pursuant to American Society for and Materials International standard requirements.	e II minated orted, and The	Pre-construction	Applicable	<b>Pending</b> . A portion of the Phase II assessment was completed for the north end of the upper yard and included as part of the Hazardous Materials and Waste Management Plan (HMWMP) that was approved by the CPUC on 09/07/17 and through Addendum No. 1 of the HMWMP submitted to the CPUC on 11/1/2017. The remaining southern portion of the existing 138-kV will undergo a Phase II assessment prior to the start of ground-disturbing activities.
<b>APM HAZ-2: Hazardous Materials and Waste Management Plan.</b> The applicant would a project-specific Hazardous Materials and Waste Management Plan (HMWMP) follo CPUC project approval and be submitted to the CPUC prior to issuance of any applica to Proceed for the project. Handling, recycling, and waste transportation, and tempo storage procedures would be outlined within the HMWMP. The project-specific HMV include site-specific procedures and would be developed based on SDG&E standards applicable hazardous materials laws, standards, and regulations. Sampling and cleant would be established in the HMWMP as follows:	wing final able Notice rary waste WMP would and	Pre-construction, during Construction, and Restoration	Applicable	<b>Complete</b> . The Hazardous Materials and Waste Management Plan was submitted on 08/02/2017 and approved by the CPUC on 09/07/17. SDG&E will implement the Plan during NTP-3 activities.
<ul> <li>Confirmation samples would be taken to ensure that site conditions are consisten current and proposed land uses (i.e., electric substation);</li> </ul>	t with			
<ul> <li>Confirmation samples would be taken, utilizing industry standard testing methods Methods), for appropriate site specific contaminants of concern;</li> </ul>	s (e.g. EPA			
• Final sampling procedures would be included within the project-specific HMWMP,	; and			
• Final cleanup levels would be identified in the HMWMP and be consistent with accelevels for Commercial Industrial land uses.	ceptable			
Plans for the unanticipated discovery of contaminated soil and/or groundwater during construction would be included in the HMWMP, including:				
<ul> <li>Procedures in response to the discovery of contaminated soil or groundwater, incl those for stopping work, securing the contaminated area, preventing the spread or</li> </ul>				
South Orange County Reliability Enhancement Project NTP-3 Request	Applicable	Not Applicable to to NTP-3 – Meas on/Restoration/(	sure to be Imple	mented During

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APPLICANT PROPOSED MEASURE (APM) OR MITIGATION MEASURE (MM	1)	TIMING	Applicability to NTP-3	STATUS
contamination, and appropriate waste management (testing, profiling, shipping d	lisposal);			
• Training requirements for construction workers performing excavation activities;				
Dewatering procedures; and				
<ul> <li>Procedures for notifying SDG&amp;E and agency personnel in the event of the discove contaminated soil and/or groundwater.</li> </ul>	ry of			
The applicant's outline of environmental procedures for management of the followir addressed in the HMWMP:	ng would be			
Asbestos Management;				
Hazardous Materials Transportation Security Plans;				
Hazardous Materials and Waste Management;				
Hazardous Material and Waste Shipping;				
Hazardous Waste Minimization Plans; and				
Field Guidelines for Emergency Incidents.				
Soil sampling and building materials sampling results from applicable Environmental Assessments would be applied to development of the HMWMP.	Site			
<b>APM HAZ-3: Personal Protection Equipment.</b> Specialized crews would be utilized to conduct any remediation (safe removal of contaminants) at the Capistrano Substation site prior to actual construction of the proposed project commencing. Proper personal protection equipment would be utilized by all remediation workers that may come into contact with known contaminated soil or hazardous building materials. Personal protection equipment would be determined based upon the nature of the contamination present at any given portion of the substation site and would comply with all applicable CalOSHA standards.		During Construction and Restoration	Applicable	SDG&E will implement this measure during NTP-3 activities as needed.
<b>APM HAZ-5: Recycling and Reuse.</b> It is SDG&E's practice to reuse or recycle all old structures/ poles, materials, and components following the retirement of substations, transmission lines, and structures/poles. Whatever cannot be reused or recycled is disposed of at an appropriate facility pursuant to all applicable laws.		During Construction and Restoration	Applicable	SDG&E will implement this measure during NTP-3 activities and will recycle or reuse materials as feasible.
<b>APM HAZ-6: Fire Control.</b> Construction restrictions would occur during times of high fire threat such as Red Flag Warnings issued by the National Weather Service or other severe fire weather conditions as identified by SDG&E. Consistent with SDG&E's Electric Standard Practice 113.1 and the project-specific fire plan, prior		During Construction and Restoration	Applicable	The Construction Fire Prevention Plan was approved by the CPUC on 07/12/2017. SDG&E will implement the Plan during construction.
