

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

September 10, 2010

Susan J. Nelson, AIA  
Project Manager  
Southern California Edison  
2244 Walnut Grove Ave.  
Rosemead, CA 91770

RE: Tehachapi Renewable Transmission Project (Segments 4-11), Notice to Proceed (NTP # 15)

Dear Ms. Nelson,

On August 16, 2010, Southern Californian Edison (SCE) submitted a Notice to Proceed Request (NTPR) seeking authorization from the California Public Utilities Commission (CPUC) to construct the Segment 5 transmission line (T/L), which consists of the construction of approximately 17 miles of new 500 kV transmission line structures between SCE's existing Antelope Substation and Vincent Substation in northern Los Angeles County, located in Lancaster and near Acton, California. Segment 5 T/L also traverses the City of Palmdale and unincorporated areas of Los Angeles County, California. Additional information, including biological resource maps, was submitted August 24 and August 26, 2010.

The SCE Tehachapi Renewable 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 Decision 09-12-044, (Application #07-06-031), SCH #2007081156 on December 17, 2009. **NTP # 15 is granted by CPUC for the proposed activities based on the following factors:**

- SCE submitted the following information:

SCE submitted a NTPR seeking authorization from the CPUC to construct Segment 5 T/L, which consists of the construction of approximately 17 miles of new 500 kV transmission line structures between SCE's existing Antelope Substation and the Vincent Substation in northern Los Angeles County, located in Lancaster and near Acton, California. Segment 5 T/L also traverses the City of Palmdale and unincorporated areas of Los Angeles County, California.

Beginning at the Antelope Substation 500 kV switchracks, the new Antelope-Vincent No. 2 500 kV T/L will head on a southeast alignment for approximately 17 miles, and then turn south for approximately 0.8 miles to enter Vincent Substation. The new 500 kV T/L will replace the existing Antelope-Vincent 220 kV T/L and the Antelope-Mesa 220 kV T/L from the existing Antelope Substation to a location just north of the existing Vincent Substation. At this point, the new Antelope-Vincent No. 2 500 kV T/L circuit would utilize two new single-circuit structures, an existing double-circuit structure that was already permitted as part of Segment 2, and one new pole located within the substation to connect to the 500 kV switchrack at Vincent Substation. The existing 220 kV structures supporting the Antelope-Vincent 220 kV and Antelope-Mesa 220 kV will be removed. Once the existing 220 kV lines are removed, Segment 5 will mostly be built in the existing ROW. The new Antelope-Vincent No. 2 500 kV T/L will generally follow the same route.

**Site Location and Conditions**

The construction activities for Segment 5 T/L will occur within northern Los Angeles County. The Segment spans approximately 17 miles from the Antelope Substation in Lancaster to the Vincent Substation in Acton.

New construction between the Antelope and Vincent Substations includes a 17-mile section of 500 kV T/Ls on existing ROW which contains other SCE 500 kV lines (Midway-Vincent No. 3 T/L and newly constructed TRTP Segment 3 T/L), which currently include several crossings. Therefore, construction of the 500 kV T/L also includes the "untangling" of the existing crossed 500 kV lines along the Segment 5 route. Segment 5 also includes the removal of the Antelope-Vincent 220 kV T/L and the removal of a 17-mile section of the Antelope-Mesa 220 kV T/L.

At the Vincent Substation, approximately 3,350 circuit foot section of the temporary TRTP Segment 2 Antelope-Vincent T/L will be removed. A 2,828 foot section of the Sagebrush 220 kV T/L near the Vincent Substation will also be removed to accommodate the expansion of the Vincent Substation.

Also to accommodate the expansion of the Vincent Substation, a 3,750 foot section of the Sagebrush 220 kV T/L will be installed near the Vincent Substation. At the Vincent Substation, two new TSP structures will also be installed; one will be inset into the Vincent-Whirlwind 500 kV T/L and the other will be inset into the Midway-Vincent No. 3 500 kV T/L.

Segment 5 T/L construction also includes access roads and underground fiber optic work.

