

PUBLIC UTILITIES COMMISSION505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

January 4, 2010

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

RE: SCE Antelope-Pardee 500 kV Transmission Project, Segment 1 - Notice to Proceed (NTP) #26

Dear Mr. Johnson,

On December 18, 2009, Southern Californian Edison (SCE) requested authorization from the California Public Utilities Commission (CPUC) for the construction related to the Antelope Substation 500 kV expansion, located at SCE's Antelope 220 kV Substation in the City of Lancaster, Los Angeles County, California.

The SCE Antelope-Pardee 500 kV Transmission 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.04-12-007, SCH #2005061161 on March 1, 2007. The Forest Service is the federal Lead Agency for the preparation of the Project's EIR/EIS in compliance with NEPA. The proposed work and yard locations do not occur on Forest Service land thus no approval from the Forest Service is required. **NTP #26 is granted by CPUC for the proposed activities based on the following factors:**

- SCE submitted the following information:

SCE is requesting a Notice to Proceed (NTP) for the construction related to the Antelope Substation 500 kV expansion located at SCE's existing Antelope 220 kV Substation in the City of Lancaster. The work required to expand the existing Substation facility includes the relocation of several 66 kV transmission lines and one 220 kV transmission line known as the Sagebrush 220 kV transmission line. Relocation of the 66 kV transmission lines has been addressed in a separate Notice to Proceed (NTP) request and was approved by the California Public Utilities Commission (CPUC) on October 21, 2009. A separate NTP request addressing the Sagebrush 220 kV transmission line relocation will be submitted to the CPUC at a later date.

Project Overview

The Substation is located at 9634 West "J" Avenue in the City of Lancaster. The proposed expansion site consists of open undeveloped land located to the southeast of the existing Antelope 220 kV substation. The existing ground surface of the proposed expansion area slopes gently to the southeast. The site is desert terrain with a three to four percent slope from northwest to southeast that is diagonal to the Substation equipment layout. In order to bring the grade into a slope that is parallel with the equipment and to reduce the slope to a workable one and one half to two percent, it will be necessary to alter the existing topography through grading.

The Substation property contains approximately 138.9 acres of land. The total area of land disturbance within the property associated with the construction of the Antelope Substation expansion will be 58 acres. The total area inside of the perimeter wall will contain 69 acres. A graded pad sloping at 1.8 percent (the area containing the enclosed substation expansion) will contain 54 acres. The Substation will be oriented north-to-south with one

vehicular access road connecting to Avenue J to the north. Also provided will be one emergency access road (currently existing) on the south side.

Construction efforts will require the installation of a new water-well at the Antelope Substation site. The existing well is damaged and is potentially unable to provide an adequate volume for the project requirements. Water is needed on-site during grading and construction for minimizing fugitive dust and for soil compaction. Future needs also include a potable water source for the substation facilities. It is estimated that approximately 12 million gallons will be required or two million gallons per month for six months, during the initial construction and grading operations. The nearest sufficient water line source is a hydrant approximately 1/2 mile away to the south on an adjacent road. To provide the quantity of water needed for grading activities, 30-40 truck trips (4,000 gallons per truck) would be needed per day, for six months. An on site water source (well) capable of supplying the volume needed for this effort would drastically cut down on the off-site truck trips and truck emissions, as well as minimize any impacts or strain on the City of Lancaster's potable water resources. Therefore SCE is proposing to install a new well to support construction at the Antelope Substation site to support construction.

A 12 kV source line for temporary construction power and permanent power for the future Substation expansion will be installed. The 12 kV line is existing and is serving the existing substation. The existing 12 kV line will be tapped for service to the new substation.