		Not Applicable to		
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March 2018Applicable to NTP-3 – Pre-Construction Status Pending/OngoingPage 23 of 37Applicable to NTP-3 – Pre-Construction Status Complete/Approved		<b>. . .</b>		
Applicable to MTP-5 - FTE-Construction Status Complete/Apploved				tus complete/Apploved

APPLICANT PROPOSED MEASURE (APM) OR MITIGATION MEASURE (MM)	TIMING	Applicability to NTP-3	STATUS
to starting construction activities, SDG&E would clear dead and decaying vegetation from proposed project work areas where personnel are active or where equipment is in use or being stored within ROWs, staging areas, stringing sites, and access roads. Cleared dead and decaying vegetation would either be removed or chipped and spread on site. The project-specific fire plan would requirements for equipping diesel and gasoline operated engines with spark arrestors, carrying emergency fire suppression equipment, furnishing a water truck on or immediately adjacent to the proposed project work area, restricting smoking and vehicle idling, construction restrictions during Red Flag Warning periods (as applicable); and conducting pre-activity tailgate meetings that include fire safety discussions.			
<ul> <li>MM HAZ-1: Hazardous Substances Contamination Prevention Plan. Prior to construction, the applicant shall prepare and implement a Hazardous Substances Contamination Prevention Plan supplementing the Hazardous Material Business Plan to prevent the release of hazardous materials and hazardous waste. The plan will include the following requirements and procedures:</li> <li>Training requirements for construction workers in appropriate work practices, including spill prevention and response measures. Additional training requirements for those performing excavation activities shall be required and shall include training on types of contamination (e.g., petroleum hydrocarbons, lead, asbestos, and <i>hazardous materials</i> (as defined by the California Health and Safety Code) and identifying potentially hazardous contamination (e.g., stained or discolored soil and odor).</li> <li>Contain all hazardous materials at work sites and properly dispose of all such materials.</li> <li>Hazardous materials shall be stored on pallets within fenced and secured areas and protected from exposure to weather and further contamination.</li> <li>Fuels and lubricants shall be stored only at designated staging areas.</li> <li>Maintain hazardous material spill kits for small spills at all active work sites and staging areas used during activities for decommissioning. Sorbent and barrier materials will be used to contain runoff from contaminated areas and from accidental releases of oil or other potentially hazardous materials to prevent the runoff from entering the stored rand grayes.</li> <li>Perform all routine equipment maintenance at a shop or at the staging area and recover and dispose of wastes in an appropriate manner.</li> <li>Monitor and remove any vehicles with chronic or continuous leaks from use and complete</li> </ul>	Pre-construction, during Construction, and Restoration	Applicable	<b>Complete.</b> The Hazardous Materials and Waste Management Plan supplants the Hazardous Substances Contamination Prevention Plan and was approved by the CPUC on 09/07/17. SDG&E will implement the Hazardous Materials and Waste Management Plan during construction.

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<ul> <li>repairs before returning them to operation.</li> <li>Store shovels and drums at the staging areas. If small quantities of soil become contaminated, use shovels to collect the soil and store in drums before proper off disposal. Large quantities of contaminated soil may be collected using heavy equi stored in drums or other suitable containers prior to disposal. Should contaminate adjacent to staging areas because of runoff, shovels and/or heavy equipment sha collect the contaminated material.</li> <li>Procedures for transporting, shipping, and disposal of hazardous waste.</li> <li>Procedures for managing asbestos containing material.</li> <li>Procedures for notifying applicant and agency personnel in the event of the disco contaminated soil and/or groundwater. Contact information for federal, regional, agencies, the applicant's environmental coordinator(s) responsible for the cleanu contaminated soil or groundwater, and licensed disposal facilities and haulers.</li> <li>Procedures for dewatering, including storage, testing, treatment, and disposal recont dewatering BMPs with reference to the applicant's Stormwater Pollution Pref (SWPPP).</li> <li>This plan will be submitted to the CPUC for review and approval 30 days prior to the project construction.</li> </ul>	very of and local o of uirements vention Plan		
<b>MM HAZ-2: Contaminated Materials from MCB Camp Pendleton.</b> Excavation, gradin removal of any materials within MCB Camp Pendleton boundaries shall be accomplis accordance with EPA Best Management Practices for Outdoor Shooting Ranges (EPA 001), RCRA, the Clean Water Act, 40 CFR 260 (Federal Hazardous Waste Regulations) California Title 22 (California Hazardous Waste Regulations). All work shall be accom every effort to prevent the spread of any potential contamination or release of any p existing contaminants to the environment in accordance with all federal, state, and I regulations and instructions. Prior to the removal of any soil or wood and construction that has been used in live fire training and received impact from rounds, the soil or of be sampled for appropriate hazardous in accordance with all federal, state, and local regulations, and instructions. Also, prior to the removal of any wood and construction that has been used in live fire training and received impact from rounds, the debris s sampled for lead and other constituents. If the soil, wood, or debris is determined to hazardous waste, it will be handled and disposed of in accordance with applicable has waste regulations. All hazardous waste manifests shall be signed by the Hazardous W Branch, AC/S Environmental Security. Solid lead or copper removed from the base sh recycled in accordance with the base Qualified Recycling Program regulations.	hed in Construction an 902-B-01- Restoration , and olished with otential ocal laws, on debris ebris shall laws, n debris hould be be zardous /aste	d Not Applicable	NTP-3 does not include activities on MCB Camp Pendleton.
