# **PUBLIC UTILITIES COMMISSION**

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298

October 22, 2008

Donald Johnson Project Manager Southern California Edison 2131 Walnut Grove Ave. Rosemead, C 911770

RE: SCE Antelope Transmission Project (Antelope-Vincent 500 kV Transmission Line) Segment 3A Notice to Proceed (NTP # 17)

Dear Mr. Johnson,

Southern Californian Edison (SCE) has requested authorization from the California Public Utilities Commission (CPUC) for construction of the Antelope Transmission Project (Antelope-Vincent 500 kV Transmission Line), Segment 3A.

The SCE Antelope 500 kV Transmission Project (Project) was evaluated in accordance with the California Environmental Quality Act and a Certification of Public Convenience and Necessity (CPCN) was granted by CPUC Docket #A.04-12-008, SCH #2006041160 on March 15, 2007. NTP # 17 is granted by CPUC for the proposed activities based on the following factors:

SCE submitted the following information in their NTP request:

#### **Project Description**

Segment 3 is comprised of a southern segment (3A) and a northern segment (3B). Segment 3A involves the construction of a new 25.6-mile 500 kV transmission line initially energized at 220 kV connecting SCE's Antelope Substation in the City of Lancaster to a new proposed Windhub Substation on Oak Creek Road in the Tehachapi area of Kern County. The work on Segment 3B and the Winhub Substation will be addressed in a separate NTP request.

The 500 kV transmission line project begins at the Windhub Substation at Project Mile S3-9.6 and travels south to Project Mile S3-10 before turning southwest for approximately 2.4 miles to Project Mile S3-12.5. At this point the Project right-of-way turns south and runs parallel to and west of  $103^{rd}$  Street to Project Mile S3-16.3. From Project Mile S3-16.3 to Project Mile S3-22.0 the transmission line switches from lattice steel towers (LSTs) to tubular steel poles (TSPs). This is because the LSTs are no longer required at elevations below 3,000 feet and TSPs tend to be preferable in agricultural areas due to their typically smaller footprint (with respect to temporary impacts during construction). In areas where TSPs are installed, LSTs would still be used at points of inflection (PIs) and at points where a dead-end structure would be required (SCE, 2006). A dead-end tower differs from a suspension tower in that it is built to be stronger, often has a wider base, and often has stronger insulator strings. Dead-end towers are used where a transmission line actually ends; where a transmission line turns at a large angle; on each side of a major crossing, such as a large river, highway, or large valley; or at locations requiring strategic engineering.

At Project Mile S3-22.0, the new 500 kV transmission line crosses the existing LADWP utility easement containing the LADWP Sylmar-Celilo 1000-kV DC transmission line and the Owens Gorge-Rinaldi 220 kV transmission line. After crossing the LADWP easement, the Project turns southwest and runs parallel to the LADWP corridor for just under one mile. The new transmission line then turns south and runs parallel and east of 110th Street West. After approximately 2.5 miles the line turns south-southeast for approximately 0.5 miles before turning back south for the next 7.4 miles. At approximately Project Mile S3-25.5, the proposed line crosses from Kern County into Los Angeles County approximately 16 miles south of Windhub Substation and 9.6 miles north of the Antelope Substation.

At Project Mile S3-33.4, the Project crosses the privately-owned Sagebrush 220 kV transmission line. Just after the Sagebrush crossing the Project crosses (Project Mile S3-33.8) and then runs parallel to the west of Midway-Vincent No. 3 500 kV, Antelope-Magunden No. 1 and No. 2 220 kV, and double circuit Antelope-Neenach and Antelope-Cal Cement 66 kV transmission lines for 1.3 miles towards SCE's existing Antelope Substation. The Project again crosses the existing Midway-Vincent No. 3 500 kV transmission line just before connecting to Antelope Substation at Project Mile S3-35.2 at Line Position No. 6 within the Antelope Substation.

From Project Mile S3-9.6 to Project Mile S3-22.1 and from Project Mile S3-23.2 to Project Mile S3-33.8 the Project ROW will be 200 feet wide (23.1 miles entirely new ROW). From Project Mile S3-22.1 for approximately 0.5 miles the Project will be built within a new 180-foot wide ROW adjacent to an existing LADWP ROW, as well as from Project Mile S3-33.8 to Project Mile S3-35.2 (1.4 miles) where the Project will be adjacent to an existing ROW. The Project will utilize a combination of 500 kV TSP and LST structures for the 25.6 miles between the Windhub Substation and the Antelope Substation. An estimated 41 single-circuit 500 kV LSTs will be installed along Segment 3A, and an estimated 60 single-circuit 500 kV TSPs and two single-circuit 220 kV H-frame (2 pole) TSPs will be installed along Segment 3A.

