

**PUBLIC UTILITIES COMMISSION**505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298

January 13, 2011

Susan J. Nelson, AIA  
Southern California Edison  
Regulatory Affairs  
2244 Walnut Grove Avenue, Quad 3D, GO1  
Rosemead, California 91770

RE: Tehachapi Renewable Transmission Project (Segments 4-11), Notice to Proceed (NTP #26)

Dear Ms. Nelson,

On June 22, 2010, Southern California Edison (SCE) submitted a Notice to Proceed Request (NTPR) seeking authorization from the California Public Utilities Commission (CPUC) to construct the new Whirlwind Substation 500 kV and 220 kV switchyards and associated equipment located near the intersection of 170<sup>th</sup> Street West and West Rosamond Boulevard in Kern County, California. On December 10, 2010, SCE submitted additional information regarding the project description and biology based on requirements of the USFWS Biological Opinion and CDFG Incidental Take Permit.

The SCE Tehachapi Renewable Transmission Project (TRTP) was evaluated in accordance with the California Environmental Quality Act and a Certification of Public Convenience and Necessity (CPCN) was granted by CPUC Decision 09-12-044, (Application #07-06-031), SCH #2007081156 on December 17, 2009. **NTP #26 is granted by CPUC for the proposed activities based on the following factors:**

- Since the original submittal of the NTPR on June 22, 2010, SCE has completed final engineering on portions of the approved Project. Based on final engineering, additional details on the construction of the Whirlwind Substation have been further defined, as presented in an email to the CPUC from SCE dated December 10, 2010 (SCE, 2010). The following table describes the modifications in comparison to the original NTPR for the Whirlwind Substation.

Original NTPR	Proposed Modification	Comments
82 acres for pad and future expansion	118 acres	Pad/future expansion area remains at 82 acres, 26 acres for drainage/diversion berms and spreader
102 acres of total land disturbance	124 acres	Total now includes temporary and tortoise exclusion fencing (linear feet total below)
270,000 cubic yards of soil for grading	285,000 cubic yards	Revised to include final design of drainage/diversion berms and spreader
Precast concrete wall and gates around substation	Additional 11,500 linear feet of temporary perimeter chain link and tortoise exclusion fencing	15 feet past grading limits

Original NTPR	Proposed Modification	Comments
Two permanent access roads <ul style="list-style-type: none"> <li>• 40 feet wide by 800 feet long</li> <li>• 40 feet wide by 1,200 feet with 5-foot dirt shoulders</li> </ul>	One permanent access road	30 feet wide and 1,600 feet long with 5-foot wide dirt shoulders

Additional construction activities include the conversion of an existing onsite well to a grounding well and the installation of four additional grounding wells.

As described in the Final EIR/S, a 97 acre permanent land disturbance was expected for the Whirlwind Substation; however, a +/- 15% deviation was stated since final engineering was not yet completed, resulting in a maximum disturbance considered in the Final EIR/S of 111.5 acres. As stated in the table above, based on final engineering, 118 acres would be permanently impacted; therefore, the permanent impact increased by about 6.5 acres.

The CPUC completed an Addendum to determine whether or not the additional 6.5 acres of permanent impact resulting from the Whirlwind Substation and additional well work would result in any new or different impacts from what was previously analyzed in the Final EIR/S. Based on the evaluation of SCE's proposed modifications to the Whirlwind Substation, no new or substantially different impacts have been identified, no changes to impact significance conclusions are needed, and no new mitigation is necessary. Therefore, there is no need for any additional CEQA analysis of the Project modifications for the Whirlwind Substation.

- SCE submitted the following information regarding the construction of the Whirlwind Substation:

SCE is requesting to construct the new Whirlwind Substation 500 kV and 220 kV switchyards and associated equipment located near the intersection of 170<sup>th</sup> Street West and West Rosamond Boulevard in Kern County, California. The proposed substation layout consists of several major construction facilities and activities, which include the construction of a 500 kV switchyard, construction of a 220 kV switchyard, construction of a Mechanical Electrical Equipment Room (MEER), and the construction of an approximate 90-foot-high free-standing microwave antenna tower.

**Site Location and Conditions**

The site location is approximately a 124-acre area adjacent to the Segment 4 right-of-way. The site is a combination of disturbed and undisturbed land. During construction, the site will be accessed from 170<sup>th</sup> Street West and/or Rosamond Boulevard.

**Project Components**

Construction operating hours are planned to be from 7:00 AM to 7:00 PM. SCE has established a TRTP toll-free information line (877-795-8787) and website ([www.sce.com/tehachapi](http://www.sce.com/tehachapi)). The information line is the designated public notification contact for the Segment 9 Whirlwind Substation activities.