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APPLICANT PROPOSED MEASURE (APM) OR MITIGATION MEASURE (MM)	TIMING	Applicability to NTP-3	STATUS
<b>MM HAZ-3: Worker Safety Training.</b> As part of the worker environmental awareness program, the applicant will prepare a safety training module, in coordination with an appropriate representative from MCB Camp Pendleton, to inform all on-site personnel of the active military training activities occurring within MCB Camp Pendleton and the potential hazards associated with working at Talega Substation. The worker environmental awareness program shall include training on how to identify unexploded ordinance and what procedures shall be followed if potential unexploded ordinance is identified, including the "Three R's" method: Recognize, immediately Retreat, and Report to the Provost Marshal's Office at (760) 725-3888 or dial 911 immediately. The applicant shall provide a copy of the training material and trainee sign-in sheets to the CPUC prior to construction.	Pre-construction and during Construction	Not Applicable	NTP-3 does not include activities on MCB Camp Pendleton.
<ul> <li>MM HAZ-4: Fire Prevention and Emergency Response Plan. The applicant will develop and implement a Fire Prevention and Emergency Response Plan. This plan, and a record of contact and coordination with the Orange County Fire Authority (OCFA), will be submitted to the CPUC for review and approval 30 days prior to the start of construction of the proposed project. The plan will describe fire prevention and response practices that the applicant will implement during construction of the proposed project to minimize the risk of fire and, in the case of fire, provide for immediate suppression and notification. The plan will include:</li> <li>Fire prevention and response practices, including the proper dispensing and storage of gasoline, diesel, and other fuels and combustible chemicals; power tool and equipment use; emergency access; fire suppression equipment and training; vegetation clearing; designated parking areas; appropriate climatic conditions and designated areas to perform welding or blow torch activities and other hot-work activities; and ceasing of any or all work activities, including helicopter use, as directed by the OCFA or other applicable fire department representatives.</li> </ul>	Pre-construction, during Construction, and Restoration	Applicable	<b>Complete</b> . The Construction Fire Prevention and Emergency Response Plan was approved by the CPUC on 05/25/2017. The plan will be implemented by SDG&E during construction.
<ul> <li>Communication protocols for on-site workers to coordinate with local agencies and emergency personnel and for the applicant's environmental health and safety personnel to coordinate with on-site workers in the event of fire, flood, or other emergencies or increased risk of emergency during construction or operation of the project.</li> <li>The Project Construction Manager, Contract Administrators, and/or Site Foreman will be present at each worksite during construction activities, and it will be their responsibility to</li> </ul>			
monitor the contractor's fire-prevention activities. The Project Construction Manager, Contract Administrators, and/or Site Foreman will have full authority to stop construction as needed to prevent fire hazards. The Project Construction Manager, Contract Administrators, South Orange County Reliability Enhancement Project Measure	Not Applicable to		

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APPLICANT PROPOSED MEASURE (APM) OR MITIGATION MEASURE (MM)	TIMING	Applicability to NTP-3	STATUS
and/or Site Foreman responsibilities will include:			
- Maintain a complete copy of the Fire Prevention and Emergency Response Plan;			
- Serve as a point of contact for fire departments in the event of fire or other emergency;			
<ul> <li>Manage the prevention, detection, control, and extinguishing of fires started accidentally as a result of construction activity;</li> </ul>			
<ul> <li>Review site-specific fire prevention and emergency response plans with construction personnel prior to starting work in each project area;</li> </ul>			
<ul> <li>Ensure that all construction personnel are trained in fire safety measures relevant to their responsibilities. At minimum, construction personnel will be trained in fire prevention and emergency reporting. Each member of the construction work force will be trained and equipped to extinguish small fires (i.e., the fire can be controlled or extinguished by portable fire extinguishers, small hose systems, or portable water supplies without the need for protective clothing or breathing apparatus);</li> </ul>			
- Be equipped with radio and cellular telephone access for the duration of each work day;			
<ul> <li>Ensure that all construction personnel are provided with operational radio and/or cellular telephone access to allow for immediate reporting of fires or other emergencies and ensure that communication pathways and equipment are tested and confirmed operational each day prior to initiating construction activities at each worksite;</li> </ul>			
<ul> <li>Maintain an updated key personnel and emergency services contact (telephone and email) list onsite and available to construction personnel; and</li> </ul>			
- Construction workers will immediately report all fires to the nearest Fire Risk Manager.			
The required fire suppression equipment, tools, and other materials to be included with each construction vehicle on the Project.			
<b>MM HAZ-5:</b> Discovery of an Unrecorded Oil or Gas Well. If an unrecorded oil and gas well is discovered during construction of the proposed project and the well is located within 50 feet of a construction disturbance area, the applicant shall immediately cease work within 50 feet of the well and notify the California Department of Conservation Division of Oil, Gas, and Geothermal Resources (DOGGR) Cypress District Office. Work shall not resume within 50 feet of the unrecorded well until DOGGR has determined appropriate actions to be taken and has given written notice of approval for work to resume.	During Construction and Restoration	Applicable	SDG&E will implement MM HAZ-5 as needed. If an unrecorded oil or gas well is discovered, the Project's Lead Environmental Inspector will notify the DOGGR and work will not commence until approval is given.