The single-circuit 500 kV TSPs will be approximately 160 feet tall. The single-circuit 500 kV LSTs will range in height between 115 feet and 193 feet. Each four-legged LST will be built on four drilled pier concrete footings and each TSP will be built on one drilled pier concrete footing. Although the dimension of each footing will depend on variables such as topography, tower height, span length, and soil properties, an average footing will have an aboveground projection of approximately three feet.

## Construction Methodology

Installation of the new 500 kV transmission line will include five sequential and sometimes concurrent phases: road preparation, tower site preparation, foundation installation, structure installation (includes assembly and erection), and wire stringing (includes conductor splicing).

#### Road Preparation

The first step for construction of the new 500 kV transmission line is access road preparation. Existing access roads along the existing SCE ROW corridor will be used to the greatest extent feasible in constructing Segment 3A. Existing access roads that are too narrow to accommodate equipment or require maintenance for constructability or safety reasons will be modified. This may involve something as simple as smoothing ruts to widening the road to 15 feet to accommodate large construction equipment. The Access Road and Disturbance Maps provided in Attachment C [of the NTP request] note that overland travel can be used in limited instances where there are no existing roads. This involves allowing vehicles access to sites by driving over existing vegetation. Temporary roads not required for ongoing maintenance of the new 500 kV transmission line will be restored and revegetated in accordance with Mitigation Measures B-27b, APM BIO-2, and APM BIO-7 in the Habitat Restoration and Revegetation Plan.

## **Tower Site Preparation**

A work area of approximately 200 feet by 200 feet will be prepared at each construction tower site to provide a fairly level and safe working platform. Where necessary, tower sites, or an associated crane pad, would be graded or cleared of most vegetation to provide a construction pad that is free of vegetation or any obstacles hindering tower construction. Preparation of the Tower Construction Sites will provide a stable area of sufficient size to assemble tower components and to properly set up the erection crane so that the crane boom can be located transverse to the tower to the greatest distance possible.

#### Foundation Installation

Once a Tower Construction Site has been prepared, the foundations will be installed using standard "poured-in-place" augured excavation techniques. Typically, installation of the foundation requires: final surveying to establish elevations and orientation, fabrication and installation of rebar cages, installation of stub angles/anchor bolt cages, concrete pouring, and tower site re-contouring. Spoil resulting from augured excavations for LST structures will be spread at the site within an area fifteen feet outside of the foundation footprint. Spoil resulting from augured excavations for TSP structures will be spread within an area twenty five feet outside the foundation footprint. Spoil resulting from augured excavations for TSP structures located in agricultural land will be hauled off site to an approved location.

For steel lattice towers, each foundation is augured to the required depth and a full length reinforcing steel (rebar) cage is placed inside the excavated hole. The tower leg stub angle is set to its required dimensions and then held in place with a

template while concrete is being poured. The final step is forming and finishing the reveal (exposed) portion of the foundation. On average, a typical foundation will have a reveal of approximately two feet but may vary from six inches to three feet depending on the terrain.

Steel lattice towers will be constructed on four concrete foundations. The dimensions for each foundation will be dependent upon line angle, topography, tower height, span length, and soil properties. Typically, the foundations will range from three and one half to six feet in diameter and have a depth of 15 to 30 feet.

Foundations for tubular steel poles (TSP) will be of a single shaft drilled pier concrete foundation design. Single shaft foundations for TSPs used in this section of line may range from eight to ten feet in diameter and from 35 to 60 feet in depth. A drilled shaft of this size generates more spoils than can be effectively used to recontour the site upon completion of the foundation. Excess spoils will be hauled to an approved disposal site to be recycled as clean fill on other projects in accordance with the stipulations of both the Vegetation Removal and Excavation Plan and Disposal and Waste Characterization Plan approved for the Project.

Installation of the concrete foundations for steel lattice towers or TSP's requires the use of heavy construction equipment, including: auger units, rough terrain cranes, rock drills, air compressors, crawler tractors, crawler excavator, front-end loaders, dump trucks, water trucks, concrete trucks, boom trucks, flatbed trucks, crew hauling trucks, and tractor trailers.

