

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

December 1, 2009

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), Notice to Proceed (NTP # 25)

Dear Mr. Johnson,

Southern Californian Edison (SCE) has requested authorization from the California Public Utilities Commission (CPUC) to commence construction of the 500 kV upgrade work to the Windhub Substation in Segment 3, Kern County, California.

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 # 25 is granted by CPUC for the proposed activities based on the following factors:**

- SCE submitted the following information:

The Windhub Substation is a SCE owned substation located on Oak Creek Road in the Tehachapi area of Kern County and will serve as the termination point for the Antelope Transmission Project Segments 3A and 3B. The Substation's 220 kV interconnection facilities were previously approved by the CPUC and a Notice to Proceed (NTP #19) was granted on November 21, 2008. The Segment 3A transmission line will initially be energized at 220 kV, however, it will ultimately be energized to 500 kV. This NTP request addresses the work that will be involved to upgrade the Substation to a 500 kV substation facility.

The Windhub Substation, in the Tehachapi Wind Resource Area, will be located at Mile S3-9.6 of the Project route. The site is desert terrain with a three to four percent slope from northwest to southeast that is diagonal to the Substation equipment layout. The Substation property measures 1,660 feet by 2,317 feet and contains 88.3 acres of land. The total area of land disturbance within the property associated with the construction of Windhub Substation will be 83.7 acres. The total area inside of the perimeter wall will measure 1,310 feet by 2,000 feet and contains 60.1 acres. Grading of the substation, substation access roads, and a 12 kV source line for permanent substation power were addressed in the Windhub Substation NTP #19 approved on November 21, 2008.

As part of the initial 220 kV construction, the substation was equipped with the following: one concrete control building including a basement, one microwave tower and telecommunication facility (approximately 180 feet), four 220 kV breaker and one half bays, five 220 kV bus dead-end structures, two 220 kV AA bank interface dead-end structures, one station light and power system (one distribution class transformer, 12 kV source line, and one diesel emergency generator), two main 125V batteries with two chargers, and two main distribution panel boards, and one 220 kV AA spare phase jack bus.

As part of the 500 kV expansion, the substation will be equipped with the following:

- Six 500 kV breaker and one half bays
- Eight 500 kV bus dead-end structures
- Two 500 kV AA bank interface dead-end structures
- Two 500 kV line dead-end structures
- Two sets of 156-MVAR 500 kV shunt capacitor banks
- Two sets of 1120 MVA AA transformer banks
- One 373 MVA AA transformer bank spare phase unit
- Two sets of 13.8 kV AA transformer bank tertiary buses
- Eighteen 13.8 kV 15-MVAR shunt reactors (six 45-MVAR shunt reactor banks)
- Seven AA bank interface dead-end structures
- One 500 kV AA spare phase jack bus
- One 13.8 kV tertiary bus connected distribution class power transformer rated 750-kVA three-phase capacity for augmentation of the existing station light and power system
- One SPCC system

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. Facilities and equipment that may be installed in the future includes the following: one administration building, two 500 kV line/AA bank interface dead-end structures, two sets of 156-MVAR 500 kV shunt capacitor banks, two sets of 1120 MVA AA transformer banks, two sets of 13.8 kV AA transformer bank tertiary buses, eight 13.8 kV 15-kVA shunt reactors, nine 220 kV breaker and half bays, ten 220 kV bus dead-end structures, four 220 kV rated 79.2/156-MVAR each shunt capacitor banks, four 280 MVA three-phase 220/66 kV transformer banks, sixteen 66 kV lines, four sets of 66 kV shunt capacitor banks, four sets of 66/12 kV transformers, four sets of 12 kV shunt capacitor banks, and sixteen 12 kV circuits.

Construction of the Substation consists of two major activities: 1) Installation of foundations, cable trenches, conduit and ground grid for the 500 kV switchyard; 2) Installation of the major equipment, steel, control cable and associated relays for the 500 kV switchyard.

The equipment required for the Substation construction includes the following: crane, crane 150-ton, crew hauling trucks, trenching equipment, truck-mounted auger for drilling, dump truck, forklift, 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 Kern 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.

Within the 88.3 acre Substation property a two tier pad consisting of 61.7 acres was graded under the authorization of the previous Windhub Substation NTP, and a perimeter fence installed to enclose the Substation. Additional side-slope grading beyond the Substation boundaries was also completed under the previous NTP in order to blend existing terrain with the new Substation pad and to accommodate perimeter surface drainage improvements. The Substation was graded under the authorization of the previous Windhub Substation NTP. The grading design established a high point at the northern edge of the Substation pad and a two percent slope down towards the southern edge of the pad. Approximately 1,120 feet from the northern wall

line is an eight- to ten-foot drop in the pad, creating a two terrace site. The site drainage was permitted and completed as part of the previous Windhub Substation NTP.

Approximately 374 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. An estimated 18,000 cubic yards of soil will be excavated for foundations and trenches. Approved land fills will be utilized to dispose of anticipated spoils of approximately 18,000 cubic yards.

The facility access was addressed and approved under the previous Windhub Substation NTP. The main facility access will be a 30-foot wide, 240-foot long asphalt concrete paved road connecting Oak Creek Road to a 40-foot wide rolling gate. A secondary access gate with 240-foot long asphalt concrete paved road will also connect to Oak Creek Road. An internal network of asphalt concrete paved driveways will provide access to the various major sections of the switchyard and the control building. To facilitate access to the adjacent transmission towers/poles, two additional 30-foot gates will be located in the east and south walls. The external access roads will not be paved. At the request of the Kern County Traffic Engineer, SCE will be making improvements to Oak Creek Road for safety while entering and exiting the site. These road improvements include providing a left turn pocket lane into the main Substation entrance and increasing the radius of curb returns to allow for easier truck turning.

