

## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



September 28, 2010

Mr. Alan F. Colton  
Manager – Environmental Services  
Sunrise Powerlink Transmission Project  
8315 Century Park Court, CP21G  
San Diego, CA 92123-1550

RE: SDG&E Sunrise Powerlink Transmission Line Project - Notice to Proceed (NTP #6)

Dear Mr. Colton,

On May 26, 2010 San Diego Gas and Electric (SDG&E) requested authorization from the California Public Utilities Commission (CPUC) to commence with construction of upgrades to the Encina Switchyard, Segment 24 of the Sunrise Powerlink Project, Carlsbad, California.

The SDG&E Sunrise Powerlink Transmission Line Project was evaluated in accordance with the National Environmental Policy Act and California Environmental Quality Act. The mitigation measures and applicant-proposed measures (APMs) described in the Final Environmental Impact Report/Statement were adopted by the CPUC and BLM as conditions of project approvals. The CPUC also adopted a Mitigation, Monitoring, Compliance and Reporting Program (MMCRP) to ensure compliance with all mitigation measures imposed on the Sunrise Powerlink Project during implementation. The CPUC voted on December 18, 2008 to approve the Final Environmentally Superior Southern Route ([Decision D.08-12-058](#)) and a [Notice of Determination](#) was submitted to the State Clearinghouse (SCH#2006091071). The BLM issued a [Record of Decision](#) approving the same route on January 20, 2009. The Project also crosses lands under jurisdiction of the U.S. Department of Agriculture; and Forest Service on the Cleveland National Forest; the Forest Service issued its Record of Decision and Supplemental Information report on July 9, 2010. The area requested under this NTP does not fall under Forest Service jurisdiction.

The Sunrise Powerlink Project will be constructed in 26 segments, as defined on the CPUC's project website (<http://www.cpuc.ca.gov/Environment/info/aspen/sunrise/sunrise.htm>). Within the 26 project segments, SDG&E will submit multiple separate requests for Notice to Proceed (NTPs) during the construction process, as is typical for transmission line projects. Given that the Sunrise Powerlink Project has been approved by the CPUC and BLM, as described above, this segmented construction review process allows SDG&E to proceed with individual project components where compliance with all applicable mitigation measures and conditions can be documented.

This letter and the attached Compliance Status Table document the CPUC's thorough evaluation of all activities covered in this NTP. The evaluation process ensures that all mitigation measures and Biological Opinion conditions applicable to the location and activities covered in the NTP are implemented, as required in the CPUC's Decision and in BLM's Record of Decision.

NTP #6 for the Encina Switchyard is granted by CPUC for the proposed activities based on the factors described below.

**SDG&E NTP Request.** Excerpts from the SDG&E NTP request May 26, 2010 are presented below with CPUC clarifications based on discussions and/or correspondence with SDG&E inserted (**in parenthesis**

**and in bold).** Additional information was also provided by SDG&E in an e-mail received July 26, 2010. This information has been incorporated into the following:

SDG&E requests a Notice to Proceed from the CPUC for use of the Encina Switchyard, Segment 24 of the Sunrise Powerlink Project. The Encina Switchyard is located at 4600 Carlsbad Boulevard, Carlsbad, CA 92008. The enclosed area of the two switchyards located at the Encina site (APN 210-010-430) is approximately five acres in size and is located north of Cannon Road, between I-5 and Carlsbad Boulevard. The Switchyard is a previously disturbed and developed site, adjacent to the Encina Power Station. The property is owned by NRG Energy, Inc. and SDG&E has a ground lease with easement rights.

These upgrades are necessary to alleviate existing operational issues and to support the future addition of the Sunrise Powerlink line to the existing SDG&E system. Encina Switchyard is not directly connected to the proposed Sunrise Transmission Line.

The Encina facility consists of two switchyards, a 138-kV yard covering approximately 3.7 acres of the northern portion of the facility, a 230-kV yard covering 1 acre of the southern portion of the facility, and an approximate 0.3 acre area separating the two switchyards. The perimeter of the Switchyard as well as the area between the switchyards is enclosed by an existing and approximate 7-foot high chain-link with barbwire fence. The 138-kV and 230-kV Switchyards were designed as a switching station for the generating units at the Encina Power Plant and the 138-kV and 230-kV transmission lines. The two switchyards are not electrically connected.

Aside from the switchyards, the Encina site also includes other facilities such as the Encina Power Plant, parking areas, and utilities that occupy other areas of the larger site. Upgrades are only being proposed within the existing Switchyard fence-lines. A 19,455-square foot dirt area east of the Switchyard at the Encina site is proposed for temporary construction-related parking for the crew and as a material storage area.

Switchyard uses, equipment, and materials are summarized below:

The scope of work for the Encina Switchyard facility includes an upgrade of the 138-kV Switchyard and expansion of the 230-kV Switchyard that will convert the facility into a substation. Existing facilities and equipment within the 138-kV Switchyard will be removed and relocated within the Switchyard areas. The 230-kV Switchyard will be expanded to accommodate the installation of gas circuit breakers, as well as the installation and termination of a new transformer.

A 230/138-kV, 392-MVA transformer will electrically connect the two switchyards. The addition of this transformer will then balance the power flowing on either the 230-kV or 138-kV transmission system, depending on the power flow south from the San Onofre Nuclear Generating Station (SONGS) and the amount of generation online at the Encina Power Plant.

The following are proposed modifications to the 138-kV Switchyard:

- Relocate transmission line (TL) 13806 from Bay 8 to Bay 5, TL 13804 from Bay 10 to Bay 7, Encina Unit 3 Main Transformer termination from Bay 9 to Bay 8, Encina 4 Main Transformer termination from Bay 11 to Bay 10, and Encina 4-5B Aux Bank connection from Bay 13 to Bay 11.
- Remove all equipment, structures, and foundations in Bays 12 and 13.
- Remove four 138-kV bus support structures and foundations located at the south end of the 138-kV Switchyard.
- Remove fencing between the switchyards.
- Widen existing paved access road between the two switchyards and install security gates at either end.
- Remove an existing above and below ground fuel oil and steam piping located between the 230-kV and 138-kV switchyards.
- When piping is removed, fill and re-compact the soil between the switchyards to make it suitable for expanding the 230-kV Switchyard.
- Relocate all other plant utilities outside of the Switchyard and elsewhere at the Encina site.
- Pave access roads inside the Switchyard with asphalt.
- Install thirteen 138-kV, 3000 A, 40 kA, gas circuit breakers in positions 1E, 3W, 5E, 5W, 7E, & 7W and replace the obsolete oil breakers in positions 1W, 9E, 9W, 10E, 10W, 11E, and 11W.

- Install 32 sets of 138-kV, 2000 A, vertical break disconnect switches with 650 BIL, extra high strength, station post insulators with semiconducting glaze. The switches shall be installed in Bays 1, 3, 5, and 7 and replaced in Bays 8-11.
- Install two 138-kV Main Bus dead ends next to Bay 11. The 1/C-1000 KCM Cu per phase main bus conductors will be replaced with 2/C-1033 KCM ACSR per phase and re-terminated into the new structures. Remove the existing main bus disconnects.
- Replace the low bus and line drop 1/C-500 KCM Cu per phase conductors in Bays 5, 9, and 11 with 2/C-1033 KCM ACSR per phase. Add 2/C-1033 KCM ACSR per phase low bus and line drop conductors in Bay 7.
- Replace the line drop suspension insulators with polymer suspension insulators.
- Install a 138-kV CCVT in Bays 1, 3, 5, 7, and 9 for line synchronizing.
- Install Bank 60 in the open area east of Encina Control House 3-4. Install a line termination structure and extend the 138-kV side of the transformer to Bay 9.
- Relocate the Encina Unit 4 and auxiliary transformer terminations by installing one approximately 100-foot steel monopole adjacent to Bank 60. The pole will be installed on a new foundation within the Switchyard.
- Install a new Control Shelter in the 138-kV Switchyard adjacent to the Encina Control House 3-4 for the control and protection panels, RTU, annunciator, telecommunications equipment, and AC & DC equipment.
- Upgrade the AC systems by installing two 138/12-kV, 1500-kVA transformers with associated distribution transformers and panelboards.
- Upgrade the DC system by installing new batteries and chargers in the expanded Control Shelter and associated distribution panelboards.

Following are proposed modifications to the 230-kV Switchyard:

- Upgrade the Encina 230-kV East Bus by replacing the 5-inch aluminum pipe bus in Bays 1 & 2 with 6-inch aluminum pipe bus and adding 6-inch pipe with associated bus support structures to form two more bays (Bays 3 & 4). Use 900-kV BIL, extra high strength, station post insulators with semiconducting glaze porcelain for bus supports.
- Upgrade the Encina 230-kV West Bus by removing the strain bus and structures and adding 6-inch pipe with associated bus support structures to form two more bays (Bays 3 & 4). Use 900-kV BIL, extra high strength with semiconducting glazed porcelain station post insulators for bus support.
- Replace the 1/C-2500 KCM-AAC per phase low bus conductors with 2/C-2156 ACSR per phase to increase the bus rating to 3000 A. Install 2/C-2156 ACSR per phase low bus conductors in new Bay 3.
- Install 18 230-kV, 3000 A disconnects with associated support structures in Bays 1-3.
- Install four 230-kV, 3000 A breakers in positions 1E, 3E, 3T, & 3W.
- Install 230-kV CCVTs in the line and bank positions for synchronizing.
- Relocate TL 23011 to the new line position in Bay 3 and remove the line deadend and cable termination structures used for TL 23011 in the current position.

Replace Breakers and Insulators – Most all obsolete oil circuit breakers will be replaced with gas circuit breakers throughout both switchyards. In addition, all porcelain insulators will be replaced with polymer insulators.

Foundation Installations – Excavations for foundations will take place within the previously developed Switchyard and will consist of concrete pads and piers. Pad foundations will have an average thickness of 24-inches and require 12-inch excavations below surface grade. Concrete piers will be drilled to depths ranging from 5 to 28 feet, with pier diameters ranging between two and eight feet. Reinforcing steel and anchor bolts will be set within the excavations prior to adding the structural concrete into the excavations. Forms constructed at-grade will extend each foundation approximately six-inches above grade.

Trench and Install Controls - Trenching for the placement of control and power conduits and the ground grid will take place at various locations entirely within the existing Switchyard fence. Trenching for control and power conduit packages will vary in depth with a maximum depth of approximately ten feet. Conduit trenches vary in length and depth and will be filled with layers of concrete or concrete slurry and Class II base material. The slurry typically fills the bottom layer of the trench to a depth of approximately one foot below grade. The top foot of the trench is then filled and compacted with a Class II base material. Trenches for the ground grid are approximately 18 inches deep with the ground wires spaced on a 20-foot wide by 20-foot long grid pattern. The excavated material is back-filled and compacted over the ground grid.