#### Structure Installation

Once the foundations have been cured and deemed ready for structure installation, several truck tractor/trailer units, flatbed trucks and on-site loaders/forklifts will haul, unload and stack bundles of steel at each tower location and pole components at each pole location. An assembly crew will assemble the tower/pole components ahead of a tower/pole erection crew that will erect the assembled structures.

### Tower/Pole Assembly

The tower/pole components will be assembled on-site. Assembly crews will use various pieces of heavy equipment to complete their portion of the work, which may include setting tower legs. Assembled components will be placed on wood blocking for the erection crew to facilitate the lifting capacity of the erection cranes. Equipment required for tower/pole assembly includes: material hauling trucks, crew hauling trucks, air compressors, rough terrain hydraulic crane – 30 - 40-ton capacity, crawler tractor w/dozer, boom trucks, water truck, and fire fighting tool box.

## Tower/Pole Erection

The towers/poles will be erected in stages using conventional and rough terrain hydraulic cranes with the lifting capacity for the components being erected, such as preassembled tower panels, boxed sections, and bridges. During the erection operations, the erection crew may opt to install insulators and wire rollers. Upon completion of tower/pole erection, the construction pad will be left in place for use by the wire stringing crew for the purpose of setting up wire stringing and high-reach man lift equipment. Equipment required for tower erection includes: crawler tractor w/dozer (Cat D8 Size), material hauling trucks, 250-ton hydraulic erection crane with 230-foot boom, 4x4 forklift, boom truck(s), flatbed rigging truck, crew hauling truck, water truck, air compressors, and fire fighting tool box.

## Wire Stringing

Wire pulling sites will be established at predetermined disturbance locations as shown on the Access Road and Disturbance Maps. The wire installation crew will make extensive use of helicopters for movement of crews, movement of tools and equipment, installing insulators, hanging stringing sheaves, pulling sock-line cables and monitoring the wire pulling portion of the wire stringing operation. The wire stringing operation consists of the following activities: prepare wire pulling and wire stringing sites, install insulator assembly on the towers/poles, hang stringing sheaves, haul and set up wire pulling and tensioning equipment (movement of wire stringing equipment in many cases will require transporting heavy equipment on lowboy trailers from site to site), install wire catch-off snubs, string in overhead ground wire (OHGW) and fiber optic cable (OPGW), string in conductor wire, splice conductor wire, sag conductors (OHGW and OPGW), remove string sheaves and attach conductor wire to insulators (clipping), dead-end wires (Install compression dead-end assemblies), and install jumper wires on dead-end towers.

The area required for wire stringing and pulling sites will be the entire width of the ROW and 300 feet in length. A three to one ratio from the break-over tower to the puller or tensioner is mandatory. It is the goal to have the wire pulling sites

spaced a distance of two full reel lengths (approximately three miles) apart. In rough terrain with limited conventional road access, the degree of angle of dead-end towers limits the choices for wire stringing and pulling locations.

The wire stringing setup locations will include buried wire snubbing devices, tensioning equipment, wire reel trailers and wire sagging winch tractors. Buried wire snubbing devices are only required when the stringing setup is between two tangent towers. When stringing from a dead-end tower, the wire is typically snubbed to the tower dead-end plates. The equipment required at wire stringing locations is as follows: truck mounted – two bundle 72-foot bullwheel wire tension machine, truck mounted – three drum fly-line pulling machines (equipped with 3/8-inch steel pulling cable), tractor trailer two reel wire stringing reel trailers for 96-inch diameter reels, three crawler tractors equipped with dozers and wire sagging winches (Cat D8 size), crawler tractor used for dozer work and equipment towing (Cat D8 size), rigging truck, crew hauling trucks, high-reach man lift boom trucks, boom truck, water truck, fire fighting tool box, and R/T crane (changing out conductor reels).

The wire pulling sites are located in areas according to tower type and the terrain length of the prescribed pull. Conductor pulling machines appropriately sized for the conductor being strung are trailer mounted single drum type, with the drum holding approximately 21,000 feet of ¾-inch steel pulling cable (Sockline). The following equipment is required at wire pulling sites: two – single drum wire pullers with 21,000 feet of ¾-inch pulling line, two – truck tractors attached to each pulling machine, crawler tractor (Cat D6 size) for towing and anchoring the conductor pulling machines when pulling wire, crawler tractor (Cat D8 Size) to catch wire pulled in for the purpose of holding the tension and installing conductor splices, overhead ground wire tensioner reel truck, optical ground wire tensioner reel truck, boom truck, crew hauling trucks, splice truck, water truck, and fire fighting tool box.