The 220 kV Substation is equipped with the following:

- One new mechanical electrical equipment room (MEER) to house protective relays, a battery system, and automation equipment
- One micro wave tower & telecommunication facility (2009)
- Thirteen 220 kV double breaker bays
- Four 220/66 kV transformer banks
- Twenty-six 66 kV bays
- Two 220 kV shunt capacitor banks
- Four 66 kV shunt capacitor banks

As part of the Antelope Substation Expansion, the Substation will be equipped with the following:

- Six 500 kV breaker and one half bays
- Eight 500 kV bus dead-end structures
- Seven 500 kV/220 kV AA auto-transformer dead-end rack structures
- One 500 kV jack bus (spare phase) system
- One 220 kV jack bus (spare phase) system
- One 500 kV connected SVC transformer bank dead-end rack structure system
- Two sets of 150-MVAR 500 kV shunt capacitor banks
- Two sets of 1120 MVA AA transformer banks
- One AA type transformer bank for the future 500 kV SVC
- Two sets of 13.8 kV AA transformer bank tertiary buses
- Twenty-four 13.8 kV 15-MVAR shunt reactors

Additional facilities and equipment will be installed in the future as necessary, to accommodate additional wind energy projects that may apply for interconnection facilities agreements.

Construction Methodology

Construction of the Substation consists of three major activities: grading of the entire Substation pad and installation of the perimeter walls, installation of the 220 kV switchyard and associated equipment, and installation of the Control Building.

The equipment required for the Substation construction includes the following: five-ton truck, 980 loader/scrapper, compactor, crane, crane 150-ton, crew hauling trucks, trenching equipment, truck mounted auger for drilling, dump truck, forklift, grader, man-lift, soils test crew truck, support truck, survey truck, tractor/backhoe, truck crane, and water truck.

Substation construction will occur within the Substation perimeter area in accordance with accepted construction industry standards. Work will generally be scheduled in daylight hours (6:30 a.m. to 5:00 p.m.), Monday through Friday. In the event that construction is required outside of the specified hours in order to meet schedule requirements, a variance will be obtained from Los Angeles County if necessary. All materials associated with Substation construction will be delivered by truck to the site. As applicable, truck traffic will use major streets and will be scheduled for off-peak traffic hours. All construction debris associated with the construction effort will be placed in appropriate onsite containers and periodically disposed of according to all applicable regulations.

Site Preparation

Within the 138.9 acre Substation property, a pad consisting of 54 acres will be graded for the expansion, and a perimeter wall constructed to enclose the Substation. Additional side-slope grading is required beyond the Substation boundaries in order to blend existing terrain with the new Substation pad and to accommodate perimeter surface drainage improvements.

The following elements of site preparation will be required for Antelope Substation:

- Grade the entire 54 acre Proposed Substation pad
- Grade the cut and fill side slopes to blend the existing terrain with the new pad
- Grade and install the Substation access road
- Install 7,734 feet of eight-foot-high perimeter wall with barbed wire, one 30-foot-wide automatic gate and one 30-foot-wide manual rolling gate
- Install new 350-MCM copper conductor ground grid system

Grading

The grading design establishes a high point along the southwestern edge of the Substation pad and slopes down at a 1.8 percent slope towards the northeastern edge of the pad.

Prior to the start of grading, the entire area to be graded will be stripped of all organic matter and loose rocks. Any waste materials encountered will be removed as required by the environmental and geotechnical investigations. Waste material collected from the stripping operations will be tested for contaminants, if site conditions, such as evidence of prior use involving hazardous materials, warrant additional investigation. An estimated quantity of approximately 16,000 cubic yards of soil mixed with stones and organic matter will be transported from the site and disposed of at an appropriate waste disposal facility.

Once the surface has been cleared, the grading operations will begin. An estimated 115,800 cubic yards of soil will be cut from the higher elevations and relocated to the lower elevation as fill. If excessive cut or fill results, minor alterations to the site elevation and/or slopes might be needed in an attempt to achieve an overall balance. During grading operations, dust will be controlled by watering.

The following list represents the estimated waste that will be disposed of due to construction of Antelope Substation:

- 16,000 pounds of organic matter mixed with soil and rock
- 1000 pounds of wood waste
- 500 pounds of sanitation waste
- 1000 pounds of concrete waste
- 500 pounds miscellaneous waste

Foundation Installation

Approximately 700 foundations of various sizes would be constructed throughout the area to support equipment and steel structures. In addition, a network of partially buried concrete trenches will be installed throughout the Substation area. Excavation of these foundations and trenches will commence following completion of grading and other yard improvements, and will continue for several weeks. An estimated 6,000 cubic yards of soil will be excavated for foundations and trenches. Approximately 440 columns required to support the pre-cast modular perimeter wall will generate an estimated 500 cubic yards of soil. The anticipated total spoils of 5,500 cubic yards will be spread and compacted on a portion of the Substation property.