Structures and Equipment Erection - Structures will be delivered by semi/tractor trailer rigs and assembled as much as possible while on the ground. Bolts and insulators will be attached by hand, using wrenches.

Lighting - Due to the type and timing of work conducted at the Switchyard, permanent overhead lighting is present to light work areas and to support security. New permanent lighting, matching the existing light height and design, will be installed as part of the Switchyard upgrade. Temporary construction lighting will also be installed for use during the upgrade. All temporary lighting will be removed upon completion of the upgrade. Mitigation plans for both permanent and temporary/construction-related lighting improvements have been prepared in compliance with mitigation measure V-1b and V-21a.

Equipment Wiring and Testing - Equipment wiring and testing will occur near the end of each phase of construction. After each piece of equipment is erected and set in place, control wire will be pulled between the equipment and the control house. The control wire is terminated at control panels both inside the equipment and the control house. Once the terminations are complete, crews will test the equipment operation and control functions. Pick up trucks will be used to deliver small equipment, and testing vans will be used for transporting crews and testing equipment.

Construction Access Routes - Existing drives and hard-surfaced areas within the Encina Power Plant and Switchyard property will be used to access the construction and upgrade areas.

Transport of Equipment, Materials, and Personnel - The number of vehicle trips to and from the Switchyard associated with worker commutes and equipment transportation would not result in unstable flow, fluctuations in volumes of traffic, or cause substantial drops in operating speeds on surrounding roadways.

Large switchyard equipment and materials will be delivered to the Switchyard via semi-trucks, with approximately 30 large deliveries spanning a 22 month construction period. The proposed construction activities at the Encina Switchyard will only require temporary lane closure for delivery of the new 230/138 kV transformer, to be conducted per Hauling and Encroachment Permits which will be obtained from Caltrans and in coordination with the City of Carlsbad during construction (**Hauling and Encroachment Permits shall be submitted to the CPUC prior to transport and delivery of the transformer.**)

The Hauling Permit will identify the temporary lane closure and traffic control measures required to safely transport the transformer to the Switchyard. The temporary lane closure will not restrict the movement of emergency vehicles. (**Prior to any lane closures, documentation of advance coordination with emergency service providers shall be submitted to the CPUC.**). SDG&E and its contractors will also coordinate with the California Highway Patrol regarding transformer transport along freeways.

A project specific Fire Prevention and Response Plan (FPRP) was acknowledged\* by CAL Fire Chief (the plan has been CPUC approved). A project Fire Marshall has been hired onto the project and is assigned to enforce the FPRP. (\*In regard to the FPRP the Cal Fire Chief provided "The signatory reviewing officials are acknowledging that SDG&E has a Construction Fire Prevention Plan that is appropriate and necessary to mitigate fire hazard and risk for the SRPL construction and maintenance activities. They do not accept any responsibility for SDG&E interpretation or implementation of this Plan during the construction and maintenance of the SRPL or for any resulting actions associated with these activities.")

Nighttime construction is anticipated. Should construction activities need to occur outside of what is permitted by local ordinances, a variance will be obtained 45 days prior to (that) construction. Per the NTP request, the City of Carlsbad Noise Ordinance (Chapter 8.48 Noise, 8.48.020 Exceptions) provides an exception to construction during normal daylight hours for construction activities that occur within non-residential zones provided there are not occupied residential dwellings within 1,000 feet of the exterior boundary of the construction site. There are some dwellings west of Carlsbad Boulevard that fall within the 1,000-foot buffer from the Encina Switchyard. Trenching, drilling, and major equipment installation, which would generate the most noise, will most likely occur during daytime hours. Other construction and upgrade operations within the Switchyard may occur during nighttime hours but should not generate excessive noise levels. If necessary, SDG&E will obtain a variance from the City of Carlsbad to accommodate nighttime construction activity. Once approved from the City of Carlsbad, the variance will be submitted to the CPUC. Installation of sound barrier walls or acoustic blankets to shield residences will not be required as there are not occupied residences located within 200 feet of the Switchyard. SDG&E has established a toll free telephone hotline for the SPL Project and this number will be included on mailed notification. All noise-suppression techniques will be followed during construction.

## **CPUC Evaluation of Mitigation Implementation**

All applicable project mitigation measures, APMs, compliance plans, and permit conditions shall be implemented. Some measures have on-going/time-sensitive requirements and are required to be implemented prior to and during construction where applicable. For biological and cultural resources, those additional conditions are defined in this section.

Please see also the attached Compliance Status Table documenting pre-construction requirements identified in the Final EIR/EIS. Note that entries shaded in yellow are outstanding and must be completed prior to the start of construction. Entries shaded in purple are to be conducted during construction. Entries shaded in gray have either been fulfilled or are not applicable to this action.

Following the discussion of biological, cultural, and paleontological resources, a list of bulleted conditions is presented to define additional information and clarifications regarding outstanding requirements. In some cases, these items exceed the requirements of the Mitigation Measures and Applicant Proposed Measures, and are based on specific site conditions and/or are proposed conditions by SDG&E. In these cases, the conditions will not also appear in the Compliance Status Table.

**Biological Resources.** This section presents background on biological resources that occur at or near the site. This summary of biological issues was provided by SDG&E in the initial NTP request. The CPUC biological consultant conducted reviews of the initial NTP request and follow-up materials for completeness and compliance with Project mitigation requirements.

SDG&E requests that the Encina Switchyard NTP be conditioned for conducting pre-construction surveys for nesting birds (Mitigation Measure B-8a) within 100 feet of the construction zone within 10 calendar days prior to the initiation of construction that would occur between January 15 and August 15. In addition nesting surveys for listed species including raptors shall be conducted within 500 feet of the construction zone within 10 days prior to the initiation of construction that would occur between January 1 and September 15. **Please note that survey results shall be submitted to the United States Fish and Wildlife Service [USFWS], California Department of Fish and Game [CDFG] and CPUC prior to construction.**

Activities will be limited to previously disturbed/developed areas and will not impact rare plants.

**Cultural Resources.** The Encina Switchyard Cultural Resources Inventory Report was submitted on May 13, 2010. The report was reviewed by the CPUC cultural resources consultant and comments were provided May 18, 2010. Per the report and the CPUC review, there is no potential to encounter cultural resources at the Encina Substation Yard. The Sunrise Project Historic Properties Management Plan (HPMP) was approved July 2010. The conditions of the HPMP shall be implemented during construction.

**Paleontological Resources.** Based on a letter report from the San Diego Natural History Museum, dated May 17, 2010, there is a high potential to encounter paleontological resources at the Encina Substation site. Therefore, to mitigate any potential negative impacts to buried paleontological resources, SDG&E shall ensure that a qualified paleontological monitor is on site during excavations for foundation installation and trenching for control and power conduits to monitor for unearthened fossil remains.

The Final Paleontological Monitoring and Treatment Plan was approved July 2010 and its conditions shall be implemented during construction.

### Conditions of NTP Approval

The conditions presented below shall be met by SDG&E and its contractors:

1. All applicable project mitigation measures, APMs, compliance plans, and permit conditions shall be implemented. Some measures have on-going/time-sensitive requirements and shall be implemented prior to and during construction where applicable. Please see the attached table of pre-construction mitigation measure requirements. Note that entries shaded in yellow are outstanding and shall be completed prior to the start of construction. Purple entries shall be conducted during construction. Grey entries have either been fulfilled or are not applicable to this action. Bulleted items can be found below which provide additional information and clarifications to outstanding requirements.
2. Copies of all relevant permits, compliance plans, and this Notice to Proceed shall be available on site for the duration of construction activities.
3. All temporary facilities (i.e., trailers, fencing, etc.) shall be removed from the Switchyard at the completion of construction.
4. No clearing or disturbance to vegetation shall occur inside or outside of approved work areas.
5. In compliance with Mitigation Measure B-8a, pre-construction surveys for nesting birds within 100 feet of the construction zone within 10 calendar days prior to the initiation of construction shall occur between January 15 and August 15. In addition, nesting surveys for listed species including raptors shall be conducted within 500 feet of the construction zone within 10 days prior to the initiation of construction shall occur between January 1 and September 15.
6. "Survey sweeps" will occur immediately preceding and during active construction as part of required biological monitoring activities. If active nests are found, a biological monitor shall establish an appropriate buffer around the nest and no activities will be allowed within the buffer until the young have fledged from the nest or the nest fails. The biological monitor shall conduct regular monitoring of the nest to determine success/failure and to ensure that project activities are not conducted within the buffer until the nesting cycle is complete or the nest fails. The biological monitor shall be responsible for documenting the results of the surveys and the ongoing monitoring. The buffer may be adjusted with the approval of CDFG and USFWS, and with prior knowledge of the CPUC.
7. If the application of water is needed to abate dust in construction areas and on dirt roads, SDG&E shall use the least amount needed to meet safety and air quality standards and prevent the formation of puddles, which could attract wildlife to construction sites (as requested by USFWS). Conditions of the Dust Control Plan will be implemented and enforced throughout the Encina upgrade activities.
8. All crew members shall be Safe Worker and Environmental Awareness Program (SWEAP) trained prior to working on the project. A log shall be maintained on-site with the names of all crew personnel trained. For any crew members with limited English, a translator shall be on-site to ensure understanding of the training program. In place of a translator, the SWEAP training brochure can be provided in Spanish or other languages as appropriate. All participants will receive a hard-hat sticker for ease of compliance verification.
9. If construction debris or spills enter into environmentally sensitive areas, appropriate jurisdictional agencies and the CPUC Environmental Monitor shall be notified immediately.

10. No movement or staging of construction vehicles or equipment shall be allowed outside of the approved areas. If additional temporary workspace areas or access routes, or changes in technique and mitigation implementation to a lesser level are required, a Variance Request shall be submitted for CPUC review.
11. Excavations shall be sloped on one end to provide an escape route for small mammals and reptiles.
12. If groundwater is encountered it will be handled according to federal, state and local regulations. Groundwater will be pumped into either a tank truck or a baker tank and tested for proper disposal. If required, a groundwater disposal permit will be obtained.
13. SDG&E shall design and install all lighting at the construction site such that light bulbs and reflectors are not visible from public viewing areas; lighting does not cause reflected glare; and illumination of the project facilities, vicinity, and nighttime sky is minimized.
14. Per Mitigation Measure V-1b, lighting mitigation plans will be implemented during construction.
15. Verification of noticing as required under Mitigation Measures L-1a, LU-APM-1 shall be submitted to the CPUC prior to construction.
16. Per the NTP request, the Encina Power Stations (Cabrillo Power, LLC) will be notified of the proposed upgrades within the required timeframe prior to initiating construction and verification will be submitted to the CPUC as per the Construction Notification Plan approved on March 1, 2010.
17. Per Applicant Proposed Mitigation LU-APM-6, crews shall flag (switchyard and fence line) boundaries and limits of construction activity inside and outside the environmentally sensitive areas to alert construction personnel that those areas should be avoided.
18. SDG&E shall ensure that a qualified paleontological monitor is on site during excavations for foundation installation and trenching for control and power conduits to monitor for unearthed fossil remains.
19. All complaints received by SDG&E in regard to the switchyard shall be logged and reported immediately to the CPUC. This includes complaints relevant to lighting as well as noise and dust, etc. Complaints should also be forwarded immediately to San Diego County. If complaints cannot be resolved, lighting at the site may need to be modified and/or sound attenuation devices may need to be installed etc., depending on the nature of the complaint.
20. In the event of after-hours work, per Mitigation Measure N-1, SDG&E will obtain a variance from the City of Carlsbad to accommodate nighttime construction activity. Once approved from the City of Carlsbad, the variance will be submitted to the CPUC.
21. Access and traffic control will be coordinated with the City of Carlsbad, including any requirements regarding emergency services. Per the NTP request, during construction, a Traffic Control Plan will be obtained with the City of Carlsbad for one delivery of the 230/138 kV Transformer. Coordination will be made, as required under this Plan, with emergency and police services, to ensure disruption to response times and access is minimized.
22. Hauling and Encroachment permits will be obtained and submitted to the CPUC prior to transport and delivery of the new transformer. SDG&E or its contractor shall coordinate with the City of Carlsbad, Caltrans, and the California Highway Patrol before transport of the transformer.