## Wire Splicing

During stringing operations, the length of conductor wire pulled will be greater than what is provided on a single reel requiring that two or more reels are "temporally spliced" using flexible or double sock type grips joined with a steel pulling swivel. These temporary splices will be removed and a compression splice installed in their place. The splicing operation will take place mid-span between towers. Equipment requiring road access to the splice location will include: 6x6 splice truck, crew hauling equipment, and fire fighting tool box.

### **Guard Structures**

The purpose of a guard structure is to protect the public from pulling cables and wires at road crossings and to protect existing power line crossings. Guard structures will be installed prior to wire stringing or splicing. A temporary guard structure consisting of upright poles and pole cross-arms will be set at the edge of main access roads, highways and at existing power lines being crossed to allow public and construction traffic to move freely along the roads during construction of the transmission line. The following equipment is required for the construction of guard structures: 4x4 crew truck pickup, 6x6 truck tractor with pole trailer, truck-mounted auger unit, 25-ton boom truck type crane, and loader backhoe (580 case type).

#### Helicopter Usage and Storage

Helicopters will be used during construction of the new 500 kV line to support all construction activities. Uses may include: transporting personnel and tools to tower sites and onto towers; transporting personnel performing environmental and cultural resource monitoring, construction quality control and site visits; installing tower insulator assemblies; and installing wire stringing sheaves and pulling cables.

Helicopters will be stored and operated out of the Avenue I Yard, the 10-Acre Yard, Race Track Yard, and the Windhub Substation site upon approval by the CPUC. Helicopters supporting Segment 3A construction activities will require landing areas at selected locations along the route. These areas will be selected during construction by personnel qualified to assess impacts resulting from their use. Helicopter fueling will take place at various locations along the right-of-way, primarily at wire stringing pulling and tensioning areas depicted on the Access and Disturbance Maps.

The primary construction equipment fueling sites for this section of line will be Avenue I with some fueling expected to occur at 10-Acre Yard, Rodeo Yard, Race Track Yard, and Windhub Substation site when approved. Hazardous Substance Spill Control Plan (Mitigation Measure PH-1), Waste Characterization Plan (Mitigation Measures PH-1c, H-1f), and, because no fuel will be stored on site currently, a statement of exemption from a Spill Control and Prevention Plan (Mitigation Measure PH-4a) have been prepared that include conditions pertaining to this yard. All personnel working on the site will be required to be trained in accordance with the Worker Environmental Awareness Program (Mitigation Measures PH-1a, PH-4a, APM BIO-6) created for the Project to ensure a clear understanding of how to prevent and respond to spills, fires, or other

emergencies. The Contractor, Par Electrical Contractors Inc., is in the process of determining a location for a secondary helicopter fueling area between selected towers along the ROW. These locations will be primarily wire stringing pulling and tensioning areas. Any locations proposed for use will be provided to the CPUC for approval prior to use.

• CULTURAL RESOURCES. A document titled "Report of Supplemental Archaeological Survey and Cultural Resources Management Plan, Tehachapi Renewable Transmission Project Segment 3A, Kern and Los Angeles Counties, California" by Pacific Legacy dated September 12, 2008, was submitted to the CPUC. There are sixteen (16) resources relating to construction sites, access roads, and other facilities that could be impacted by activities associated with the construction of Segment 3A of the Antelope Transmission Project. However, measures can be implemented during construction to avoid impacts to these resources: CA-KER-3549H, CA-KER-6341H, CA-KER-6343, CA-KER-7034H, CA-KER-7035, CA-KER-7037, CA-LAN-3725, CA-LAN-3726, PL-SCE-Tehachapi-3A-01, PL-SCE-Tehachapi-3A-04, PL-SCE-Tehachapi-3A-05, PL-SCE-Tehachapi-3A-06, PL-SCE-Tehachapi-3A-07, PL-SCE-Tehachapi-3A-08, PL-SCE-Tehachapi-3A-09, and PL-SCE-Tehachapi-42H.