### **Project Components**

Project components include the site facilities and operations, and site work associated with Segment 5 T/L including the following:

- Antelope-Vincent 220 kV T/L – Removal of T/L
- Antelope-Mesa 220 kV T/L – Removal of 17 mile section of T/L
- Antelope-Vincent 220 kV T/L (Temporary TRTP Segment 2) – Removal of 3,350 circuit at Vincent Substation
- Sagebrush 220 kV T/L – Removal of 2,828 foot section near Vincent Substation
- Sagebrush 220 kV T/L – Installation of 3,750 foot section near Vincent Substation
- Antelope-Vincent No. 2 500 kV T/L – Construction of T/L
- Vincent Substation – Installation / Removal of TSP Structures

Construction equipment operating hours for the installation and upgrade of Segment 5 T/L activities are planned to be from approximately 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 TRTP.

### ***Project Elements/Construction Activities***

Project elements that will possibly be present or active throughout the construction of the transmission line include the following: new and/or improved access roads; wire setup sites (i.e., pull sites, wire splice sites, tensioning sites); transmission foundations, structures and wires; temporary guard poles; construction equipment and vehicles; helicopters; and permit requirements (e.g., BMPs).

Construction activities that will possibly be present or active throughout the construction of the transmission line include the following: grading for new and improved access roads and site preparation; removal of existing foundations, structures, and wires; installation of foundations, tower/pole structures, and wires; operation of construction equipment and vehicles; operation of helicopters; installation, maintenance and removal of guard poles; installation, maintenance and removal of permit requirements; and material salvage and disposal.

### ***Site Work***

Site work for the removal and installation of the transmission line will include grading for access roads and site preparation; removal of existing transmission structures/foundations, wires and hardware assemblies; and installation of new transmission structures/foundations, wires and hardware assemblies. Specific information on these activities is provided in the following text.



## **Access Roads**

In most areas, construction of the new 500 kV structures will involve clearing and grading of new, temporary and permanent access roads. Improvements to existing access roads may also include grading, blading and vegetation clearing or removal. New roads and planned improvements have been designed to be 14-foot-wide roadway plus additional roadway width to accommodate the necessary vehicles and equipment turning radii during construction. Additionally, some roads may be capped to protect archaeological resources. Berms or swales approximately 2 to 3 feet wide will be created on each side of the roadway where necessary. Roadway width will also be required to accommodate vehicle turning, vehicle turnouts, sidecast, and backslope.

In some locations, access to construction areas will take place in the form of temporary overland travel. In these areas, overland access will be made without the creation of new temporary or permanent access roads.

## **Site Preparation**

Construction activities associated with the removal and installation of the transmission line will require grading and other site preparation activities. Some of these activities would be temporary (e.g. land disturbance for construction staging areas and crane pads associated with tower assembly and erection). Other construction activities would be permanent, where the land would remain in use after construction (e.g. tower footings and access roads). Additionally, some sites may be capped to protect archaeological resources.

Typically, the staging area for construction activities would require an area of approximately 200 by 200 feet. In locations of relatively level terrain, only vegetation removal would typically be required to prepare the site for construction. In more rugged terrain or sloping site conditions, both vegetation clearing and removal and grading will be necessary to prepare the staging area for construction.

To support the equipment and vehicle traffic, the graded area will be compacted. Site preparation is necessary to accommodate new tower sites and perform crane operation during the assembly of tower structures, as well as to remove existing structures. Site preparation will be conducted in compliance with all permit requirements and installation of Best Management Practices.

## **Underground Major Activities**

Approximately 4,800 linear feet of Fiber Optic Cable (FOC) will be installed in new underground utility duct banks at seven locations along the route. These duct banks will connect FOC and optical ground wire (OPGW) between different transmission line towers. This will enable the construction of the projects' multiple configurations of transmission lines without affecting the communications path. The new underground utility duct bank installation is typically comprised of an approximate 1.5 foot wide by 3-foot-deep trench with two five inch PVC conduits installed. The trench will then be filled with a mixture of concrete and concrete slurry (bottom portion) and native soil (top portion) to existing grade.

## **Below Grade Major Activities**

It is anticipated that below grade activities such as excavation, drilling and foundation construction will be necessary for the construction of the new transmission lines. Construction of the new LSTs and TSPs will require construction of concrete foundations. Typically, LSTs will require four excavated holes of 3 to 6 feet in diameter and 15 to 40 feet deep. TSPs typically will require one hole up to 10 feet in diameter and 60 feet deep.

For removal sites, the existing footings would typically be excavated and removed to a depth of 2 feet below grade. Any remaining footing foundation would remain in place and the excavation filled and compacted to match the surrounding grade.