23. SDG&E shall coordinate with City of Carlsbad emergency service providers prior to activities that would restrict movements of emergency vehicles. Documentation of coordination with emergency service providers shall be submitted to the CPUC.
24. Prior to construction, SDG&E will submit to the CPUC a report with site-specific information identifying any potential hazards (e.g. contaminated soil) in relation to trench locations and other areas scheduled for ground disturbance during the Encina Switchyard Upgrade activities in compliance with Mitigation Measure P-7a.
25. The SDG&E Environmental Monitoring Program will be implemented during construction which will include implementation of the applicable environmental plans (as defined in HS-APM-1, HS-APM-2, HS-APM 3, HS-APM-8 and HS-APM-10. SDG&E has designated an Environmental Field Representative for the Encina Switchyard. The Representative will be on site to observe and document adherence to the applicable environmental plans.
26. In regard to the Hazard Communication Plan to fully satisfy the intent of Mitigation Measure P-1a, documentation of training for personnel who would be working near or handling hazardous materials shall be submitted to the CPUC for review after completion of these training activities.
27. Per the NTP request, an NPDES storm water discharge permit for construction activities has been obtained. A SWPPP applicable to the Encina Switchyard shall be submitted to the CPUC prior to construction. The SWPPP shall be implemented where appropriate prior to and during construction.
28. SDG&E shall not use groundwater supply wells for project water sources.

Please contact me if you have any questions or concerns.

Sincerely,

*Billie Blanchard*

Billie Blanchard  
CPUC Environmental Project Manager  
Sunrise Powerlink Transmission Project

cc: Mary Jo Borak, CPUC CEQA Team Manager  
Nicholas Sher, CPUC Legal Division  
Daniel Steward, BLM El Centro Field Office  
Tom Zale, BLM El Centro Field Office  
Holly Roberts, BLM Palm Spring South Coast Field Office  
Robert Hawkins, U.S. Forest Service  
Cliff Harvey, State Water Resources Control Board  
Eric Porter, USFWS  
Doreen Stadtlander, USFWS  
Paul Schlitt, CDFG  
Heather Pert, CDFG  
Kelly Fisher, CDFG  
Erin Wilson, CDFG  
Susan Lee, Aspen Environmental Group  
Vida Strong, Aspen Environmental Group  
Anne Coronado, Aspen Environmental Group  
Hedy Koczwara, Aspen Environmental Group  
Don Haines, San Diego Gas and Electric Company

Tina Carter, San Diego Gas and Electric Company

## Sunrise Powerlink Project NTP 5 Compliance Table

Pre-Construction Compliance Status Table as applied to the Encina Switchyard NTP #6	
Mitigation Measure and APM	Status
Please note that the full text of the mitigation measure conditions are not provided in this table. Complete measures can be found in the EIR/EIS and MMCRP.	Please note that cells highlighted in grey have been fulfilled or are not applicable.
Abbreviated conditions of the USFWS Biological Opinion are shown in green highlights.	Cells highlighted in yellow are conditions of the NTP and shall be fulfilled with documentation submitted to the CPUC prior to construction.
	Cells highlighted in purple will be fulfilled during or after construction.
<b>Biological Resources</b>	
B-1a: Provide restoration/compensation for impacted sensitive vegetation communities	NA: Construction activities will take place on previously disturbed areas free of vegetation. The yard boundaries will be flagged/delineated within the existing disturbed portions of the property. Project impacts will occur only within the previously disturbed, fenced limits of the proposed property. No sensitive vegetation communities will be directly impacted by project construction. Impacts to previously disturbed and developed areas will not require mitigation. No shrub or tree trimming or removal will occur. (Flagging will be conducted prior to construction. Per the NTP request, construction will be confined within the Switchyard fence lines and the area between the two existing Switchyards. However, access roads will be widened, so the limits of the expanded roadway will be flagged prior to construction.)
B-1c: Conduct biological monitoring	During construction, a qualified biological monitor with the authority to issue stop work orders will be on-site and periodic inspections will be performed.
B-1k: Re-seed disturbed areas after a transmission line-caused fire	NA
B-1l: SDG&E shall continue to work with the USDA Forest Service to minimize impacts to the RCA between Structures 184 and 187	NA
B-2a: Provide restoration/compensation for impacted jurisdictional areas	NA
B-3a: Prepare and implement a Weed Control Plan	Weed Control Plan was approved by CPUC on September 8, 2010. The Weed Control Plan shall be implemented during construction.
B-5a: Conduct rare plant surveys, and implement appropriate avoidance/minimization/compensation strategies	NA. Per the NTP request, construction activities will occur only within the previously disturbed, fenced Switchyard fence lines; there are no special status plant populations within the Encina Switchyard.
G-CM-32 Prior to construction activities, SDG&E will conduct on-the-ground surveys (following Service protocols where they exist) for the following listed species where such surveys had not been conducted in 2007 and 2008, or for those species for which surveys in 2007 and 2008 were not reliable due to lack of sufficient rainfall. San Diego Thornmint ( <i>Acanthomintha ilicifolia</i> ), San Bernardino Bluegrass ( <i>Poa atropurpurea</i> ), Willowy Monardella ( <i>Monardella viminea</i> ), Quino Checkerspot Butterfly ( <i>Euphydryas editha quino</i> ), Arroyo Toad ( <i>Bufo californicus</i> ), Southwestern Willow Flycatcher ( <i>Empidonax traillii extimus</i> ), Least Bell's Vireo ( <i>Vireo bellii pusillus</i> ), Coastal California Gnatcatcher ( <i>Poliotila californica californica</i> ), Stephen's Kangaroo Rat ( <i>Dipodomys stephensi</i> )	NA: No sensitive species are expected to occur inside the previously-disturbed construction area.
SS-CM-1 San Diego Thornmint. No impacts will occur to the thornmint population at and adjacent to MP 116 or to any thornmint occurrences between MP 114 and 119...In other areas where suitable thornmint habitat (i.e., gabbro and calcareous soils and a slope of 0 to 25 percent) exists, the area to be impacted will be surveyed for thornmint before any impacts may occur, per G-CM-32.	NA: No sensitive species are expected to occur inside the previously-disturbed construction area.
SS-CM-2 Impacts to San Diego thornmint will first be avoided where feasible, and where not feasible due to physical or safety constraints, impacts will be compensated through salvage and relocation via a restoration program...The CPUC, BLM, USFS and Wildlife Agencies will decide whether the applicant can restore San Diego thornmint populations or will acquire habitat with San Diego thornmint...	NA. See SS-CM-1

## Sunrise Powerlink Project NTP 5 Compliance Table

Mitigation Measure and APM	Status
B-7a Cover all steep-walled trenches or excavations used during construction to prevent the entrapment of wildlife (e.g. reptiles and small mammals)	Per the NTP request, steep-walled trenches or excavations will be covered or fencing will be installed to prevent the entrapment of wildlife during construction. A qualified biological monitor will inspect any open trenches as required. Should a dead or injured listed species be found in a trench or excavation or anywhere in the construction zone or along an access road, the qualified biologist shall contact the CPUC, BLM, State Parks (for activities in ABDSP), USDA Forest Service (for alternatives with activities on National Forest lands), and the Wildlife Agencies within 48 hours of the finding. The qualified biologist shall report the species found, the location of the finding, the cause of death (if known), and shall submit a photograph and any other pertinent information. Workers will be instructed to look under vehicles for wildlife before movement and to report mortality or injury of a listed species within 48 hours. No vehicles or equipment will be moved until the animal has left or is removed by a qualified biologist.
B-7b: Implement avoidance/mitigation/compensation according to the Flat-Tailed Horned Lizard Range wide Management Strategy	NA
B-7c: Minimize impacts to Peninsular bighorn sheep and provide compensation for loss of critical habitat	NA
SS-CM-22 Construction activities (including the use of helicopters) in bighorn sheep designated critical habitat will be limited to outside the lambing season (January 1 through June 30) and the period of greatest water need (June 1 through September 30) as defined in the Recovery Plan...	NA
SS-CM-23 Compensation for the loss of occupied bighorn sheep habitat will be implemented...	NA
SS-CM-24 A biological consultant approved by the Wildlife Agencies will be retained by SDG&E to collect data on bighorn sheep movements in the area during the construction phase. Prior to construction the biologist shall submit a bighorn sheep monitoring plan that meets the approval of the Wildlife Agencies...	NA
SS-CM-25 To help reconnect desert bighorn sheep subpopulations and at least partially offset impacts to the overall population caused by the project, SDG&E will: Fund the design and construction of an overpass or underpass, or tunnel to facilitate desert bighorn sheep movement across a highway...Fund, design, and construct a system of fences to prevent bighorn sheep from crossing on the surface of westbound Interstate 8...Fund removal of tamarisk, fountain grass, other invasive species, and hazardous fences for the life of the project...	NA
B-7d: Conduct burrowing owl surveys, and implement appropriate avoidance/ minimization/compensation strategies	NA. There is low or no potential for burrowing owl to occur based on habitats present and CNDDB and USFWS records.
B-7e: Conduct least Bell's vireo and southwestern willow flycatcher surveys, and implement appropriate avoidance/ minimization/compensation strategies	NA. This measure is not applicable, as there is no suitable habitat for least Bell's vireo and southwestern willow flycatcher.
SS-CM-16 During construction, all grading or brushing taking place within riparian habitats occupied by the vireo will be conducted outside the vireo breeding season (defined as March 15 through September 15)...	NA: See B-7e
SS-CM-17 To avoid impacts to vireo, towers, pads, pull stations, access roads, staging areas, and fly yards will be located outside of riparian vegetation, including occupied vireo habitat, where feasible..	NA: See B-7e
SS-CM-18 To minimize adverse impacts from loss of occupied habitat in the Cleveland National Forest, and to minimize predation and parasitism, SDG&E will develop and implement a brown-headed cowbird ( <i>Molothrus ater</i> ) trapping program, in consultation with the USFS.	NA
B-7h: Implement appropriate avoidance/ minimization strategies for eagle nests	NA. No suitable eagle habitat exists within or adjacent to the Encina Switchyard.
B-7i: Conduct Quino checkerspot butterfly surveys, and implement appropriate avoidance/minimization/compensation strategies	NA. Per the NTP request, there are no Quino checkerspot butterflies or their associated habitat within the Switchyard.
SS-CM-3 A biologist permitted by the Service will delineate suitable/occupied (quino) habitat areas that will be impacted by project construction...	See B-7i
SS-CM-4 A pre-construction, Service protocol presence/absence survey for the adult Quino will be conducted within the delineated suitable/occupied habitat in the construction zone...	See B-7i
SS-CM-5 Any Service-approved restoration (plan) of impacted (quino) habitat will be conducted in areas with appropriate topographical and biological features to be determined by the Service, BLM, USFS and SDG&E...	See B-7i