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HYDROLOGY AND WATER QUALITY			
<b>MM WQ-1: Pesticide Application.</b> If pesticides are used during construction or operations, they shall be applied in accordance with Federal Insecticide, Fungicide, and Rodenticide (FIFRA) labels. Applicators shall be appropriately trained and shall be certified by the California Department of Pesticide Regulation. Prior to any use of pesticides, the type of pesticides proposed for use shall be approved by the CPUC. Prior to each pesticide application the National Weather Service (forecast.weather.gov) shall be consulted, and no pesticides shall be applied if the chance of rain exceeds 70% within 24 hours of the proposed application time and location. Records of type and amount of pesticides used and locations of application shall be kept and submitted to the CPUC on a monthly basis during construction.	During Construction and Restoration	Applicable	SDG&E will implement this measure during NTP-3 activities as needed.
NOISE AND VIBRATION			
<b>APM NOISE-1: Nighttime and Weekend Activities.</b> Any endeavors during the construction phase wherein nighttime and/or weekend activities are necessary (such as due to Caltrans transportation constraints for conductor stringing (I-5) or oversized/ overweight loads or CAISO outage constraints) would be limited to the extent feasible so that noise would not exceed the pertinent maximum noise level limits or the hourly L50 limits when measured at the nearest residential property. For example, to minimize potential noise disturbances during nighttime deliveries of transformers, the applicant would make every reasonable effort to minimize the duration of trucking activities at the project site. This would entail pulling delivery vehicles onto the project site, parking them overnight, and unloading/installing the item(s) during normal daytime construction hours. If nighttime or weekend activities cannot be conducted to meet the city's noise standards, SDG&E would communicate the exception to the appropriate local agency at least 24 hours in advance of conducting work that may exceed the threshold(s).	During Construction and Restoration	Applicable	SDG&E will implement this measure during construction as required.
<b>MM NV-1: Nighttime and Weekend Construction Noise Controls.</b> Before performing any construction, activities required during periods of time not allowed by local ordinances (i.e., nighttime and weekends), the applicant will:	During Construction and Restoration	Applicable	SDG&E will implement this measure during construction as needed.
<ul> <li>Obtain authorization from the local jurisdiction where work will be performed (city or county, as applicable) prior to initiating work at night and on weekends;</li> </ul>			
<ul> <li>Notify occupants of the sensitive receptors properties located within 230 feet of the work a minimum of one week prior to the potential activities and their anticipated duration;</li> </ul>			
• Ensure that noise levels will not exceed exterior noise standards of 55 A-weighted decibels (dBA) at the property boundary during the period of 6:00 p.m. to 10 p.m. and 45 dBA between 10 p.m. and 7 a.m.;			
Minimize the duration of trucking activities at work sites to less than 30 minutes, when			

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APPLICANT PROPOSED MEASURE (APM) OR MITIGATION MEASURE (MM)	)	TIMING	Applicability to NTP-3	STATUS
feasible;				
<ul> <li>Monitor noise levels during a cumulative period of more than 30 minutes in any ho and maximum noise levels (L<sub>max</sub>) at the nearest residential property boundary durin period when nighttime or weekend construction is performed;</li> </ul>				
<ul> <li>Report noise levels (hourly L<sub>50</sub> and L<sub>max</sub>) measured at the nearest residential proper local jurisdiction (city or county, as applicable) and the CPUC within one week. Noise measurements shall be conducted and reported in compliance with the City of San Capistrano and City of San Clemente requirements, as applicable; and</li> </ul>	se level			
• If nighttime or weekend activities cannot be conducted to meet the local ordinance noise standards, the applicant will implement additional mitigation measures, such				
<ul> <li>Reducing trucking activities to shorter periods of time;</li> </ul>				
<ul> <li>Using low noise electrical equipment;</li> </ul>				
<ul> <li>Installing portable noise barriers surrounding the work sites; or</li> </ul>				
<ul> <li>Offering potentially affected residents an alternative place to stay overnight or tweekend, as necessary.</li> </ul>	for a			
<b>MM NV-2:</b> Low-Noise Substation Equipment and Noise Barriers. The applicant will ere San Juan Capistrano Substation's operational noise levels will not exceed 45 dBA at the boundary during the period of 10 p.m. to 7 a.m. This will be achieved by ensuring that substation layout provides sufficient setback between the project facilities and closes residential receptors, use of low-noise substation equipment, or installation of noise be the perimeter of the substation. The 230-/138-kV and 138-/12-kV transformers will be at a minimum distance of 100 feet from the nearest residential property. The applicant conduct a noise survey at the closest receptors to the substation once the substation operational to confirm that sufficient measures have been implemented to reduce no to 45 dBA at the property boundary. The applicant will submit the noise survey results CPUC.	the property the final t barriers in e located nt will is fully pise levels	During Operation	Applicable	The SJC Substation has been designed to reduce operational noise levels. Following energization of the substation, SDG&E will perform a noise survey and submit the results to the CPUC as required.