Three archaeological sites, CA-KER-2821/H, CA-LAN-3724, and PL-SCE-Tehachapi-3A-02H cannot be avoided by Project activities. Evaluations of historical significance will be conducted by SCE to determine if any of these sites meet any of the criteria for listing in the California Register of Historical Resources (CRHR).

Archaeological site CA-LAN-3725 may be avoided entirely by construction activities; however, final engineering of the structure near this site is not completed at this time and mitigation of impacts to a small area of the site may be necessary.

Two sites P-19-186857 (Antelope-Pardee transmission line) and CA-LAN-3477 (Antelope Substation) have previously been determined by the California State Historic Preservation Officer to not meet any criteria for listing in the CRHR and will not be managed for this project.

• BIOLOGICAL RESOURCES. Biological surveys were conducted in 2007 and in April, May, and June of 2008, along the new 500 kV/220 kV transmission line as a 200 foot wide belt transect corridor survey (100 feet on each side of the outer disturbance limits of the line). A survey with the same 200 foot buffer was also conducted for access roads, guard poles, wire stringing, and turnaround areas. Other areas were also surveyed that are outside of this right-of-way as identified on the disturbance maps. In addition, the areas between Avenue D to just north of Oak Creek Road were also surveyed according to the Field Survey Protocol for any Non-Federal Action that May Occur within the Range of the Desert Tortoise (USFWS 1992), which describes coverage of the zone of influence (ZOI) buffer (i.e. belt transects at 100 feet, 300 feet, 600 feet, 1,200 feet and 2,400 feet from the project area). The desert tortoise survey area was based on suitable habitat (creosote bush scrub, saltbush scrub, desert scrub, Joshua tree woodland, and nonnative grasslands associated with these habitats) within the study area and the vegetation maps and desert tortoise information in the EIR. All surveys focused on biological resources, as described in the mitigation measures of the Final EIR.

No special-status plant species were observed within the Segment 3A survey area.

No California desert tortoise or desert tortoise sign (i.e. burrows, scat, tracks, shells) were detected within the survey area corridor or the ZOI during protocol-level surveys. Protocol-level surveys conducted by LSA in 2007 were also negative, with the exception of some old, unoccupied potential burrows which did not show evidence of tortoise use or sign. No potential burrows were detected during the 2008 surveys.

No incidental Mohave ground squirrels were detected by LSA in 2007. Protocol trapping surveys were not conducted in 2007, in part due to the low rainfall. In 2008, Mojave ground squirrel surveys were done in accordance with California Department of Fish and Game Mojave Ground Squirrel Survey Guidelines (January 2003) by wildlife biologist William J. Vanherweg. No Mojave ground squirrels were seen or trapped during the 2008 surveys.

Two special-status bird species and one special-status mammal species were identified: Swainson's hawk (*Buteo swainsoni*), western burrowing owl (*Athene cunicularia*), and American badger (*Taxidea taxus*). Surveys for Swainson's hawks conducted in 2007 and 2008 that included Segment 3A had positive results. In 2007, twenty-five (25) potential burrowing owl burrows were detected in Segment 3A during surveys. In 2008 surveys, both burrowing owls and burrows were found. A preconstruction survey for burrowing owls, in conformance with CDFG protocol, shall be completed no more than 30 days prior to the start of construction within suitable habitat at the project site(s) and buffer zone(s). During 2007 surveys, four potential American badger burrow locations were noted. No individual badgers were observed, but signs of their presence were noted near some of the burrows and the vicinity surrounding the burrows (e.g. diggings, claw marks). During the 2008 surveys, one American badger in a burrow and two American badger burrows were detected. Per Mitigation Measure B-26, and in consultation with CDFG, badgers will be passively relocated from the project area during the non-breeding season.