**Construction Facilities/Activities**

Construction facilities that may be present and active throughout the duration of the project include the following: project and contractor equipment and material storage areas, office trailers, portable toilets, water tanks and retention basin, temporary concrete wash-out area, and a possible water production well.

Proposed construction activities that may be present and active throughout the duration of the project include the following: project and contractor equipment and material storage, grading activities, construction of new paved access roads, underground construction activities, aboveground construction activities, conversion of existing onsite well to grounding well, installation of four grounding wells, and possible water production well installation.

SCE is not anticipating that helicopter activity will be performed at the Whirlwind Substation. In the event helicopter activity is needed, SCE will provide supplemental information and appropriate biological survey reports.

### **Site Work**

#### **Grading, Drainage, and Site Preparation**

The entire substation pad and future expansion area of approximately 118-acres will be graded and fenced. Approximately 3.2 acres will be graded for installation of a one-acre stormwater retention basin and two Spill Prevention Control and Countermeasures (SPCC) ponds. Additional side-slope grading may be required to blend existing terrain with the new substation pad. The total land disturbance associated with the site preparation will be approximately 124-acres, which includes the following: substation pad, excavation of foundations and trenches, side-slope grading, construction of primary and secondary access roads, installation of a stormwater retention basin, SPCC pond, and water production well and grounding wells, rock surfacing, temporary and permanent facilities site, and drainage channels.

**Grading** – The entire area to be graded will be stripped of organic matter and loose rocks. Once the surface has been cleared, grading operations will begin. The proposed grading design will establish a high point at the northern end of the substation pad and slope down at 1.0 percent toward the southern end of the pad. An estimated quantity of 285,000 cubic yards of soil will be cut from higher elevations and relocated to the lower elevations as fill. A portion of the cut soil will be used to form a protective earthen barrier along the upslope boundaries to prevent stormwater runoff from entering the substation. Exporting excess soil or importing new fill soil may be necessary.

**Fencing** – The approximately 8,000-linear-foot perimeter of the proposed substation will be enclosed by a precast concrete wall and gates. The perimeter wall will conform to the requirements for electrical substations by consisting of the minimum height of 8 feet above the adjacent finished grade to the outside of the substation. Approximately 11,500 linear feet of temporary perimeter chain link and tortoise exclusion fencing will be installed prior to construction.

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

**Rock Surfacing** – Those areas that were not paved or covered with concrete foundations or trenches will be surfaced with a 4-inch layer of untreated, ¾-inch nominal crushed run rock. The rock will be applied to the finished grade surface after grading and below-grade construction have been completed.

**Access** – For temporary ingress/egress during construction, crews and equipment will use the existing transmission rights-of-way to the west of the substation property. A new approximately 30-foot-wide, 1,600-foot-long asphalt concrete paved driveway with 5-foot-wide compacted dirt shoulders will provide permanent facility access by connecting 170<sup>th</sup> Street West to the substation. The driveway will branch into two directions, providing ingress/egress to the substation through the gates at the perimeter wall. Additionally, two new rocked roads will provide permanent ingress/egress from the existing transmission rights-of-way to the substation. Both are located at the southwestern side of the substation.

### **Underground Major Activities**

Major underground activities associated with the Project are as follows: install foundations for structures associated with the new 500 kV switchyard, install foundations for two new 500 kV shunt capacitor banks and associated structures, install foundations for two new 220 kV shunt capacitor banks and associated structures, install foundations for new 500/220 kV 1AA transformer bank and associated structures, install foundations for new 220 kV buses and associated structures, and installation of a stormwater retention basin, SPCC pond, and possible water production well.

### **Aboveground Major Activities**

Major aboveground activities associated with the Project are as follows: install a new 500 kV switchyard, install two new 500 kV shunt capacitor banks, install two new 220 kV shunt capacitor banks, install new 500/220 kV 1AA transformer bank, install new 220 kV buses, construction of a Mechanical Electrical Equipment Room (MEER), and construction of an approximately 90-foot-high free-standing microwave antenna tower.

Temporary power and communication services for Whirlwind Substation construction activities will be accessed from an aboveground source located east of the substation along 170<sup>th</sup> Street. These power (12 kV) and fiber optic cable lines are being installed along 170<sup>th</sup> Street as part of the Segment 10 Telecom Project, which is a separate NTPR. For the Whirlwind Substation construction activities, 12 kV and fiber optic cable will be installed in approximately 1,420 feet of underground conduit, travelling from the last pole on 170<sup>th</sup> Street into the substation.

- **Biological Resources:** The USFWS Biological Opinion (BO) was issued on July 31, 2010. The CDFG 2081 Incidental Take Permit was issued November 23, 2010. The 2081 is required for the Whirlwind Substation for Swainson's hawk, desert tortoise, and Mohave ground squirrel.