<ul> <li>MM NV-3: Construction Vibration Control Measures. The applicant will implement the following measures to reduce construction vibration at substations, transmission lines distribution lines, and staging areas located within 100 feet of residential and other visensitive receptors:</li> <li>Route heavily loaded trucks away from residential streets, if possible. Select streets fewest homes if no alternatives are available;</li> <li>Operate earth-moving equipment on construction sites as far away from residential</li> </ul>	s, bration- s with the	During Construction and Restoration	Applicable	<b>Complete</b> . The Construction Noise and Vibration Control Plan was approved by the CPUC on 10/5/2017. Construction Noise and Vibration Control Plan will be implemented during construction and restoration.
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#### TIMING Applicability to **STATUS** APPLICANT PROPOSED MEASURE (APM) OR MITIGATION MEASURE (MM) NTP-3 other vibration-sensitive receptors as possible; SDG&E sent pre-construction notification letters on 8/11/17 to sensitive receptors, Phase earth-moving and ground-impacting operations so as not to occur in the same time residents and property owners within period; 230 feet of San Juan Capistrano Avoid nighttime activities; substation. Avoid the use of vibratory rollers near noise- and vibration-sensitive areas; · Conduct pre-construction notifications for sensitive receptors located within 100 feet of construction activities within 30 days prior to construction; Develop a construction vibration mitigation and monitoring plan during final project design to be reviewed and approved by the CPUC; and Implement a compliance monitoring program during construction to ensure implementation of vibration control measures. MM NV-4: Corona Noise Reduction during Wet Weather Conditions. The applicant will ensure **During Operation** Not Applicable While 230-KV transmission structures that the incremental increase in ambient noise levels from the proposed 230-kV transmission will be installed within the SJC line corona noise levels will not exceed FTA Cumulative Noise Levels Allowed by Criteria (Figure Substation, the noise study is applicable 4.11-1) at the closest sensitive receptor during nighttime operations (10 p.m. to 7 a.m.). To to the portions of the line outside of the verify compliance with this measure, the applicant will measure ambient noise levels before the fenceline of the Substation and will be proposed project's 230-kV line operations and the operational noise levels at sensitive performed following energization of the residential receptors located within 45 feet of the 230-kV line segments. Operational noise 230-kV transmission line to be described in future NTP requests. levels will be measured during three rain events during the first two rainy seasons when the 230-kV line is operating. Reports shall provide noise measurements in Ldn and indicate the existing ambient noise levels and weather conditions during measurements. The applicant will submit measurement results to the CPUC annually. If the reports determine that the corona noise levels exceed FTA Cumulative Noise Levels Allowed by Criteria at sensitive residential receptors located within 45 feet, the applicant will implement the use of additional insulation equipment and additional technological solutions and will repeat the measuring of operational noise levels at sensitive residential receptors located within 45 feet of the 230-kV line segments during three rain events during the subsequent two rainy seasons, until the FTA Cumulative Noise Levels Allowed by Criteria threshold is no longer exceeded during rain events. MM NV-5 : Noise Control Plan. Prior to the start of construction, the applicant shall prepare a Pre-construction, Applicable Complete. The Construction Noise and Noise Control Plan for the construction and restoration of the proposed project. The applicant Vibration Control Plan was approved by during shall submit the Noise Control Plan to the CPUC at least 30 days prior to the start of the CPUC on 10/05/2017. SDG&E will Construction, construction for review and approval. The Noise Control Plan shall include measures that the and Restoration implement the Plan as required during applicant shall employ during construction and restoration of the proposed project to keep construction.

### ATTACHMENT B: MMCRP REQUIREMENTS TRACKING TABLE

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generated noise levels below the Severe Impact range shown in Figure 4.11-1 (FTA 2006) of this EIR at the nearest sensitive receptors to each project construction location, in order to avoid significant impacts from temporary ambient noise increases. The Noise Control Plan shall include measures such as the following:			
Install and maintain an absorptive noise control barrier in the perimeter of the San Juan Capistrano Substation construction site.			
• Limit heavy equipment activity adjacent to residences or other sensitive receptors to the shortest possible period required to complete the work activity.			
• Ensure that proper mufflers, intake silencers, and other noise reduction equipment are in place and in good working condition.			
Maintain construction equipment according to manufacturer recommendations.			
Minimize construction equipment idling.			
<ul> <li>Noise from back-up alarms (alarms that signal vehicle travel in reverse) in construction vehicles and equipment shall be reduced by providing a layout of construction sites that minimizes the need for back-up alarms and using flagmen to minimize time needed to back up vehicles.</li> </ul>			
<ul> <li>When possible, use construction equipment specifically designed for low noise emissions (i.e., equipment that is powered by electric or natural gas engines instead of diesel or gasoline reciprocating engines). Electric engines have been reported to have lower noise levels than internal combustion engines.</li> </ul>			
Where practical, locate stationary equipment such as compressors, generators, and welding machines away from sensitive receptors or behind barriers. The Noise Control Plan shall detail the frequency, location, and methodology for noise monitoring prior to and during various construction and restoration activities to ensure that generated noise levels do not exceed the Severe Impact range shown in Figure 4.11-1 of this EIR. The Noise Control Plan shall detail the actions and procedures that the applicant shall implement to mitigate impacts in the event that monitoring detects that noise levels have exceeded the Severe Impact range shown in Figure 4.11-1 of this EIR. Noise level measurements shall be conducted in compliance with the City of San Juan Capistrano, City of San Clemente, and Orange County requirements.			