## Sunrise Powerlink Project NTP 5 Compliance Table

Mitigation Measure and APM	Status
SS-CM-6 Due the extreme importance of the Quino population located in the Jacumba Unit of Quino critical habitat, SDG&E will consult with the Service regarding the final design and siting of all permanent and temporary impacts (e.g., towers, pads, access roads, staging areas, pull down areas, helipads, and fuel modification zones) within Quino critical habitat...	See B-7i
SS-CM-7 No new construction will occur during the Quino flight season within 1 km (1 mi) of any known or newly discovered Quino occurrence. If it is not feasible to construct outside of the flight season in these instances, SDG&E must obtain written consent from the Service to proceed with construction.	See B-7i
B-7j: Conduct arroyo toad surveys, and implement appropriate avoidance/minimization/compensation strategies	NA. There is no suitable habitat for arroyo toad.
SS-CM-8 A pre-construction, Service protocol, survey will be conducted for the arroyo toad by a biologist approved by the Service to handle the toad) in all areas of the project located within suitable arroyo toad breeding habitat. The removal of toad riparian breeding habitat will occur from October through December to minimize potential impacts to breeding adults (including potential sedimentation impacts to toad eggs) and dispersing juveniles.	See B-7j
SS-CM-9 SDG&E will develop an arroyo toad translocation monitoring program to be implemented during all construction activities that have the potential to adversely affect the arroyo toad...	See B-7j
SS-CM-10 To offset the loss of occupied and suitable arroyo toad habitat within the project area, and to offset indirect effects of the project on arroyo habitat, SDG&E will develop and implement an arroyo toad predator control program on USFS lands. The scope and methods for this program will be developed in consultation with the Service and USFS.	See B-7j
SS-CM-11 Compensation for the loss of arroyo toad-occupied habitat will be implemented... Any acquired habitat will be approved by the CPUC, BLM, USFS, and Wildlife Agencies.	See B-7j
SS-CM-15 Towers, pads, pull stations, access roads, staging areas, and fly yards will not be located within suitable/potential arroyo toad upland aestivation and riparian breeding habitat to the extent feasible...	See B-7j
B-7l: Conduct coastal California gnatcatcher surveys, and implement appropriate avoidance/minimization/compensation strategies	N/A. There is no suitable habitat for coastal California gnatcatcher..
SS-CM-19 All brushing or grading taking place within occupied habitat of the gnatcatcher 500 ft of any gnatcatcher sightings during construction will be conducted outside of the gnatcatcher breeding season (2-15 through 8-31). When conducting all other construction activities during the gnatcatcher breeding season, within occupied habitat, the following avoidance measures will apply. Vegetation clearing outside of the breeding season (10-1 through 2-14) will take place in the presence of a biological monitor approved by the Service... A Service-approved biologist will survey for gnatcatchers within 10 days prior to initiating activities in an area. The results of the survey will be submitted to the Wildlife Agencies for review and approval prior to initiating any construction activities...If an active nest is located, 300-ft no-construction buffer will be established around each nest site... The applicant will contact the Wildlife Agencies to determine the appropriate buffer zone...However, if construction must take place within 300-ft buffer, a qualified acoustician will monitor noise..	See B-7i
SS-CM-20 Compensation for the loss of occupied gnatcatcher habitat will be implemented...Any acquired habitat will be approved by the CPUC, BLM, USFS, and Wildlife Agencies.	See B-7i
SS-CM-21 Compensation for the loss of unoccupied designated critical habitat for the gnatcatcher will be implemented...Any acquired habitat will be approved by the CPUC, BLM, USFS, and Wildlife Agencies.	See B-7i
B-8a: Conduct pre-construction surveys and monitoring for breeding birds	Per the NTP request, although the Switchyard and adjacent dirt area are devoid of vegetation, birds may nest within the Switchyard on existing equipment and structures. Within 10 calendar days prior to construction, a qualified biologist will conduct avian breeding surveys. Results of the surveys will be submitted to the CPUC and Wildlife Agencies for review and approval. If active nests are located, a suitable buffer will be established. If project construction cannot occur completely outside the general avian breeding season, then pre-construction surveys will be conducted in the following manner: 1. 100-foot pre-construction surveys will be conducted for non-listed bird species prior to occupancy/use. 2. 500-foot pre-construction surveys for listed bird species, including raptors.

## Sunrise Powerlink Project NTP 5 Compliance Table

Mitigation Measure and APM	Status
B-9a: Survey for bat nursery colonies	See BIO-APM-28
B-10a: Utilize collision-reducing techniques in installation of transmission lines	This location is designated as a construction yard and transmission lines will not be installed as part of this work. Therefore, this mitigation measure does not apply.
B-11a: Prepare and implement a Raven Control Plan	NA
B-12a: Conduct maintenance activities outside the general avian breeding season	NA
B-12b: Conduct maintenance when arroyo toads are least active	NA
B-12c: Maintain access roads and clear vegetation in Quino checkerspot butterfly habitat	See B-7i
BIO-APM-1: Perform any detailed on-the-ground protocol surveys with regard to specific sensitive plant or wildlife species whose habitat would be impacted. Implement with B-1a, B-1b, B-2a, B-5a, B-7d, B-7e, B-7g, B-7i, B-7j, B-k, B-7l, B-7m, and B-7o	NA. Per the NTP request, habitat for sensitive plants and animal species does not exist within the existing Switchyard fence-line or the dirt area to the east. Construction activities will take place within the existing Switchyard which has a ground cover of crushed stone. There is no vegetation or suitable habitat present within the Switchyard and no impacts to biological resources will occur as a result of the upgrade activities.
BIO-APM-2: Train personnel regarding the appropriate work practices necessary to effectively implement the biological APMs.	Safe Worker and Environmental Awareness Program (SWEAP) video will be shown to all project personnel and enforced throughout all phases of the Project, and includes appropriate work practices to effectively implement the biological resources and applicant proposed mitigation measures (APMs).
BIO-APM-3: Restrict vehicle movement to existing and constructed roads. Implement with B-5a, B-7a, B-8a, B-9a, B-12a, B-12b, and B-12c	Per NTP request, all vehicle traffic will be on existing paved and unpaved areas of the Switchyard. In addition to regular watering to control fugitive dust created during clearing, grading, earth-moving, excavation, and other construction activities which could interfere with plant photosynthesis, a 15-mile-per-hour speed limit shall be observed on dirt access roads to reduce dust and allow reptiles and small mammals to disperse.
BIO-APM-4: Comply with project area limits during construction and survey activities	Per the NTP request, all vehicles shall remain on existing roads. Construction activities will be limited to pre-disturbed areas within the Switchyard, which is fenced and gated. Switchyard upgrade activities or parking and material storage proposed on the pre-disturbed area east of the Switchyard will not require brush clearing or disturbance of sensitive vegetation.
BIO-APM-5: Configure access roads in compliance with hydrological resources guidelines. Implement with B-1a, B-2a, B-5a, and B-8a	NA
BIO-APM-6: Comply with all applicable environmental laws and regulations. Implement with B-1a, B-5a, B-8a, and B-12a	During construction and operation of this site, SDG&E will comply with all the necessary environmental laws and regulations, including, without limitation, those regulating and protecting wildlife and its habitat. The SWEAP video was approved by the CPUC on March 4, 2010. This SWEAP will be shown to all project personnel to ensure compliance with all applicable laws and regulations, addressing the protection of wildlife and its habitat.
BIO-APM-7: Littering is not allowed. Implement with B-6a, B-8a, and B-12a	SWEAP video addresses the fact that no littering is allowed, including food waste, other waste or any type of debris.
BIO-APM-8: Delineate sensitive plant population boundaries. Implement with B-5a	Per the NTP request, there are no sensitive plant populations that exist within the Switchyard fence-lines.
G-CM-33 Prior to construction, plant population boundaries designated as listed or proposed by the Wildlife Agencies and other resources designated as listed or proposed by SDG&E and other resource agencies will be clearly delineated with visible flagging or fencing, which will remain in place for the duration of construction...Where these areas cannot be avoided, focused surveys for covered plant species will be performed. Notification of presence of any covered plant species to be removed in the work area will occur within ten (10) working days prior to construction activity, during which time the Wildlife Agencies may remove such plant(s) or recommend measures to minimize or reduce the impact...	See B-1a. Per the NTP request, there are no sensitive plant populations that exist within the Switchyard fence-lines.
BIO-APM-9: Follow brush clearing guidelines. Implement with B-8a and B-12a	NA
BIO-APM-10: No wildlife, including rattlesnakes, may be harmed except to protect life and limb. Firearms shall be prohibited. Implement with B-12a	SWEAP video will be shown to all project personnel, and includes instructions that no wildlife, including rattlesnakes, may be harmed except to protect life and limb. The SWEAP also addresses that firearms are prohibited in all project areas, except for security personnel.
BIO-APM-11: Feeding of wildlife is not allowed. Implement with B-12a	SWEAP video will be shown to all project personnel, and includes instructions that feeding wildlife is prohibited.