SCE submitted a revised report titled *SCE TRTP Segment 9 – Whirlwind Substation Biological Review* prepared by ICF International dated December 2010. The biological survey area (BSA) for the Whirlwind Substation Project Component was defined as the new substation grading limits (ICF 2010i) plus a 500-foot buffer. A literature search was conducted for the Whirlwind Substation Project Component to determine the potential for special-status biological resources to occur within the 5-mile vicinity of the site. Focused surveys were conducted in 2009 for rare plants, burrowing owl (*Athene cunicularia*), desert tortoise (*Gopherus agassizii*), Swainson's hawk (*Buteo swainsoni*), and Mohave ground squirrel (*Spermophilus mohavensis*) along portions of the Project Component that occur within the TRTP right-of-way (portions of Segments 4, 10 and Telecom 10), and Whirlwind Substation (Segment 9). Focused surveys for rare plants, desert tortoise, burrowing owl, and Swainson's hawk were also conducted in 2010.

The substation Project Component and buffer area is composed mostly of Mojave creosote bush scrub with inclusions of Mojave mixed woody scrub, desert saltbush scrub, rabbitbrush scrub, Joshua tree woodland, Mojave desert wash scrub, ruderal grassland, and disturbed/developed areas. One California Native Plant Society (CNPS) List 1.B.1 species, Clokey's cryptantha (*Cryptantha clokeyi*) was historically recorded within 5 miles of the site and portions of the Project Component provide suitable habitat in the form of desert scrub. Focused plant surveys in 2010 for Segment 9 (ICF 2010ap) and Segments 4, 5 and 10 (ICF 2010zz) were negative for special-status species and no listed plant species were identified within the Project Component.

Six incidental special-status wildlife species were detected during the 2009 and 2010 surveys, which include: American badger (*Taxidea taxus*), burrowing owl, Cooper's hawk (*Accipiter cooperii*), Le Conte's thrasher (*Toxostoma lecontei*), sharp-shinned hawk (*Accipiter striatus*), and loggerhead shrike (*Lanius ludovicianus*). Vegetated areas within and adjacent to the Project Component provide suitable foraging and nesting habitat for some raptors, including burrowing owl and Swainson's

hawk. CDFG recommends that no new disturbances or other project-related activities that may cause Swainson's hawk nest abandonment or forced fledging be initiated within 0.25 mile of an active nest between March 1 and September 15, or until August 15 if a Management Authorization is obtained for the project from CDFG. Phase I, II, and III burrowing owl surveys were completed in September 2010 (ICF 2010ab, 2010ac, 2010am) and active burrows and two burrowing owls were observed in the northeast portion of the BSA. Preconstruction burrowing owl surveys were completed in November 2010 (ICF 2010an, 2010bz) and results identified four burrowing owls and five occupied burrows within the grading limits of the Project Component. Within the larger BSA, at least 20 potential burrows were recorded during the 2010 focused surveys. The 2010 surveys for the Project Component recorded loggerhead shrike within the Project Component and LeConte's thrasher within the BSA. A raptor nest was identified on a pole within the northwest corner of the BSA.

The site includes suitable habitat (e.g. Mojave creosote scrub) for desert tortoise and there is a low density population of desert tortoise in the TRTP area. Protocol surveys were completed in 2009 for desert tortoise along Segments 9, 4 and 10 (AMEC 2009ac, 2009e), and results were negative. Surveys for desert tortoise were completed in 2010 along Segments 9, 4 and 10 (ICF and ECORPS 2010a, 2010b) and no desert tortoise was identified within the BSA. The Project Component also provides suitable habitat for both the California (*Phrynosoma coronatum frontale*) and San Diego (*Phrynosoma coronatum blainvillii*) horned lizard species.

The Project Component and adjacent areas provide suitable habitat for Mohave ground squirrel, but does not lie within the historic range of the species. The TRTP area is approximately 5 miles west of the published range for the species. Suitable habitat occurs within the 500-foot survey buffer of the Project Component for American badger, Townsend's big-eared bat (*Corynorhinus townsendii*) (foraging only), and Tehachapi pocket mouse (*Perognathus alticolus inexpectatus*). Preconstruction surveys for bats completed in 2010 for Segments 4, Telecom 10 (ICF 2010be, 2010bw) and Segment 9 (ICF 2010bp) were negative for bats and bat roosting features within the BSA.

One unnamed, jurisdictional dry wash (feature 4-5-S-1) was observed within the Project Component. Construction activities will permanently impact a portion of the drainage feature (ICF 2010i). This drainage feature is a water of the State. The State Water Resources Control Board (SWRCB) is currently processing SCE's application for a Waste Discharge Requirement (WDR) permit for impacts on drainages regulated under the Porter-Cologne Act. In addition, the project is subject to regulation under Segments 1600-1616 of the California Fish and Game Code. A Streambed Alteration Agreement (SAA) currently is being processed by CDFG.