# The conditions noted below shall be met by SCE and its contractors:

- Construction of new access and spur roads shall be done in accordance with approved project mitigation measures.
- Several sensitive resources were identified during the preconstruction surveys and noted in LSA's biological report August 20, 2008. Prior to work in the vicinity of those areas, CDFG must be consulted on how the resource protection is to be handled. This information shall be submitted to the CPUC prior to work in the area.
- As identified in the Biology Mitigation Measures and Applicant Proposed Measures (APMs) in the EIR/EIS, SCE would assign Biological Monitors to the Project. They would be responsible for ensuring that impacts to special-status species, native vegetation, wildlife habitat, or unique resources would be minimized to the fullest extent possible. The Biological Monitor shall be on-site to monitor all work and will conduct sweeps of the approved areas, especially areas with high burrow concentrations which will be impacted. Monitors would flag the boundaries of areas where activities need to be restricted in order to protect wildlife including special-status species. These restricted areas would be monitored to ensure their protection during construction. This will include protecting species covered under the Migratory Bird Treaty Act (MBTA) and CDFG codes regarding the protection of nests and eggs. If breeding birds with active nests are found, a biological monitor shall establish a 300-foot 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 300-foot buffer may be adjusted to reflect existing conditions including ambient noise and disturbance with the approval of the CDFG and USFWS (as well as CPUC notification). 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.
- Biological survey sweeps shall be conducted and results submitted to the CPUC for review and approval prior to equipment and vehicles mobilizing into an area. After complete surveys have been submitted and approved by the CPUC, site occupation can occur; however, if occupation does not

occur within seven calendar days of survey submittals, biological clearance sweeps shall be reconducted prior to site occupation, including nesting bird surveys during the breeding season.

- Per Mitigation Measure B-3b, CDFG and CPUC shall field verify temporary impacts to desert wash habitat. SCE shall coordinate with CDFG and CPUC to acquire and ensure permanent protection of mitigation lands.
- Per Mitigation Measure B-4b, CDFG and CPUC shall field verify temporary and permanent impacts to Joshua tree woodland and Juniper woodland habitat. SCE shall coordinate with CDFG and CPUC to acquire and ensure permanent protection of mitigation lands.
- Per Mitigation Measure B-13d, CDFG and CPUC shall field verify temporary and permanent impacts to montane scrub and Juniper woodland habitat. SCE shall coordinate with CDFG and CPUC to acquire and ensure permanent protection of mitigation lands.
- As stated in the LSA Final Preconstruction Biological Survey for the Antelope Transmission Project, Segment 3 in Los Angeles and Kern Counties, California dated August 20, 2008, and the Preconstruction Swainson's Hawk Survey Report for Segments 2 and 3, dated August 2008, surveys conducted in 2007 and July of 2008 had positive results with several sightings on Segment 3A. The August 2008 Swainson's hawk survey results shall be submitted to CDFG for review and approval prior to construction. Clearance surveys shall include investigations for Swainson's hawk nests. If a nest site if found during the time period of March 1 and September 15, consultation with CDFG shall be required prior to commencement of construction activities within ½ mile of the subject nest.
- A preconstruction survey for western burrowing owls, in conformance with CDFG protocol, shall be
  completed no more than 30 days prior to the start of construction within suitable habitat at the project
  site(s) and buffer zone(s). The survey results shall be submitted to CDFG and CPUC for review and
  approval prior to the start of construction within suitable burrowing owl habitat.
- Per Mitigation Measure B-26, occupied American badger dens shall be flagged for avoidance. Unoccupied dens located in the ROW shall be covered to prevent the animal from re-occupying the den prior to construction. Occupied dens in the ROW shall be hand-excavated if avoidance is not possible. Dens shall only be hand-excavated before or after the breeding season (February-May). Any relocation of badgers shall take place after consultation with the CDFG.
- SCE shall submit documentation that California red-legged frog and desert tortoise survey results have been submitted to CDFG and USFWS.
- Per Mitigation Measure B-27a, to avoid creating barriers to desert tortoise movements within areas designated in the WMP s desert tortoise "Survey Areas", roadbeds shall not be lowered and berms shall not exceed 12 inches (30 cm) or a slope of 30 degrees. SCE has stated that the Project has no plans to lower roadbeds in DTSAs or to upgrade berms so that they exceed 12 inches in height or a 30 degree slope. However, over time, access road roadbeds may be lowered as a result of normal wear and tear associated with construction activities involving heavy equipment. A biological monitor will inspect access roads in DTSAs to ensure they continue to comply with the specifications of Mitigation Measure B-27a. If during the routine use of the roads it is noted that the roadbed has been lowered and the berms exceed 12 inches in height or a 30 degree slope, these locations will be regraded to comply with the specifications provided in Mitigation Measure B-27a.