## Sunrise Powerlink Project NTP 5 Compliance Table

Mitigation Measure and APM	Status
BIO-APM-12: Do not bring pets. Implement with B-12a	SWEAP video will be shown to all project personnel, and includes instructions that project personnel are not allowed to bring pets to any project area, minimizing harassment or killing of wildlife and prevention of introduction of animal diseases to wildlife populations.
BIO-APM-13: Plant or wildlife species may not be collected for pets or any other reason. Implement with B-5a and B-12a	SWEAP video will be shown to all project personnel, and includes instructions that prohibit collecting plant or wildlife species for pets or any other reason.
BIO-APM-14: Comply with removal of wildlife and transportation guidelines. Implement with B-7a	Wildlife found to be trapped will be removed by a qualified biological monitor. If the biological resource monitor is not qualified to remove the entrapped wildlife, a recognized wildlife rescue agency (such as Project Wildlife) will be contacted to remove the wildlife and transport it safely to other suitable habitats.
BIO-APM-15: Follow APMs during emergency repairs. Implement with B-1a and B-2a	NA
BIO-APM-16: Follow sensitive tree trimming guidelines. Implement with B-1a, B-2a, B-8a, and B-12a	NA. No tree trimming will occur at the construction site.
BIO-APM-17: Permanently close any new access roads or spur roads constructed as part of the project that are not required as permanent access. Implement with B-1a	NA. No access roads will be constructed.
BIO-APM-18: Design structures and access roads to minimize impacts to sensitive features. Implement with B-2a and B-5a, B-8a, and B-9a	NA. No access roads will be constructed. Per NTP request, there are no sensitive features or endangered species or their sensitive habitat within the Switchyard areas.
G-CM-27 To the extent feasible, access roads will be built at right angles to the streambeds and washes. Where it is not feasible for access roads to cross at right angles, SDG&E will limit roads constructed parallel to streambeds or washes to a maximum length of 500 ft at any one transmission line crossing location...Culverts will be installed where needed for right angle crossings, but rock crossings will be utilized across most right angle drainage crossings. All construction activities will be conducted in a manner that will minimize disturbance to vegetation, drainage channels, and stream banks. Up to 30 days prior to construction in streambeds and washes, SDG&E will perform a pre-activity survey(s) to determine the presence or absence of threatened or endangered riparian species. Details of protocol survey requirements are listed in the species-specific measures below.	NA. See BIO-APM-18 above
BIO-APM-19: Implement restoration and habitat enhancement and mitigation measures developed during the consultation period with the BLM	See B-1a
BIO-APM-20: Leave vegetation in place in construction areas where re-contouring is not required. Implement with B-1a	See B-1a
BIO-APM-21: Comply with "Suggested Practices for Raptor Protection on Power Lines" (Raptor Research Foundation, Inc., 1981). Implement with B-10a	Per NTP request, SDG&E has designed structures in conformance with "Suggested Practices for Raptor Protection on Power Lines."
BIO-APM-22: Salvage may include removal and stockpiling for replanting. Implement with B-5a	NA
BIO-APM-23: Remove only the minimum amount of vegetation necessary for the construction of structures and facilities. Implement with B-1a and B-3a	NA
BIO-APM-24: Prevent livestock or wildlife from falling through covers. Implement with B-7a	NA
BIO-APM-25: Revegetate disturbed soils. Implement with B-1a and B-3a	NA
BIO-APM-26: Excavations shall be sloped on one end to provide an escape route for small mammals and reptiles. Implement with B-7a	Implement during trench excavation until trench is filled.
BIO-APM-27: Remove all existing raptor nests from structures that would be affected by Project construction. Implement with B-8a	Per NTP request, existing raptor nests have not been observed within the Switchyard fence-line. If nests are found prior to construction and outside of the raptor breeding season, SDG&E will remove nests that would be affected by construction activities.
BIO-APM-28: Remove potential roost trees	NA. Per the NTP request, there are no potential bat roost trees on site.
BIO-APM-29: Reduce construction night lighting on sensitive habitats. Implement with B-7a and B-9a	Surveys for nesting birds shall be conducted within 10-days prior to construction and reported to the CPUC.
Visual Resources	

## Sunrise Powerlink Project NTP 5 Compliance Table

Mitigation Measure and APM	Status
V-1a: Reduce visibility of construction activities and equipment	Per the NTP request, existing fencing and facilities, as well as the lower elevation of the Switchyard area provides screening from adjacent properties. The upgrades will be installed within the existing Switchyard site which is located on an area considerably lower (on average, approximately 30 feet) than surrounding properties. There will not be additional visual impacts to nearby residences as a result of upgrades in an existing Switchyard. In addition, according to the "Interpretation & Approach" section of this mitigation measure in the MMCRP, "Existing substations already have fences or screening in place, therefore no additional screening or changes to existing fences are required for construction within these fences."
V-1b: Reduce construction night lighting impacts	Per the NTP request, SDG&E shall design and install all lighting at construction and storage yards and staging areas and fly yards such that light bulbs and reflectors are not visible from public viewing areas; lighting does not cause reflected glare; and illumination of the project facilities, vicinity, and nighttime sky is minimized.
V-2a: Reduce in-line views of land scars	NA. Access to this yard will be made via existing roads. No new access roads will be constructed for utilization of the yard.
V-2b: Reduce visual contrast from unnatural vegetation lines	NA. This location will not require grading, nor will visual contrast be created that would need to be reduced. Therefore, this mitigation measure does not apply.
V-2c: Reduce color contrast of land scars on non-Forest lands	NA. This location will not require grading, nor will visual contrast be created that would need to be reduced. Therefore, this mitigation measure does not apply.
V-2d: Construction by helicopter	NA
V-2f: Reduce land scarring and vegetation clearance impacts on USFS-administered lands	NA
V-3a: Reduce visual contrast of towers and conductors	NA.
V-7a: Reduce visual contrast associated with ancillary facilities	NA. Per the NTP request, colors and textures of all upgraded equipment will match existing equipment, therefore a Surface Treatment Plan will not be required.
V-7b: Screen ancillary facilities	Per NTP the request, existing fencing and facilities, as well as the lower elevation of the Switchyard area provides screening from adjacent properties. The upgrades will be installed within the existing Switchyard site which is located on an area considerably lower (on average, approximately 30 feet) than surrounding properties. There will not be additional visual impacts to nearby residences as a result of upgrades in an existing Switchyard. In addition, according to the "Interpretation & Approach" section of this mitigation measure in the MMCRP, "SDG&E will match existing screening within existing substations." A Screening Plan will not be required.
V-21a: Reduce night lighting impacts	Per the NTP request, system conditions at the Encina Switchyard may warrant that testing and maintenance work be performed during nighttime, off-peak load conditions, due to scheduled outages that may be required, as well as the risk of forced outages which could have severe system impacts resulting from transmission restrictions out of Encina. Because Encina Switchyard is a generation switching station, the availability of transmission capacity at the station is paramount during high load conditions; therefore, taking scheduled outages to perform bus maintenance may only be feasible at night. Working during nighttime hours requires the use of both fixed switchyard lighting, and when the task warrants, portable task flood lighting. Two Substation Lighting Mitigation Plans have been developed for the Encina Substation describing the measures implemented to minimize night lighting impacts during normal Substation operation and maintenance activities. The plans were reviewed by the CPUC, and reviewer's comments were incorporated into the revised plans.
V-45a Prepare and implement Scenery Conservation Plan	NA
V-66a: Reduce structural prominence and visual contrast associated with the Interstate 8/Chocolate Canyon transition structures	NA
V-68a: Eliminate sky lining of ridgeline towers and conductors	NA
VR-APM-1: Place structures at the maximum feasible distance from highway, canyon, and trail crossings.	NA. No crossings proposed.
VR-APM-2: Use dulled metal finish on transmission structures and non-specular conductors in visually sensitive areas. Implement with V-3b	NA
VR-APM-3: Match the spacing of structures where the line parallels existing transmission lines	NA
VR-APM-4: No paint or permanent discoloring agents will be applied to rocks or vegetation to indicate survey or construction activity limits. Implement with V-1c	SWEAP video will be shown to all project personnel, and includes instructions prohibiting application of paint or permanent discoloring agents on rocks or vegetation to indicate survey or construction limits.

## Sunrise Powerlink Project NTP 5 Compliance Table

Mitigation Measure and APM	Status
VR-APM-5: Transmission line structures will not be installed directly in front of residences or in direct line-of-sight from a residence. Implement with V-3c	NA
VR-APM-6: In scenic view areas place structures to avoid sensitive features and/or allow conductor to clearly span the features. (Need SDG&E input)	NA
<b>Land Use</b>	
L-1a: Prepare Construction Notification Plan	A Construction Notification Plan was submitted to the CPUC and approved 3-1-10.
L-1c: Coordinate with MCAS Miramar	NA
L-2b: Revise project elements to minimize land use conflicts	NA. SDG&E is leasing the property for this construction site, and will not present a land use conflict or physically divide a community.
LU-APM-1: Provide advance notice to residents, property owners, and tenants within 300 feet of construction activities and SDG&E will appoint a public affairs officer to address public concerns or questions. Implement with L-1d	Per the NTP request, Encina Power Station (Cabrillo Power, LLC) is the only property owner located within 300 feet of the Encina Switchyard. Cabrillo Power, LLC will be notified of the proposed upgrades within the required timeframe prior to initiating construction and verification will be submitted to the CPUC as per the Construction Notification Plan approved on March 1, 2010.
LU-APM-2: Place new transmission structures more than 330 feet from an existing residence. Implement with L-1d	NA. Encina Power Station (Cabrillo Power, LLC) is the only property owner located within 300 feet of the Encina Switchyard.
LU-APM-4: Notify property owners and tenants in advance of construction activities. Provide alternative access if feasible. Implement with L-1e	Per the NTP request, Encina Power Station (Cabrillo Power, LLC) will be notified of the proposed upgrades within the required timeframe prior to initiating construction and verification will be submitted to the CPUC as per the Construction Notification Plan approved on March 1, 2010.
LU-APM-5: Coordinate construction activities with appropriate water management representatives. (Need SDG&E input). Implement with L-1a	NA. No irrigation canals or flood management structures exist nearby, nor will be encroached upon, with utilization of this yard.
LU-APM-6: Flag ROW boundary and limits of construction activity inside and outside the ROW in environmentally sensitive areas to alert construction personnel that those areas should be minimize or avoided. Implement with L-1f	See B-1a.
LU-APM-7: Install project facilities along the edges or borders of private property, open space parks, and recreation areas	NA.
LU-APM-8: Continue coordination efforts with the Counties of Imperial and San Diego General Plan Updates and the City of San Diego General Plan Updates to include the Proposed Project in their respective General Plans.	NA. Per the NTP request, there will be no permanent project facilities installed at this yard which would require updates to the General Plan for either Imperial or San Diego Counties.
LU-APM-9: Obtain all necessary and/or appropriate ministerial land use permits	If required, any ministerial land use permit(s) will be obtained as necessary before construction.
LU-APM-10: Match structure locations with existing transmission facilities. (Need SDG&E input)	NA
<b>Wilderness and Recreation</b>	
WR-1a: Coordinate construction schedule and activities with the authorized officer for the recreation area	NA. Per the NTP request, the Encina Switchyard is located within an industrial complex and approximately 600 feet south of the Agua Hedionda Lagoon Foundation Complex. The on-going operation and proposed upgrade of the Encina Switchyard will not have an effect on the recreational facilities associated with the Agua Hedionda Lagoon or Cannon Park.
WR-1b: Provide temporary detours for trail users	NA
WR-1c: Coordinate with local agencies to identify alternative recreation areas	NA
WR-2a: Develop a reroute for the BCD Alternative Revision to reduce effects on recreation	NA
WR-2b: Evaluate and Implement PCT Route Revision	NA
WR-3a: Coordinate tower and road locations with the authorized officer for the recreation area.	NA
R-APM-2a: Provide advance notice of restriction of conflicts with access routes to recreational use areas. Implement with WR-1a	NA
R-APM-2b: No construction that affects trail use will be conducted in that area on federal holidays. Implement with WR-1a	NA
R-APM-2c: Coordinate all construction activities, including temporary trail closures, affecting the parklands and trail systems of San Diego and Imperial Counties with the counties' Parks and Recreation Department. Implement with WR-1a	NA
R-APM-2d: Post signs directing vehicles to alternative park access and parking in the event construction temporarily obstructs parking areas near trailheads. Implement with WR-1a	NA