The Noise Control Plan shall designate a Construction Relations Officer that is readily available to answer questions or respond to complaints during any hours or days that construction or restoration is occurring. The applicant shall send pre-construction notifications to sensitive receptors located within 100 feet of construction activities at least 30 days prior construction. The notification shall include a phone number for the public to contact the Construction Relations Officer. Additionally, each construction site shall include clearly visible signs with a			

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phone number for the public to contact the Construction Relations Officer. The applicant shall submit on a monthly basis to the CPUC a summary report of the complaints submitted to the Construction Relations Officer. The summary report shall include detail on how each complaint was responded to, if and when the complaint was resolved, and contact information for the member of the public that submitted the complaint.			
PUBLIC SERVICES			
<b>APM PS-1: Recreational Facility Access.</b> Construction within existing public parks would not completely restrict access through the parks. Where necessary, SDG&E would create temporary foot and bicycle paths along with appropriate advanced notice and signage to direct and allow for the pedestrian and bicycle access through each affected park.	Pre-construction, during Construction, and Restoration	Not Applicable	NTP-3 activities will not affect recreational facilities or parks.
<b>APM PS-2: Repair Damage to Public Facilities.</b> All recreational facilities that are physically impacted during construction activities would be returned to an approximate preconstruction state, allowing for SDG&E operation and maintenance activities, following the completion of the proposed project. SDG&E would make replacements of any public damaged or removed equipment, facilities, and infrastructure, in a timely manner.	During Restoration	Not Applicable	NTP-3 activities will not affect recreational facilities or parks.
<b>APM PS-3: Roadway Repair.</b> SDG&E Contract Administrators oversee all aspects of construction and would ensure that contractors repair any damage caused by construction activities. Contract Administrators would also work with the customers and/or local agency to ensure repairs are sufficient and consistent with pre-construction conditions. Contractors working for SDG&E typically photograph and/or video document pre-construction conditions. At the completion of construction activities, this documentation is used to ensure that any damage that is caused by construction work is repaired.	During Restoration	Applicable	SDG&E will document (e.g., photograph and/or video) roadway conditions along Camino Capistrano adjacent to the substation site and make any repairs caused by construction after completion of construction of the substation. Documentation of the pre-construction conditions of the roadways will be made available to the CPUC upon request.
<b>MM PS-1: Water Efficiency Plan.</b> The applicant will make reasonable attempts to reduce overall water use and will reduce potable water use by at least 20 percent during drought conditions, as declared by the State of California. The applicant will be required to research reclaimed water sources and acquire reclaimed water to the greatest extent practicable. The applicant will prepare and submit a Water Efficiency Plan to the California Public Utilities Commission (CPUC) for review and approval at least 60 days prior to construction. The Water Efficiency Plan will detail the applicant's water efficiency measures, including the use of reclaimed water, palliatives, alternative construction methods, or other measures proposed by the applicant. The Water Efficiency Plan will detail the applicant is a sufficient supply of reclaimed water cannot be reasonably obtained, the applicant will	60 days prior to Construction, during Construction, and Restoration	Applicable	<b>Complete</b> . The Water Efficiency Plan was approved by the CPUC on 10/03/2017. SDG&E will implement the Plan as required during construction

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provide a well-documented justification for any use of potable water to be used for construction activities. If, at any time during construction, the State Water Resources Control Board (SWRCB) rescinds their Emergency Regulations (Resolution No. 2014-0038) due to a cessation of drought conditions in the state, the applicant may request that the CPUC rescind this mitigation measure. Alternatively, the applicant will need to revise their Water Efficiency Plan to remain in compliance with future adopted SWRCB regulations regarding water use during drought conditions.			
TRANSPORTATION AND TRAFFIC			
APM TR-1: Avoid Traffic Near Schools. Construction generated traffic associated with the San Juan Capistrano Substation and construction of the 138kV getaways (new underground cable packages and new Pole Nos. 1a through 7a) would avoid the start and ending time for the Saddleback Valley Christian School and the Serra Catholic High School. Workers would arrive at construction sites by 7:30 AM and would not leave prior to 3:30 PM.	During Construction and Restoration	Applicable	Start times for schools nearby the Substation are 7:45 AM and 8:30 AM and end times are 2:20 PM and 3:00 PM. During days when nearby schools are in session, workers will be directed to avoid arriving or leaving the site between the following hours of 7:30 AM - 8:45 AM and 2:00 PM - 3:15 PM. In the event that construction activities will require extended delivery windows during the start and ending time for the schools, SDG&E will notify the CPUC prior to the delivery and will document reasons why the exception is required.