- If special-status plant or animal species are observed within the project area, the CPUC EM and CDFG shall be notified immediately.
- Per Mitigation Measure A-1f, prior to its use on the project, SCE shall provide to the CPUC the
  following information for all diesel equipment used on the project: Tier rating, CARB registration,
  where applicable Smoke Check Test results, and in the case of Tier 1 engines, where the contractor
  plans to install VEDEC retrofit exhaust system, verification of installation shall be provided to the
  CPUC.
- Per Mitigation Measure A-1i, SCE will submit a monthly helicopter use log including expected hours of operation, type of helicopter, and purpose of use to the CPUC for review and approval.
- The Cultural Resources Management Plan shall be followed by SCE and its contractors.
- Two sites (CA-KER-2821/H, CA-LAN-3724, and PL-SCE-Tehachapi-3A-02H) will require testing
  to evaluate their eligibility for the California Register of Historical Resources. SCE shall provide
  documentation on the testing results to the CPUC prior to work in these areas.
- Per Mitigation Measure G-8, a certified paleontological monitor will monitor compliance at construction areas where excavation is being conducted in geologic units of moderate to high sensitivity. Areas of low sensitivity will be spot-checked periodically. Paleontological monitoring reports will be submitted to the CPUC for review on a monthly basis.
- Per Mitigation Measure H-1d, construction activities, particularly roadway installations and improvements, must not occur when precipitation events are expected. As stated by SCE, parameters for road building activities may include, but are not limited to the following: 1) precipitation event expected in excess of 0.5-inch, 2) excessive rutting and/or soil mixing, 3) evidence of erosion and sediment runoff, 4) significant soil compaction, 5) significant soil adhesion to vehicles and construction equipment.
- Per Mitigation Measure H-4, if it is determined that known groundwater resources would be unavoidable during construction, SCE will submit a Groundwater Remediation Plan to the CPUC and RWQCB for review and approval prior to the onset of any construction activities. If unknown groundwater resources are encountered, SCE will stop the disruptive excavation activity and submit a site-specific remediation plan to the CPUC and RWQCB for review and approval. Water may not be discharged on site, but may be held in a Baker Tank until the Plan is approved.
- Table A: Drainage Assessment for Impact Areas and Access Roads (Existing Overland, New Permanent, Temporary, to Improved) from the SCE Segment 3A August 2008 submittal for Mitigation Measure APM BIO-3 (Avoid Impacts to Streambed and Banks) shall be followed. If project plans and/or access road plans change, or conditions at the stream crossings/drainages change, the CPUC and CDFG shall be consulted regarding those changes and avoidance of potential impacts.
- Per Mitigation Measure V-15, SCE shall submit all permits and approvals from Los Angeles County, Kern County and other affected local agencies.
- All project mitigation measures, compliance plans, and permit conditions shall be implemented during construction activities and use of the proposed yard spaces. Some measures are on-

going/time-sensitive requirements and shall be implemented prior to and during construction where applicable.

- Copies of all relevant permits, compliance plans, and this Notice to Proceed shall be available on site for the duration of construction activities.
- Prior to the commencement of construction activities, all crew personnel including haul truck and concrete truck drivers shall be appropriately WEAP trained on environmental issues including protocols for air quality, hazardous materials, biological resources, known and unanticipated cultural materials, as well as SWPPP BMPs. A log shall be maintained on-site with the names of all crew personnel trained.
- All work boundaries shall be flagged prior to occupation. In addition, all approved access roads, spur
  roads and overland travel routes to be used shall be flagged prior to construction.
- All sensitive resources buffers shall be flagged for avoidance by a qualified biologist and approved by the CPUC EM prior to construction.
- All culturally sensitive areas shall be flagged for avoidance by a qualified archaeologist and approved by the CPUC EM prior to construction.
- 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 to construction technique or mitigation implementation to a lesser level are required, a Variance Request shall be submitted for CPUC review and approval.
- All fueling for equipment and helicopters shall be conducted using saddle trucks at least 100 feet from aquatic resource areas. No fuel may be stored on Project sites.
- Prior to use of any proposed helicopter area, SCE shall submit maps of the area as well as verification that biological and cultural surveys have been conducted for review and approval by the CPUC.
- If construction debris or spills enter into environmentally sensitive areas, the jurisdictional agencies and CPUC EM shall be notified immediately.
- In the case of a hazardous materials spill, the CPUC EMs shall be immediately notified and an incident report shall be submitted to the CPUC within five (5) working days of the spill incident and shall include spill volumes and any resource damage that may have occurred.

John Boccio

Sincerely,

CPUC Environmental Project Manager

cc: V. Strong, Aspen