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.

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, ¾-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.

Geotechnical investigation including site reconnaissance, field sampling and laboratory testing were conducted to evaluate pertinent engineering properties of materials encountered. The findings were presented in a geotechnical report prepared by a geotechnical engineer and engineering geologist both licensed in the state of California providing recommendations for the final engineering design.

An SPCC plan will not initially be required for Windhub Substation. Under federal regulation by the EPA, the owner of a facility is required to implement an SPCC plan if the facility meets the following three criteria: (1) The facility is not related to transportation; (2) The facility has an aggregate aboveground storage capacity of at least 1,320 gallons (only considering containers that are 55 gallons or more) or an in ground storage capacity of at least 42,000 gallons; (3) There is a reasonable expectation of discharge into or upon navigable waters of the United States or adjoining shorelines. In addition, more stringent regulations by the State of California independently require than an SPCC plan be implemented for any facility with an aboveground storage capacity of at least 10,000 gallons. Storage capacity of the 500 kV interconnection facilities at Windhub Substation is anticipated to equal or exceed 10,000 gallons, thereby triggering the threshold for the California requirement for an SPCC plan. An SPCC plan will be prepared and submitted to the CPUC at a later date when the Substation is equipped with transformers in 2011.

During construction, measures will be in place to ensure that contaminants are not discharged from the construction site. A SWPPP will be developed that will define areas where hazardous materials will be stored; where trash will be placed; where rolling equipment will be parked, fueled and serviced; and where construction materials, such as reinforcing bars and structural steel members, will be stored. A silting basin was constructed to capture silt and other materials, which might otherwise be carried from the site by rainwater surface runoff.

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.

The entire facility, encompassing both 500 kV and 220 kV switchracks and facilities, shall be monitored by a perimeter intrusion detection system. The perimeter intrusion detection system shall be comprised of a series of steel poles, equipment enclosures, and interconnecting conduits and foundations. Steel poles and equipment enclosures shall be outfitted with cameras, infrared illuminators, volumetric motion detection equipment, and communication devices to ensure the security of the substation. Two motorized gates will be installed with card reader interlocks and safety devices. Two additional manual operated gates will be installed to allow additional access to and from the substation.

Construction of the Substation is anticipated to begin January 2010 and be completed by August 2011.

- **Biological Resources:** The expansion of the substation will occur in an area already disturbed by grading and construction conducted under the previous NTP. Pre-construction biological surveys for listed or otherwise sensitive species were performed during the appropriate seasons in 2007. These surveys have been repeated for all areas subject to disturbance during the appropriate season in 2008 and, in some cases, 2009. Results of the repeated 2008 and 2009 surveys were submitted to CPUC on August 22, 2008, or in the case of the seasonally-dependent surveys as they are available. With the implementation of the conditions below, biological impacts are not expected to occur during this phase of construction.
- **Cultural Resources:** The expansion of the substation will occur in the area previously graded and disturbed under the previous NTP. As a result of a records search and two field surveys (Ahmet et al. 2006, Way et al. 2008), two archaeological sites (CA-KER-7050; PL-SCE-Tehachapi 56) and two cultural isolates (PL-SCE-Tehachapi-ISO 15 and PL-SCE-Tehachapi-ISO 16) were identified within the footprint of the Windhub Substation. CEQA guidelines do not require an eligibility assessment of cultural isolates. CA-KER-7050 and PL-SCE-Tehachapi 56 were tested and determined not eligible for inclusion to the California Register of Historical Resources (CRHR). Based on the evaluation of CRHR eligibility for these resources, further archaeological investigation of the substation site prior to construction is not recommended. A report entitled Supplemental Archaeological Investigations, Evaluation of California Register of Historical Resources Eligibility of Archaeological Resources at the Windhub Substation Site, Antelope Transmission Project, Segments 2 and 3, Kern County, California (Way and Jackson 2008) was submitted to the CPUC on October 29, 2008. The CPUC, as the lead agency, must make a determination on the eligibility assessment of these resources prior to any ground disturbance. The CPUC concurred with the report findings on October 21, 2008. Archaeological monitoring during initial ground disturbing activities (depths to 1 meter) is recommended, but not thereafter. With the implementation of the conditions below, cultural resources impacts are not expected to occur during this phase of construction.

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

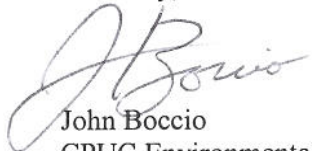
- As identified in the Biology Mitigation Measures and Applicant Proposed Measures (APMs) in the EIR/EIS, SCE would assign Biological Monitors to the Project. They would be responsible for ensuring that impacts to special-status species, native vegetation, wildlife habitat, or unique resources would 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 re-conducted prior to site occupation, including nesting bird surveys during the breeding season.
- The drainage crossing Oak Creek Road shall be avoided.
- 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 shall be obtained from Kern County if necessary and provided to the CPUC.
- Desert tortoise mitigation shall be implemented in accordance with approved CDFG and USFWS protocols for Segment 3A and Windhub Substation.
- If special-status plant or animal species are observed within the project area, the CPUC EM and CDFG shall be notified immediately.
- Archaeological monitoring shall be required during subsurface excavations up to one meter depth. Unanticipated discoveries shall be treated in accordance with approved plans. If unanticipated discoveries occur, the CPUC EM shall be notified immediately.
- 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.
- 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.
- 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 shall be conducted in approved refueling locations.
- 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.

Sincerely,

A handwritten signature in dark ink, appearing to read "J. Boccio", is written over the printed name.

John Boccio
CPUC Environmental Project Manager

cc: V. Strong, Aspen