<b>APM TR-2: Avoid SR-74 Traffic.</b> Construction generated traffic associated with the San Juan Capistrano Substation and construction of the 138kV getaways (new underground cable packages and new pole Nos. 1a through 7a) would avoid the SR-74 off ramp from I-5. Avoidance of the SR-74 and I-5 interchange would ensure that construction generated traffic would not exacerbate existing conditions on the stretch of road between the intersections of SR-74 and Rancho Viejo Road and SR-74 and Del Obispo.	During Construction and Restoration	Applicable	Construction generated traffic will be directed to avoid the SR-74 off ramp from I-5 when traveling to or from the substation.
<b>APM TR-3: Emergency Access.</b> SDG&E would coordinate with local emergency response agencies during all construction within existing roadways. Coordination with local emergency response agencies (such as Orange County Sheriff's Department and Orange County Fire Authority) would ensure that impacts to emergency access are less than significant.	During Construction and Restoration	Applicable	NTP-3 does not include work within existing roadways; however, SDG&E will continue to coordinate with local emergency response agencies throughout construction.

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<b>APM TR-4: Off Peak Deliveries.</b> Deliveries would be scheduled during off-peak traffic reduce trips during the most congested periods of the day.	periods to	During Construction and Restoration	Applicable	When feasible, deliveries arriving to the site via large trucks (defined as trucks with a gross vehicle weight rating of more than 10,000 pounds) would be scheduled to arrive and leave the site to avoid peak traffic times of 7:00 AM- 9:00 AM and 5:00 PM – 7:00 PM. Certain construction activities may require extended delivery windows (e.g. emergency events and concrete pours). In the event that construction activities will require extended delivery windows during peak traffic times, SDG&E will notify the CPUC prior to the delivery and will document the reasons why the exception is required.
<b>APM TR-5: Material Removal, City Streets.</b> For any underground work along city streematerials would be removed from work areas on a daily basis to minimize traffic imparts.		During Construction and Restoration	Not Applicable	NTP-3 does not include underground work within city streets.
<b>APM TR-6:</b> Helicopter Use. When helicopters are in use for construction activities, defly yards would be kept clear of all other construction activity. If helicopters are used construction of the proposed project, existing helicopter landing areas would be used feasible. Helicopter landing areas along the existing ROW would be located away from residences and other land uses (generally at least one mile from sensitive noise reception).	during d wherever m	During Construction and Restoration	Not Applicable	NTP-3 does not include helicopter use.
APM TR-7: Traffic Control Plans. Contractors working for SDG&E would develop specific traffic control plans immediately prior to the start of construction that adhere to the Standard Traffic Control Procedure from the authority having jurisdiction (federal, state, county, city, or municipality) of the roadway being impacted. The traffic control plans would be created for the various construction phases of the San Juan Capistrano Substation, underground transmission and underground distribution segments leaving the San Juan Capistrano Substation, and overhead transmission. The approved traffic control plans would describe lane closures and other methods for reducing adverse construction-related traffic impacts and require SDG&E to coordinate in advance with emergency service providers to avoid restricting movements of emergency vehicles, to ensure that emergency vehicle access is maintained and that impacts to traffic flow are minimized.		Pre-construction and during Construction and Restoration	Applicable	The City of San Juan Capistrano has jurisdiction over the roadways surrounding the substation property. According to the Standard Traffic Control Procedures for the City outlined in the City's Municipal Code, Traffic Control Plans are required for work conducted within the public right-of-way (i.e. roadway). While, NTP-3 activities will be conducted within the substation property and no roadways would be directly impacted, traffic control plans
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All traffic control plans would be developed, reviewed and approved by the authority jurisdiction of the specific roadway being impacted. The traffic control plans would in vehicular and non-vehicular traffic and would be communicated to the public at leas in advance of the traffic control measures being installed in the roadway or as requir traffic control permit.	nclude t 48 hours			may be needed for safety purposes. If NTP-3 activities require traffic control, (e.g., large/oversized deliveries to the site or unanticipated work within a public roadway) a Traffic Control Plan would be submitted and appropriate permits would be acquired prior to commencement of the subject work.
<b>MM TR-2</b> <sup>(a)</sup> : <b>Helicopter Safety Plan and External-Load Training Program.</b> Prior to stat construction, SDG&E must submit a Helicopter Safety Plan and External-Load Trainin prepared by qualified personnel to the CPUC. All workers that shall be present when are in use for construction of the project shall be trained regarding helicopter extern sign-in sheet recording the names and dates of all individuals trained shall be mainta SDG&E. Helicopter Safety Plan and Worker Environmental Awareness training shall in following, at minimum:	ng Program helicopters hal loads. A hined by	Pre-construction and during Construction and Restoration	Not Applicable	NTP-3 does not include the use of helicopters.
• An overview of the general steps taken by the certified Rotorcraft External-Load C before starting operations, including a survey of the flight area; the typical ground instructions from certified Rotorcraft External-Load Operators; the ramp inspectio (14 CFR 133 Ramp Inspection Job Aid) and examples of typical causes of unsatisfat inspections; and the equipment typically required for Class A, B, C, and D loads as 14 CFR 133;	d worker on checklist ctory ramp			
<ul> <li>A summary of the contents of the FAA-approved Rotorcraft Load Combination Flig applicable to external-load operations planned for the project including maximum (internal and external) and load types and general performance capabilities, unde operating procedures and limitations, for each type of helicopter to be used;</li> </ul>	n loads			
• Detailed instruction regarding the proper methods of loading, rigging, or attaching loads and examples of improper rigging and resultant accidents and incidents; and				
Detailed information about planned helicopter construction techniques.				