## Sunrise Powerlink Project NTP 5 Compliance Table

Mitigation Measure and APM	Status
R-APM-2e: Post signs advising recreation users of construction activities and directing them to alternative trails or bikeways on both sides of all trail intersections. Implement with WR-1a	NA
R-APM-2f: Post signs advising equestrians of construction timeframes where helicopters are used for construction, at all equestrian trail-access points within the vicinity of the flight paths. Implement with WR-1a	NA
R-APM-3a: Construction-related traffic shall be restricted to routes approved by the authorized agencies	NA
<b>Agriculture</b>	
AG-1a: Avoid interference with agricultural operations	NA. There are no agricultural fields located within or adjacent to the Encina Switchyard.
AG-1b: Restore compacted soil	NA
AG-1c: Coordinate with grazing operators	NA
AG-3b: Consult with and inform aerial applicators	NA
LU-APM-3: Compensate farmers for losses of crops along ROW. Implement with L-1d	NA
<b>Cultural Resources</b>	
C-1a: Inventory and evaluate cultural resources in Final Area of Potential Effect (APE)	The Encina Switchyard Cultural Resources Inventory Report was submitted on May 13, 2010. The report was reviewed by the CPUC cultural resources consultant and comments were provided May 18, 2010. Per the report, there is no potential to encounter cultural resources at the Encina Substation Yard. The Sunrise Project Historic Properties Management Plan (HPMP) was approved July 2010. The conditions of the HPMP shall be implemented during construction.
C-1b: Avoid and protect potentially significant resources	The Encina Switchyard Cultural Resources Inventory Report was submitted on May 13, 2010. The report was reviewed by the CPUC cultural resources consultant and comments were provided May 18, 2010. Per the report, there is no potential to encounter cultural resources at the Encina Substation Yard. The Sunrise Project Historic Properties Management Plan (HPMP) was approved July 2010. The conditions of the HPMP shall be implemented during construction.
C-1c: Develop and implement Historic Properties Treatment Plan	The Sunrise Project Historic Properties Management Plan (HPMP) was approved July 2010. The conditions of the HPMP shall be implemented during construction.
C-1d: Conduct data recovery to reduce adverse effects	See details in C-1a and C-1c.
C-1e: Monitor construction at known ESAs	See details in C-1a and C-1c.
C-1f: Train construction personnel	The approved SWEAP video will be shown to all project personnel, and includes instructions on recognition and protection of cultural resources.
C-1g Avoid and protect Old Highway 80 (P-37-024023)	NA
C-2a: Properly treat human remains	Per the NTP request, SDG&E has avoided direct impacts to known locations of Native American human remains and will continue to avoid direct impacts to Native American human remains. Records of consultations are being held with the BLM. See details in C-1a and C-1c.
C-3a: Monitor construction in areas of high sensitivity for buried resources	See details in C-1a and C-1c.
C-4a: Complete consultation with Native American and other Traditional Groups	NA. Per the NTP request, a survey report for cultural resources within the Encina Switchyard was submitted to the CPUC on May 3, 2010. The report concludes that there are no cultural resources identified within the Area of Potential Effect (APE) for the Encina Switchyard.
C-5a: Protect and monitor NRHP- and/or CRHR-eligible properties	NA
C-6a: Reduce adverse visual intrusions to historic built environment properties	NA
C-6e: Reduce adverse visual intrusions to portions of Old Highway 80	NA
C-6f: Reduce adverse visual intrusions to the Desert View Tower view shed	NA
CR-APM-1: Instruct construction personnel on the protection and avoidance of cultural resources. Implement with PAL-1e	The SWEAP video will be shown to all project personnel, and includes instructions on recognition and protection of cultural resources.
CR-APM-2: Flag archeological sites that are eligible or potentially eligible for the National Register	See details in C-1b. No sites identified.
CR-APM-3: Report any previously unidentified cultural resource (historic or prehistoric site or object) discovered	The SWEAP video will be shown to all project personnel, and includes instructions on what to do in case a cultural resource is discovered during construction activities.
CR-APM-4: Conduct maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation, and reconstruction of a historical resource consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines	NA. See C-4a.

## Sunrise Powerlink Project NTP 5 Compliance Table

Mitigation Measure and APM	Status
CR-APM-5: Follow the guidance described for: Preservation in-place for mitigating impacts to archaeological sites, and preparation of data recovery plans	Per the NTP request, SDG&E will continue to comply with Cultural Resources mitigation measures as outlined in the MMRP, therefore following guidelines for cultural resources.
CR-APM-6: Avoid, fence, or barricade historic properties, contributing portions and sensitive features for protection	NA. No sites identified.
CR-APM-7: Control erosion, sedimentation, or indirect displacement. Implement with C-2a, C-3a, C-4a, and C-5a	See details in C-1a and C-1c.
CR-APM-8: Avoid and protect elements of the landscape that are essential to the historic setting of the property	NA. No sites identified.
CR-APM-9: Install permanent fencing or barriers; or control/restrict access to the historic property	NA. No sites identified.
CR-APM-10: Locate project structures so that conductors span linear historic properties; underground placement of pipelines and conductors will be bored under linear properties to avoid disturbance or intrusion	NA. No sites identified.
CR-APM-11: Implement standard practices for cultural and paleontological resources on private lands	See details in C-1a and C-1c.
CR-APM-12: Conduct cultural surveys for staging areas that have not yet been identified	NA
<b>Paleontological Resources</b>	
PAL-1a: Inventory and evaluate paleontological resources in Final APE	Based on a letter report from the San Diego Natural History Museum, dated 17 May 2010, there is a high potential to encounter paleontological resources at the Encina substation site. Therefore, to mitigate any potential negative impacts to buried paleontological resources, SDG&E shall ensure that a qualified paleontological monitor is on site during excavations for foundation installation and trenching for control and power conduits to monitor for unearthened fossil remains. The Final Paleontological Monitoring and Treatment Plan was approved July 2010 and its conditions shall be implemented during construction.
PAL-1b: Develop Paleontological Monitoring and Treatment Plan	The Final Paleontological Monitoring and Treatment Plan was approved July 2010 and its conditions shall be implemented during construction.
PAL-1c: Monitor construction for paleontology	To mitigate any potential negative impacts to buried paleontological resources, SDG&E shall ensure that a qualified paleontological monitor is on site during excavations for foundation installation and trenching for control and power conduits to monitor for unearthened fossil remains. The Final Paleontological Monitoring and Treatment Plan was approved July 2010 and its conditions shall be implemented during construction.
PAL-1d: Conduct paleontological data recovery	See PAL-1b
PAL-1e: Train construction personnel	The SWEAP video will be shown to all project personnel, and includes instructions on recognition of possible subsurface paleontological resources.
GEO-APM-9: Implement appropriate mitigation efforts if paleontological resources are encountered. Implement with PAL-1d	The Final Paleontological Monitoring and Treatment Plan was approved July 2010 and its conditions shall be implemented during construction.
<b>Noise</b>	
N-1a: Implement Best Management Practices for construction noise	Nighttime construction is anticipated. Should construction activities need to occur outside of what is permitted by local ordinances, a variance will be obtained 45 days prior to construction. Per the NTP request, the City of Carlsbad Noise Ordinance (Chapter 8.48 Noise, 8.48.020 Exceptions) provides an exception to construction during normal daylight hours for construction activities that occur within non-residential zones provided there are not occupied residential dwellings within 1,000 feet of the exterior boundary of the construction site. There are some dwellings west of Carlsbad Boulevard that fall within the 1,000-foot buffer from the Encina Switchyard. Trenching, drilling, and major equipment installation, which would generate the most noise, will most likely occur during daytime hours. Other construction and upgrade operations within the switchyard may occur during nighttime hours but should not generate excessive noise levels. If necessary, SDG&E will obtain a variance from the City of Carlsbad to accommodate nighttime construction activity. Once approved from the City of Carlsbad, the variance will be submitted to the CPUC. Installation of sound barrier walls or acoustic blankets to shield residences will not be required as there are not occupied residences located within 200 feet of the switchyard. SDG&E has established a toll free telephone hotline for the SPL Project and this number will be included on mailed notification. All noise-suppression techniques will be followed during construction.
N-2a: Avoid blasting where damage to structures could occur (SDG&E to define blasting)	NA
N-3a: Respond to complaints of corona noise	NA