Well Installation

The estimate of two million gallons of water per month—pumping for 12 hours a day, six days a week—will require a well capable of producing 120 gallons per minute (gpm). Water will be pumped into a water tower to fill water trucks during grading operations. The well will be 500 feet in depth and 8 inches in diameter based on the anticipated depth to groundwater (350 feet) and the daily water requirements of 120 gpm.

The location of the new well will be on the south side of the existing substation property near the location of the existing well and will require an approximately eight-foot by eight-foot concrete pad, with a box for electrical controls mounted on a pedestal. Typically, this will be surrounded by a chain link fence, 12 feet by 12 feet.

Well drilling and casing installation will take approximately two weeks to complete and will use the following equipment: mud-rotary drill rig (diesel engine), circulating pit (with small diesel motor to run a pump), backhoe (gas or diesel), compressor (diesel), generator (diesel), and two support pickup trucks (crew truck and supervisor truck, gas or diesel).

Additionally, pump installation, well testing and development will take approximately two weeks to complete and will use the following equipment: development rig (small diesel engine), generator (gas or diesel) to operate submersible pump, forklift (diesel), and support pickup truck.

Drilling fluids will be discharged on-site for dust control under a de minimus discharge permit. All other necessary permits will be obtained from the contractor installing the well. A report/permit with the County Health Department and the California Department of Water Resources will also be on file. Copies of all permits will be submitted to the CPUC prior to the start of well construction.

Septic System

The Substation septic system will receive maintenance for the existing facilities and in support of the Antelope Substation 500 kV expansion.

Drainage

The site drainage will be developed during final engineering design to control surface runoff. In compliance with the Clean Water Act, all new site drainage installations will be consistent with the National Pollutant Discharge Elimination System (NPDES) and the SWPPP, which are to be prepared for the site after final engineering design is completed. NPDES requirements focus on the protection of water quality, through such provisions as the definition of allowable discharge materials, monitoring requirements, reporting requirements, and mitigation measures. Off-site surface runoff will be diverted around the perimeter of the Substation directing surface water away from the graded pad by way of a built up earthen berm along the southwest portion of the Substation. Surface runoff generated within the site will be directed through a five-foot-wide drainage channel and discharged into a storm water detention pond then discharged over grouted rip rap. Surface runoff will be mitigated as needed through the use of earthen berms and energy dissipation devices, such as filter cloths, slope drains, and riprap placed near drain openings. All of these methods are designed to minimize the velocity of surface water runoff and protect the landscape from erosion.

Access

The main facility access will be a 30-foot-wide, 330-foot long asphalt concrete paved road connecting Avenue J to a 40-foot-wide automatic gate. A secondary access gate with an asphalt concrete paved road will be located in the southwest portion of the site. An internal network of asphalt concrete paved driveways will provide access to the various major sections of the switchyard and the control building. The external access road connecting to Avenue J will be paved.

Geotechnical Testing

A Geotechnical Investigation Report, dated March 27, 2009, has been prepared for the Antelope Substation. The geotechnical report was prepared by a licensed engineer with experience in the geotechnical field. The report addresses the geotechnical concerns/constraints for the site and incorporates these concerns into the design and construction recommendations presented in the report. The Antelope Substation site can be developed from a geotechnical standpoint to support the proposed structures, provided the findings, conclusions and recommendations presented in the Geotechnical Investigation Report are incorporated in the preparation of the final grading plan, foundation design and construction of the Project.

Paving

Asphalt concrete paving will be applied to the facility access road and to all designated internal driveways over an aggregate base material and a properly compacted sub-grade, as recommended by the geotechnical investigation. These paving activities will take place after major construction.