- **Cultural Resources.** SCE has submitted the following Cultural Resources Survey Reports for the Whirlwind Substation (review status of each report is noted in parenthesis following the report name):
  - *Supplemental Archaeological Investigation and National Register of Historic Places and California Register of Historical Resources Eligibility Evaluation of Archaeological Site CA-KER-7214H SCE TRTP, Segment 9, Kern County, CA* (The report has been reviewed and approved by the CPUC, ANF and SHPO.)
  - *Segment 9 - NASR Whirlwind Substation Alternate Access Route Survey, Los Angeles and Kern County, California.* (The report has been reviewed and approved by the CPUC and ANF.)

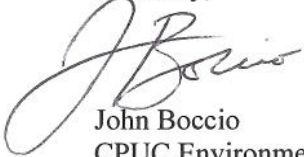
According to the final Paleontological Resource Management Plan, the Whirlwind Substation is not located in a zone of high paleontological sensitivity. Full time monitoring is not required. The Project Paleontologist may elect to spot-check this location at his or her discretion.

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

- 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.
- All sensitive resource buffers shall be flagged prior to construction/site occupation. Resource flagging shall be field verified by the CPUC EM prior to site use.
- All construction areas and access roads identified in the NTPR submitted by SCE shall be flagged prior to construction. Flagging of construction areas and access roads shall be field verified by the CPUC EM prior to site use.
- Biological survey sweeps are required to occur immediately preceding and during project area set up and occupation as part of required biological monitoring activities. Sweeps for nesting birds shall include a 500 foot buffer. If active nests are found, a biological monitor shall establish a required 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. If special-status plant or animal species or bird nests are observed within the project area, CDFG and the CPUC EM shall be notified immediately (within 24 hours). After complete sweeps have been submitted and approved by the CPUC EM, site occupation can occur; however, if occupation does not occur within seven calendar days of survey, biological clearance sweeps shall be re-conducted prior to site occupation, including nesting bird surveys during the breeding season.
- The Whirlwind Substation disturbance areas shall be included in the project Habitat Restoration and Revegetation Plan required by MM B-1a, subject to review and approval by CPUC.
- No construction or site occupation shall occur in the project area under consultation with CDFG for the 1602 Streambed Alteration Agreement and the SWRCB for the Waste Discharge Requirement (WDR) until those permits are issued and all applicable conditions are implemented.
- Topsoil shall be salvaged and stored properly for restoration purposes.
- Use of the subject site as a helicopter landing zone shall not be allowed until the contractor's Congested Area Flight Plan is approved by the Federal Aviation Administration and additional surveys and/or analysis are submitted and approved by CPUC, including but not limited to the following: 1) Updated flight plan and traffic control plans will be evaluated for impacts to nesting birds to ensure that mitigation measure requirements for required buffers are adhered to (Mitigation Measures B-5, B-14 and B-30), and 2) SCE shall route all construction traffic and helicopter flight away from residences, schools, and recreational facilities to the maximum extent feasible (Mitigation Measure N-1b).
- If unanticipated biological, cultural or paleontological resources are detected, the CPUC EM shall be notified immediately.

- At least 14 days prior to the start of any construction-related activities, SCE shall provide notification to potentially affected property owners, and copies of the notification and distribution list shall be provided to the CPUC at the time of noticing (Mitigation Measures L-1a and L-1b). In addition, SCE shall provide all affected property owners with quarterly updates on any changes to the information provided in the pre-construction notification (Mitigation Measure L-1c).
- Kern County approval or applicable Municipal Code reference shall be provided to CPUC for all future Sunday work or for work outside of the hours 7:00 AM to 7:00 PM, Monday through Saturday, prior to the commencement of work.
- Prior to fuel storage on the subject site, a Fuel Storage Plan shall be submitted to CPUC for review and approval. The Plan shall specify method and location of fuel storage, volumes, demonstration of compliance with regulatory requirements regarding fuel storage, and spill containment and response measures. All fueling of equipment shall be conducted in approved refueling locations only.
- Refueling and fueling locations shall be a minimum of 100-feet away from existing drainages. If construction debris or spills enter into environmentally sensitive areas, the jurisdictional agencies and the CPUC EM shall be notified immediately.
- Prior to 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 BMP's. A log shall be maintained on site with the names of all crew personnel trained.
- Copies of all relevant permits, compliance plans, and this Notice to Proceed, shall be available on site for the duration of construction activities.
- 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.

Sincerely,



John Boccio  
CPUC Environmental Project Manager

cc: V. Strong, Aspen