## Sunrise Powerlink Project NTP 5 Compliance Table

Mitigation Measure and APM	Status
NOI-APM-1: Provide notice by mail to all sensitive receptors and residences within 300 feet of construction sites, staging areas, and access roads; and establish a toll free telephone number for receiving questions/complaints. Implement with L-1a	NA. There are no sensitive receptors and residences within 300 feet of this construction yard. SDG&E's approved Construction Notification Plan identifies a public affairs person who will be available to address public concerns or questions. A toll-free phone number is available.
<b>Transportation and Traffic</b>	
T-1a: Restrict lane closures	In the event that lane closures are required, closures will not occur between 6:30 and 9:30 a.m. and between 3:30 and 6:30 p.m. unless an encroachment permit is acquired. Documentation of coordination with emergency service providers must be provided to the CPUC Prior to the closure.
T-4a: Ensure pedestrian and bicycle circulation and safety.	NA. Pedestrian and bicycle facilities will not be affected with the occupancy of this yard. Therefore, this mitigation measure is not applicable.
T-5a: Repair roadways damaged by construction activities	Will occur during construction.
T-7a: Notify public of potential short-term elimination of parking spaces	NA. It is not anticipated construction at this site will eliminate parking spaces.
T-9a: Prepare Construction Transportation Management Plan	Project-wide Traffic Impact Study has been submitted and is currently under CPUC review. The project-wide Traffic Impact Study determined that there will be no significant traffic impacts for set-up and utilization of this yard. The existing circulation system and intersection controls will function adequately. As a result, a CTMP will not be required.
T-11b: Consult with and inform U.S. Customs and Border Patrol	This yard will not include the installation of any towers. Therefore, this mitigation measure is not applicable.
T-APM-2a: Obtain required permits for temporary lane closures	During construction, the delivery of the new transformer to the Encina site will require a hauling permit from CalTrans, which will be secured by SDG&E's delivery contractor. The hauling permit will identify the temporary lane closure and traffic control measures required to safely transport the transformer to the Switchyard. Coordination will also be made with the California Highway Patrol for portion of transport along freeways. A traffic control permit will be obtained from the City of Carlsbad. Access and traffic control will be coordinated with the City of Carlsbad, including any requirements regarding emergency services. The impact on local traffic patterns should be minor and temporary and will not affect permanent access to surrounding developments.
T-APM-2b: Submit detour plans. Implement with T-1b	NA. No detours are planned.
T-APM-4a: Coordinate in advance with emergency service providers to avoid restricting movements of emergency vehicles.	SDG&E shall coordinate with City of Carlsbad emergency service providers prior to activities that would restrict movements of emergency vehicles. Documentation of coordination with emergency service providers shall be submitted to the CPUC.
T-APM-5a: Consult with County Education Offices, School Districts to coordinate construction activities adjacent to school bus stops	NA. Per the NTP request, construction activities are not adjacent to school bus or bus transit stops.
T-APM-6a: Comply with county parking ordinances or approved traffic control plan	See T-1a and T-7a
T-APM-6b: Prohibit parking on San Diego County-maintained roads and highways unless otherwise noted at specific locations; comply with the County of San Diego Department of Public Works Traffic Guidelines, 2001 whenever possible, or an approved traffic control plan	Parking will comply with the County of San Diego Department of Public Works Traffic Guidelines (2001) for parking along San Diego County maintained roads and highways.
T-APM-8a: Obtain required permits for entering railroad ROW	NA
T-APM-9a: Underground all new or relocated utility facilities within 1,000 feet of an Officially Designated Scenic Highway. (Need SDG&E input)	NA
T-APM-10a: Provide the ability to quickly lay a temporary steel plate trench bridge upon request in order to ensure access to properties when not actively constructing the underground cable alignment	NA
<b>Public Health and Safety</b>	
P-1a: Implement Environmental Monitoring Program	Per the NTP request, the approved Environmental Monitoring Plan addresses maintenance of emergency spill supplies and equipment, the proper use of hazardous materials, development of a Hazardous Communication Plan, development of applicable environmental safety plans associated with hazardous materials, assignment of an Environmental Field Representative and/or General Contractor to the Health & Safety Office for the project; proper disposal/storage of hazardous and solid wastes in accordance with federal, state, and local regulations, and environmental training regarding potential exposure.

## Sunrise Powerlink Project NTP 5 Compliance Table

Mitigation Measure and APM	Status
P-1b: Maintain emergency spill supplies and equipment	Maintain emergency spill supplies and equipment. Hazardous material spill kits will be maintained onsite for response to small spills. The SWEAP video will be shown to all project personnel, and includes instructions on emergency spill response, including emergency spill supplies and equipment. Detailed information for responding to accidental spills will be provided in Emergency Response information included in the site Storm Water Pollution Prevention Plan must be submitted prior to construction.
P-2a: Test for residual pesticides/herbicides on currently or historically farmed land	NA. There is no currently farmed land at this yard.
P-3a: Appoint individuals with correct training for sampling, data review, and regulatory coordination	During construction.
P-3b: Documentation of compliance with measures for encountering unknown contamination	During construction.
P-7a: Evaluate contaminated sites	Prior to construction SDG&E will submit to the CPUC a report with site-specific information identifying any potential hazards (e.g. contaminated soil) in relation to trench locations and other areas scheduled for ground disturbance during the Encina Switchyard Upgrade activities.
HS-APM-1: Train personnel involved in using hazardous materials. Develop a Hazardous Communication Plan. Implement with P-1a	All personnel involved in using hazardous materials will be trained in the proper use and safety procedures for the chemical per the approved Hazard Communication Plan and by watching a SWEAP video. All personnel involved in using hazardous materials will be equipped with the necessary Personal Protection Equipment (PPE).
HS-APM-2: Train personnel in refueling vehicles. Implement with P-1a	Onsite refuelling is not anticipated. If onsite refueling occurs, it will only be performed by operators trained in refueling of vehicles or equipment. Onsite refueling shall be performed in a designated area, with secondary containment, by a mobile refueling tanker (2,500-3,000 gallon capacity). This refueling tanker will be stored offsite.
HS-APM-3: Develop applicable environmental safety plans associated with hazardous materials. Implement with P-1a	All applicable plans have been developed for this portion of the project work, including an SPCC Plan, HMBP, and HazCom Plan. The Switchyard has an existing Spill Prevention Control and Countermeasure Plan (SPCC) which contains emergency response and spill response information.
HS-APM-4: Develop a site specific blasting plan of tower footing	NA. Blasting is not anticipated at this site.
HS-APM-5: Investigate all Government Code §65962.5 sites or other known contamination sites along the transmission line ROW.	NA. Per the NTP request, the switchyard is not a Section 65962.5 site or a known contamination site.
HS-APM-6: Investigate any known or potential areas for Unexploded Ordinance (UXO) used by the military along the ROW	NA. Per the NTP request, the Encina Switchyard has been previously excavated. There is no known or potential for UXO, as this area was not utilized for military purposes.
HS-APM-7: Train personnel involved in excavation and grading or for ROW clearing to recognized UXO and/or potential soil, surface water, and groundwater potential contamination sites	NA. See HS-APM-6.
HS-APM-8: Assign an Environmental Field Representative and/or General Contractor for Health & Safety. Implement with P-1a	SDG&E has assigned Steve Riggs, Field Monitoring Manager with Burns & McDonnell, 858.547.9869, as the Environmental Field Representative for the Encina Switchyard upgrade.
HS-APM-9: Contact airport representative and/or Federal Aviation Administration Authorities regarding work within all existing and proposed transmission line corridors within 2 miles of an airport.	NA. The scope of work is for upgrades to an existing Switchyard and not construction along the proposed transmission line corridor.
HS-APM-10: Store and dispose of hazardous waste and solid waste in accordance with federal, State, and local regulations. Implement with P-1a	All hazardous waste and solid waste will be stored and disposed of in accordance with Federal, State and local regulations. SDG&E requirements for waste disposal will meet or exceed State requirements for waste disposal facilities. Hazardous material minimization shall be employed whenever feasible.
HS-APM-11: Develop Fire Prevention and Response Plan (FPRP). Assign a project Fire Marshal to enforce all provisions of the FPRP	An approved project specific Fire Plan for Construction, Operations and Maintenance has been developed and signed by the CAL Fire Chief. A Fire Marshall has been hired for the project and is assigned to enforce the Fire Plan.
HS-APM-12: Develop a Traffic Control Plan	Per the NTP request a traffic control permit will be obtained from the City of Carlsbad. Access and traffic control will be coordinated with the City of Carlsbad, including any requirements regarding emergency services. The impact on local traffic patterns should be minor and temporary and will not affect permanent access to surrounding developments.
HS-APM-14: Construction workers shall undergo environmental training regarding potential exposure	The SWEAP video will be shown to all project personnel, and includes procedures regarding potential exposure of hazardous materials in accordance with Federal, State, and local authorities.

## Sunrise Powerlink Project NTP 5 Compliance Table

Mitigation Measure and APM	Status
HS-APM-15: Stop work and notify Health and Safety Officer if during excavation soil or groundwater contamination is suspected	Per the NTP request, there is no known environmental contamination at the site. If, during excavation (trenching), soil or groundwater contamination is suspected, work near the immediate excavation will be terminated and appropriate health and safety procedures implemented. An OSHA-trained person will be designated to conduct sample collection or investigation activities, if needed.
HS-APM-16: Terminate and cordoned off work if soil or groundwater contamination is suspected	See HS-APM-15.
HS-APM-17: Notify regulatory agency if the sample testing determines that contamination is found above regulatory limits	See HS-APM-15.
PS-1a: Limit the conductor surface electric gradient	NA. Per the NTP request, the Switchyard upgrades will not require changes in existing conductor surface gradients that could affect radio reception.
PS-1b: Document and resolve electronic interference complaints	NA
PS-2a: Implement grounding measures	NA. Per the NTP request, Switchyard upgrades will not require changes in existing conductor surface gradients that could affect radio reception. No objects with the potential for induced voltages have been identified; however, if during construction an object is identified SDG&E shall implement electrical grounding of metallic objects in accordance with SDG&E's standards.
<b>Air Quality</b>	
AQ-1a: Suppress dust at all work or staging areas and on public roads	A Dust Control Plan was approved by the CPUC on January 20, 2010 for the entire project. Conditions of the Dust Control Plan will be implemented and enforced throughout the Encina upgrade activities.
AQ-1b: Use low-emission construction equipment	SDG&E will use available Tier 3 equipment, minimizing the use of Tier 2 equipment at the yard. Any portable equipment over 50 hp will be permitted with the local Air Pollution Control District (APCD) or the California Air Resources Control Board. Equipment run logs will be maintained on a daily basis to satisfy mitigation measures and periodically submitted to the CPUC. The Tier level for non-mobile equipment rated over 50 HP is identified below: <ul style="list-style-type: none"> <li>• One backhoe 420D: Tier 3</li> <li>• Drilling equipment (if needed) Watson 2000: Tier 3</li> <li>• Paving equipment: Tier 3</li> <li>• Crane: Tier 2</li> </ul> Please note that the exact manufacturer specifications cannot be determined because the contractor needs to rent this equipment and will not know what is available until the construction start date is known.
AQ-1h: Obtain NOx and particulate matter emission offsets	Construction-phase activities and emissions would be limited in accordance with the AQMPC (June 9, 2009) and the fuel use cap and other activity caps in the CEMP (January 21, 2010). The resultant emissions are expected to remain less than the federal General Conformity de minimis thresholds for the San Diego Air Basin. Mitigation Measure AQ-1h, which involves achieving emission reductions to levels below the federal thresholds, would be satisfied based upon these lower emissions.
AQ-4a: Offset construction-phase greenhouse gas emissions with carbon credits	SDG&E will offset Construction-Phase Greenhouse Gas Emissions with Carbon Credits as per documentation submitted to the CPUC Aug. 27, 2009. A March 10, 2010 e-mail from CantorCO2e provided evidence that the off-set purchase transaction was completed.
AQ-4c: Avoid sulfur hexafluoride emissions	Per the NTP request, the Avoid SF6 Emissions Mitigation Plan was approved March 12, 2010. The Partnership MOU between SDG&E and US EPA was approved on February 24, 2010. Records of SF6 purchases will be maintained by SDG&E's Substation Construction and Maintenance group and estimates of any greenhouse gas emissions will be added to inventories developed by SDG&E.
AQ-APM-1: Comply with ICAPCD Rule 800 (Fugitive Dust Requirement for Control of Fine Particulate Matter [PM10]). File a Dust Control Plan with the ICAPCD	See AQ-1a
AQ-APM-2: Control fugitive dust	A Dust Control Plan was approved by the CPUC on January 20, 2010. Conditions of the Dust Control Plan will be implemented and enforced throughout the Switchyard upgrade activities.
AQ-APM-3: Minimize mud and dust from being transported onto paved roadway surfaces, pave, and gravel	A Dust Control Plan was approved by the CPUC on January 20, 2010. Conditions of the Dust Control Plan will be implemented and enforced throughout the Switchyard upgrade activities.
AQ-APM-4: Carpool to the job site	The SWEAP video will be shown to all project personnel, and includes promoting carpooling to the job site.
AQ-APM-5: Minimize unnecessary construction vehicle and idling time	The SWEAP video will be shown to all project personnel, and includes promoting carpooling to the job site.
<b>Hydrology and Water Resources</b>	