Rock Surfacing

Those areas within the Substation perimeter that were not paved or covered with concrete foundations or trenches will be surfaced with a four-inch layer of untreated, $\frac{3}{4}$ -inch nominal crushed run rock. The rock will be applied to the finished grade surface after all grading and below grade construction has been completed.

Perimeter Security

The entire site will be enclosed by a perimeter wall. The wall will conform to the requirements for electrical substations and have a minimum height of eight feet above the adjacent finished grade to the outside of the Substation. The wall will be fitted with barbed wire from inside.

Construction of the Substation is anticipated to begin February 2010 and continue through October 2010.

- **Biological Resources:** SCE submitted a report by Burns & McDonnell dated September 29, 2009 for the *Biological Survey Report for the Expansion of the Antelope Substation and Undergrounding of Portions of Six Existing 66kV Lines to Accommodate the Expansion of the Antelope Substation for the Antelope-Pardee 500kV Transmission Project, Segment 1, Los Angeles County, California*. Surveys were conducted on September 21-22, 2009 by ECORP. The proposed construction area consists mainly of disturbed California Annual Grassland Series with small pockets of Rubber Rabbitbrush Series (Sawyer and Keeler-Wolfe 1995) located on relatively flat topography. The area is grazed by sheep annually and also has disturbances associated with existing utility facilities (roads and poles/towers). The survey area included a 500-foot buffer around the project site and all of its proposed components (with the exception of the developed area within the existing substation boundaries). Meandering transects were walked throughout the proposed construction area and the buffer area at a spacing of approximately 50 feet apart in the grassland areas and 20 feet apart in the rabbitbrush scrub areas, with an emphasis on locating California ground squirrel (*Spermophilus beechyi*), American Badger (*Taxidea taxus*), and canid burrows that could potentially be used by western burrowing owls (*Athene cunicularia*).

A brief assessment of potential nesting habitat and impacts to additional wildlife was also conducted during the survey. Breeding bird surveys were conducted throughout the 2009 nesting season in and near the existing Antelope Substation and the vicinity of the project site. Those surveys found nests of a number of species in structures at the existing substation, in existing transmission towers near the substation, in construction equipment staged at adjacent marshalling yards, and in non-native vegetation planted for screening along the existing Antelope Substation fence line. Therefore, there is potential for nesting birds in the area during the spring breeding season.

No special-status species were observed during the survey. Two small areas were found with concentrations of active California ground squirrel burrows. Only one of these areas contained burrows of suitable size for use by burrowing owls, but the biologist stated that they did not exhibit any owl sign (whitewash, feathers, pellets, etc.). Surveys for burrowing owls were conducted in 2007 and 2008 on the adjacent Segment 1 of the Antelope-Pardee 500 kV Transmission Project (LSA 2007c, 2008a). No potential burrowing owl locations were found during those surveys. Biological clearance surveys were conducted in the vicinity of the project site throughout 2009 for Segment 1 (Burns & McDonnell 2009d) and Segments 2 and 3 (Burns & McDonnell 2009e, 2009f). No active burrowing owl burrows or potential burrowing owl burrows were found during those surveys. No American badger burrows or signs were found. Peirson's morning-glory (CNPS List 4) can be difficult to find during the fall season, and is potentially present on the project site. However, the 2007 and 2008 surveys did not find any occurrences of Peirson's morning-glory in the vicinity of the project site, and none were observed during the current survey.

- **Cultural Resources:** The proposed Antelope Substation expansion area was investigated for cultural and paleontological resources by Cogstone Resources Management (Harper and Sikes 2009; Scott and Gust 2008); Compass Rose Archaeological Inc. (Schmidt et al 2008) Pacific Legacy (O'Neil et al 2008) and Ecorp Consulting, Inc. (Ahmet, et al. 2006). The results of these studies indicate that two cultural resources, the Antelope Substation (19-003477) and the Antelope Transmission Line (19-186857), are located within the proposed disturbance area and one historic can scatter was identified adjacent to the proposed disturbance area. The can scatter will not be impacted by proposed construction activities. Both the Antelope Substation and the Antelope Transmission lines were evaluated by Urbana Preservation (Tinsley 2007) and were found not eligible for the National Register of Historic Places (NRHP) and the California Register of Historic Resources (CRHR).