A safety brief, plan of operations, and refresher helicopter external-load operations t shall occur at the start of all days during which helicopter external-load operations at to occur. The planned flight paths, landing areas, and timing and types of helicopter construction activities for the day shall be presented. At minimum, the refresher trai include examples load types and maximum loads (internal and external) for each typ helicopter to be used that day and a demonstration of proper external-load attaching restraining means for all types of attaching and retraining devices that may be used.	re planned ining shall be of g and			
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No SDG&E personnel or contractor, including helicopter pilots and crewmembers, shall work in proximity to or be involved with helicopter external-load operations unless they receive the initial training and attend the daily safety brief and refresher training. Signatures of all personnel and contractors that attend the daily safety brief and refresher training shall be collected and clear indication on the worker (e.g., sticker on the hardhat color-coded by training day) shall be visible to indicate that the worker, pilot, or crewperson is approved to work in proximity to or otherwise be involved with helicopter external-load operations for the day.			
<b>MM TR-3:</b> Notification and Monitoring of Helicopter Use. SDG&E will notify the Long Beach Flight Standards District Office at least one week in advance of all days during which helicopter operations are planned to occur or as required by the Flight Standards District Office. In addition, SDG&E will notify all residents, businesses, and owners of property within 0.25 miles of planned helicopter flight paths and landing areas along the Project alignment at least one week in advance of all days during which helicopter operations are planned to occur.	During Construction and Restoration	Not Applicable	NTP-3 does not include the use of helicopters.
In compliance with 14 CFR Part 133, the loading and unloading of all helicopter external loads shall be monitored by lineman (non-apprentice) certified by SDG&E to rig and inspect helicopter external loads.			
All accidents or incidents reported to the National Transportation and Safety Board (NTSB) or FAA shall, at the same time of reporting, be reported to the CPUC. Near misses involving helicopters that had the potential to result in an accident or incident as defined by NTSB but do not require NTSB notification, shall be recorded by SDG&E and immediately reported to the applicant's safety coordinator and the CPUC.			
MM TR-4: City of San Juan Capistrano and City San Clemente Traffic Engineer and Parks and Recreation Review. Prior to commencing work within city boundaries of San Juan Capistrano and San Clemente, the applicant shall submit a draft Traffic Control Plan (APM TR-7) for the project to the City of San Juan Capistrano and City of San Clemente traffic engineers and Parks and Recreation departments for their review. A Draft Traffic Control Plan shall be submitted according to the timeframe established by the authority having jurisdiction of the roadway or trail being impacted. The applicant shall incorporate any recommendations from this review related to bikeway, sidewalk, and unpaved trail facilities into a final Traffic Control Plan prior to com. The applicant shall provide a copy of the final Traffic control plan to the City of San Juan Capistrano, the City of San Clemente and the CPUC prior to commencing work.	Pre-construction and during Construction and Restoration	Applicable	<b>Ongoing</b> . The City of San Juan Capistrano has jurisdiction over the roadways surrounding the substation property. According to the Standard Traffic Control Procedures for the City outlined in the City's Municipal Code, Traffic Control Plans are required for work conducted within the public right- of-way (i.e. roadway). Further, traffic control permits are typically issued by the City immediately prior to the subject work starting. While, NTP-3 activities will be conducted within the substation property and no roadways would be directly impacted, traffic control plans

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			may be needed for safety purposes. Draft Traffic Control Plans were provided to the City on 10/5/2017 for all work associated with the Project (beyond the scope of NTP-3 activities), and the City has yet to provide comments regarding the draft plans If NTP-3 activities require traffic control, a Traffic Control Plan would be provided and appropriate permits would be acquired prior to commencement of the subject work.
<ul> <li>MM TR-5: Content Requirements of the Traffic Control Plan. The applicant shall include and implement the following restrictions within their Traffic Control Plan (APM TR-7):</li> <li>Lane closures along Vista Montana shall only be implemented to avoid the start and ending time for the San Juan Hills High School. Lane closures along Vista Montana shall not be allowed during the periods of 6:30 to 8:00 AM and 2:00 to 3:30 PM on days when San Juan Hills High School is in session.</li> <li>Construction-generated traffic associated with the project shall avoid the start and ending time for San Juan Hills High School. Workers shall avoid traveling along Vista Montana during the periods of 6:30 to 8:00 AM and 2:00 to 3:30 PM on days that San Juan Hills High School is in session. These times shall be modified as necessary over the duration of the project in response to changing school arrival/dismissal times.</li> </ul>	Pre-construction and during Construction	Not Applicable	As described above, NTP-3 activities will not affect Vista Montana or occur within the vicinity of San Juan Hills High School.
Additionally, a final traffic control plan shall be provided to the CPUC for approval prior to the start of construction.			

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