## Sunrise Powerlink Project NTP 5 Compliance Table

Mitigation Measure and APM	Status
H-1a: Prepare Substation Grading and Drainage Plan; construct during the dry season	If groundwater is encountered it will be handled according to federal, state and local regulations. Groundwater will be pumped into either a tank truck or a baker tank and tested for proper disposal. If required, a groundwater disposal permit will be obtained.
H-1a (CC): Construct during the dry season	NA
H-1b: Construction in Los Peñasquitos Canyon Preserve to be in the dry season; SWPPP to be reviewed and approved by San Diego County and City of San Diego	NA
H-1k: Comply with Forest Service conditions	NA
H-1l: Construction on Forest Service land to be subject to an approved, site-specific SWPPP and Sediment-Control Plan	NA
H-2d: Maintain vehicles and equipment	Will occur during construction.
H-4b: Avoid blasting where damage to groundwater wells or springs could occur	NA. There will be no blasting at this yard. A Blasting Plan will not be required.
H-5a: Install substation runoff control	NA
H-6a: Scour protection to include avoidance of bank erosion and effects to adjacent property	NA
H-7a: Develop Hazardous Substance Control and Emergency Response Plan for project operation	Per the NTP request, the existing Switchyard SPCC Plan contains emergency response information to assure quick and safe clean-up of spills as required to address hazardous substance control and emergency response.
H-8a: Bury power line below 100-year scour depth	NA
WQ-APM-1: Minimize disturbance to riparian/wetland vegetation, drainage channels, and intermittent and perennial stream banks	NA. During the Switchyard upgrades, there will be no disturbance to riparian/wetland vegetation, drainage channels, and intermittent and perennial stream banks.
WQ-APM-2: Place structures so as to avoid sensitive features such as watercourses, or to allow conductors to clearly span the features, within limits of safety and standard structure design	NA. Per the NTP request, there are no sensitive water features in the construction area.
WQ-APM-3: Clearly mark where construction equipment and vehicles are not allowed on-site; and train personnel	There are no sensitive water features inside the Switchyard. Outside the Switchyard, a drainage ditch lined with wetland vegetation located east of the proposed parking and material storage area will be flagged for avoidance as a precautionary measure. The flagging will be installed to ensure that the crew does not back-up vehicles, etc. into the drainage feature.
WQ-APM-4: Maintain adequate distance from stream banks and beds; use existing bridges to cross major streams and culverts in most dry intermittent streams; Span surface water, riparian areas and floodplains; prepare and implement a Storm Water Pollution Prevention Plan (SWPPP)	Per the NTP request, an NPDES storm water discharge permit for construction activities has been obtained. A SWPPP will be required for the Switchyard upgrades and is in process of being prepared. SDG&E will implement and install appropriate BMPs prior to construction to control erosion of soil and prevent storm water sediment, such as silt fencing or straw bales. BMPs will be maintained during construction.
WQ-APM-5: Construct any stream crossings at low flow periods; and if necessary, develop a site-specific mitigation and restoration plan	NA. There will be no stream crossings at this location.
WQ-APM-6: Avoid designated surface water protection areas	NA. Groundwater supplies will not be used during project construction.
WQ-APM-8: Obtain and comply with required permits for any groundwater discharged to surface waters or storm drains	If dewatering is required during excavation, it will be contained and disposed of according to regulations.
WQ-APM-9: Prohibit storage of fuels and hazardous materials within 200 feet of groundwater supply wells and within 400 feet of community or municipal wells	NA. Per the NTP request, storage of fuels and hazardous materials will not be within 200 feet of groundwater supply wells. There are no community or municipal wells within 400 feet of the yard.
WQ-APM-10: At locations where the project would cross below or pass adjacent to streams with erodible bed or banks, comply with burial depth requirements. Implement with H-6a	NA. There are no stream banks inside or surrounding the Switchyard.
WQ-APM-11: Test groundwater levels along underground portion of the project drilling pilot borings	NA
WQ-APM-13: Do not disposed of hazardous materials onto the ground, the underlying groundwater, or any surface water	Hazardous waste will be disposed in enclosed containment and removed to a hazardous waste facility permitted or authorized to treat, store, or dispose of such materials. In the event of a release of hazardous materials to the ground, it will be promptly cleaned up in accordance with applicable local, State and Federal regulations.
WQ-APM-14: Secure required General Permit for Storm Water Discharges Associated with Construction Activity (NPDES permit) authorization	See WQ-APM-4.
WQ-APM-15: Construct access roads to avoid streambeds	NA. There will be no access roads created for the Switchyard upgrade; existing access roads will be used.
WQ-APM-16: Conduct site-specific assessments for each affected site	NA. There are no sensitive water resource features such as wetlands or waters of the State located inside the Switchyard.
<b>Geology, Minerals, and Soils</b>	

## Sunrise Powerlink Project NTP 5 Compliance Table

Mitigation Measure and APM	Status
G-2a: Protect desert pavement	NA
G-3a: Conduct geotechnical studies for soils to assess characteristics and aid in appropriate foundation design	NA. Per the NTP request, the design of the proposed Switchyard upgrades is based on historical geotechnical testing and a geotechnical engineer has determined that new geotechnical studies are not required.
G-4a: Reduce effects of groundshaking	NA
G-4b: Conduct geotechnical investigations for liquefaction	NA
G-5a: Minimize project structures within active fault zones	NA
G-6a: Conduct geotechnical surveys for landslides and protect against slope instability	NA
G-9a: Coordinate with quarry operations	NA
GEO-APM-1: No widening or upgrading of existing access roads will be undertaken where soils are very sensitive to disturbance, except repairs, widening or upgrades necessary to make roads passable	NA. Some road-widening and paving will occur, but per the NTP request there are no sensitive soils in the construction area.
GEO-APM-2: Comply with soil disturbance guidelines	During construction.
GEO-APM-3: Avoid placing structures in areas of high shrink/swell potential	During construction and as necessary, placing structures in areas of high shrink/swell potential will be avoided, per the NTP request.
GEO-APM-4: Place structures in geologically stable areas, avoiding fault lines, brittle surface rock and bedrock	During construction, structures will be installed in geologically stable areas per the NTP request.
GEO-APM-5: Avoid or minimize new disturbance, erosion on manufactured slopes, and off-site degradation from accelerated sedimentation	During construction, new soil disturbance within the Switchyard will be minimized as much as practicable, per the NTP request.
GEO-APM-6: Conduct surface restoration for erosion control and re-vegetation	NA. Per the NTP request, no surface restoration is necessary because there are not vegetated or previously undisturbed areas at the Switchyard that could be impacted.
GEO-APM-8: Remove or stabilize boulders uphill of structures that pose potentially high risk of landslide damage; and position structures to span over potential landslide areas	NA. There are no boulders or hills within the yard construction area..
<b>Socioeconomics</b>	
S-2a: Notify public of utility service interruption	NA
S-2b: Protect underground utilities	NA
S-3a: Recycle construction waste	SDG&E and/or its construction contractor shall recycle a minimum of 90% of inerts and 70% of all other materials generated during construction activities. Documentation from the recycling and/or landfill facilities used for construction will be provided.
S-3b: Use reclaimed water	The Water Resources Availability Study, as discussed in the Project Modification Report, determined that sufficient supplies of surface water, reclaimed water, and potable water would be available to meet Project demand.
PSU-APM-1: Coordinate with all utility providers with facilities located within or adjacent to ensure that design does not conflict with other facilities	NA. No third party utility providers will be affected.
PSU-APM-2: Notify Underground Service Alert a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines	During construction. SDG&E's contractor will coordinate with DigAlert prior to earth-disturbing activities.
PSU-APM-3: Coordinate construction schedules, lane closures, and other activities with installation of the project with emergency and police services to ensure that disruption to response times and access is minimized	SDG&E will coordinate with emergency services. Construction schedules and activities are not anticipated to disrupt emergency and police service response times. Per the NTP request, during construction, a Traffic Control Plan will be obtained with the City of Carlsbad for one delivery of the 230/138 KV Transformer. Coordination will be made, as required under this Plan, with emergency and police services, to ensure disruption to response times and access is minimized.
<b>Fire and Fuels Management</b>	
F-1a: Develop and implement a Construction Fire Prevention Plan	During construction. A Fire Plan, acknowledged by the CAL Fire Chief, was submitted to the CPUC on December 14, 2009.
F-1b: Amend and implement Sempra Utilities Wildland Fire Prevention and Fire Safety Guide (2007)	The SDG&E Wildland Fire Prevention & Fire Safety Plan (ESP 113.1) is part of the Construction Fire Plan that was approved by the CPUC on February 2, 2010. Post-construction task.
F-1c: Ensure coordination for emergency fire suppression	NA. Construction activities will be limited to the yard and will not obstruct firefighting equipment or crews or emergency fire suppression efforts
F-1d: Remove hazards from the work area	If present, dead and decaying vegetation will be removed from the yard prior to set up or chipped and spread onsite in piles no higher than six inches.
F-1e: Contribute to defensible space grants fund	Fire agency proposal for both Defensible Space (F-1e) and Power line Firefighting Mitigation Fund (F-3a) were approved 3-7-10. Post-construction task.
F-2a: Establish and maintain adequate line clearances	See F-1a
F-2b: Install existing conductors on steel poles	See F-1a
F-2c: Perform climbing inspections	Post-construction task. One new tower will be installed.
F-3a: Contribute to Powerline Firefighting Mitigation Fund	Per the NTP request, on-going efforts with CAL FIRE and local fire agencies are in progress to establish and provide oversight to the Powerline Firefighting Mitigation Fund. Post-construction task.

**Sunrise Powerlink Project  
NTP 5 Compliance Table**

Mitigation Measure and APM	Status
F-3b: Prepare and implement a Multi-agency Fire Prevention MOU	Per the NTP request, SDG&E has prepared a draft Fire Prevention MOU. Draft comments from CAL FIRE and local fire agencies have been incorporated and on-going efforts are in progress to refine the draft MOU. It will be implemented prior to energization.