SHPO concurred with the cultural resource evaluations on November 13, 2007 (Donaldson 2007). As a result, the proposed expansion activities would not cause a significant adverse effect or cause a substantial adverse change in the significance of a historic property or historic resource.

The proposed Antelope Substation expansion area was investigated for paleontological resources by Cogstone Resources Management (Harper and Sikes 2009; Scott and Gust 2008). The results of these studies indicate that no paleontological resources will be impacted during expansion activities at the Antelope Substation. The sediments in the project area consist of Quaternary alluvium, which is low in sensitivity for paleontological resources (Gust and Scott 2008).

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

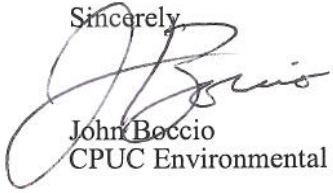
- As identified in **APM BIO-5** and **Mitigation Measure B-6**, SCE would assign Biological Monitors to the Project. They would be responsible for ensuring that impacts to special-status species, native vegetation, wildlife habitat, or unique resources would be minimized to the fullest extent possible. The Biological Monitors 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 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 Monitors 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 re-conducted prior to site occupation, including nesting bird surveys during the breeding season.
- All open trenches shall have ramps installed at the ends of the trench at the end of each day to allow trapped wildlife to escape. All installed open-ended conduit shall be covered (capped) at the end of each day to discourage wildlife from entering the conduit. All holes for new tubular steel poles (TSP) shall be covered at the end of each day so no wildlife may fall into the holes. The biological monitor shall inspect open trenches and holes every morning for trapped wildlife.
- On June 20, 2008, Dan Blankenship of CDFG provided: "All Pierson's morning glory and other sensitive plants shall be delineated with flagging and avoided. If avoidance is determined not possible, consultation with CDFG is required to minimize impacts. Consultation with CDFG is required prior to construction that will impact any wetland areas in order to determine on site mitigation measures."
- The Geotechnical Investigation Report, dated March 27, 2009, prepared for the Antelope Substation shall be submitted to CPUC for review and approval prior to foundation installation.
- If groundwater is encountered during construction, construction activities at that location shall be halted and SCE shall submit a Groundwater Remediation Plan to the CPUC and RWQCB for review

and approval. Until the Plan is approved, groundwater may not be discharged, but shall be pumped into baker tanks for holding.

- All work boundaries shall be flagged prior to occupation of the project area. 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 prior to construction.
- An archeologist shall flag all culturally sensitive areas for avoidance prior to construction.
- All new roads shall be temporary for construction. If SCE believes permanent roads are necessary, SCE shall submit an addendum to the CPUC for review and approval.
- Copies of all reports/permits from the County Health Department and the California Department of Water Resources shall be submitted to the CPUC prior to the start of well construction.
- Copies of the National Pollutant Discharge Elimination System (NPDES) and the SWPPP shall be submitted to the CPUC for review and approval prior to the start of construction.
- Per SCE, an SPCC plan shall be prepared for the 500 kV transformer banks at Antelope Substation Expansion. The SPCC plan shall be submitted to the CPUC prior to the 500 kV transformer banks operation.
- The letter notifying residents shall be sent out at least two weeks prior to the initiation of construction for the Project. A copy of the letter and a list of residences and businesses shall be submitted to the CPUC.
- All project mitigation measures, compliance plans, and permit conditions shall be implemented during construction activities. Some measures are on-going/time-sensitive requirements and shall be implemented prior to and during construction where applicable. In addition, restoration of temporarily disturbed areas shall occur in accordance with approved restoration plans.
- 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 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.
- 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.
- Project related vehicles and equipment with diesel engines shall limit idle times to no more than 10-minutes.

- If construction debris or spills enter into environmentally sensitive areas, the jurisdictional agencies and CPUC EM shall be notified immediately.

Sincerely,

A handwritten signature in black ink, appearing to read "John Boccio". The signature is fluid and cursive, with a large initial "J" and "B".

John Boccio
CPUC Environmental Project Manager

cc: V. Strong, Aspen