## Above Grade Major Activities

Segment 5 T/L construction generally consists of the removal of two 220 kV transmission lines, and the construction of a new 500 kV transmission line. Planned construction activities at these areas are summarized below.

- **Removal of Antelope-Vincent 220 kV T/L.** This activity includes removal of structures and their foundations (2 feet below grade), wires and hardware assemblies.
- **Removal of Antelope-Mesa 220 kV T/L for approximately 17 miles.** This activity includes removal of structures and their foundations (2 feet below grade), wires and hardware assemblies.
- **Removal of Sagebrush 220 kV T/L (2,828 foot section).** This activity includes removal of structures and their foundations (2 feet below grade), wires and hardware assemblies.
- **Installation of Sagebrush 220 kV T/L (3,750 foot section).** This activity includes installation of foundations, structures and wires.
- **Construction of Antelope-Vincent No. 2 500 kV T/L.** This includes the “untangling” of other existing T/Ls in the ROW (Midway-Vincent No. 3 500 kV T/L and TRTP Segment 2 500 kV T/L). This activity includes installation of foundations, structures and wires.
- **Removal of 3,350 circuit feet at Vincent Substation from Antelope-Vincent 220 kV T/L (Temporary TRTP Segment 2).**
- **Construction of TSP Structures at Vincent Substation.** This activity includes installation of foundations, structures and wires.

The removal of construction activities for these transmission structures will require a work area measuring approximately 200 feet by 200 feet. These areas will be located within the existing right-of-way corridor or approved work areas. An area within the approved work areas will be used for a crane pad. A crane will be used to install each structure.

Wire setup sites will be used to support wire stringing, including pulling, splicing, tensioning, and other disturbances along the route. Each pull/tension site, wire splice site, and wire setup will occupy a work area of approximately 500 feet by ROW width.

## Other Activities

Helicopters will be used during the removal and installation of wires. Existing identified construction disturbance areas will be used for helicopter landing zones, and will be included in the contractor's Congested Area Flight Plan to be approved by the Federal Aviation Administration. Any additional surveys or analysis required if new landing zones are identified will be conducted and the results provided to the CPUC.

- **Biological Resources:** The USFWS Biological Opinion (BO) was issued on July 31, 2010. The CDFG 2081 Incidental Take Permit has not been issued. The 2081 is required for Segment 5 for Swainson's hawk, least Bell's vireo and southwest willow flycatcher.

SCE submitted a report titled *SCE TRTP Component, Segment 5 Transmission Line Biological Review* prepared by ICF International, dated August 2010. The project area is composed of agricultural land, bunch grassland, big sagebrush scrub, California annual grassland, California annual grassland – wildflower field, desert wash, desert saltbush scrub, disturbed/developed, Joshua tree woodland, mixed chaparral, Mojave mixed woody scrub Mojavean juniper woodland scrub, nonnative woodland, rabbitbrush scrub, ruderal grassland, ruderal wetland, scrub oak chaparral, southern cottonwood willow riparian forest, and southern willow scrub (ICF 2010m). There are numerous isolated dry washes, non-riparian streams, and a small number of riparian vegetated streams within the project area. Notable features that cross the study area include Amargosa and Anaverde Creeks. A literature review was conducted for Segment 5 T/L to determine the potential for special-status biological resources to occur within a 5-mile radius of the project area. Focused surveys were conducted in 2009 for rare plants, Swainson's hawk (*Buteo swainsoni*), burrowing owl



(*Athene cunicularia*), least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), two-striped garter snake (*Thamnophis hammondi*), south coast garter snake (*Thamnophis sirtalis* ssp.), southwestern pond turtle (*Emys marmorata pallida*), and California red-legged frog (*Rana draytonii*). Additional focused surveys have been completed for 2010, and preliminary results were presented in the report. 2010 reports are being submitted to the CPUC upon completion.

Four special-status plant species were detected within the project area right-of-way during 2009 focused rare plant surveys (AMEC 2009c), including the following: short-joint beavertail (*Opuntia basilaris* var. *brachyclada*), California androsace (*Androsace elongate* ssp. *acuta*), Lemmon's syntrichopappus (*Syntrichopappus lemmonii*), and Peirson's morning glory (*Calystegia peirsonii*). Preliminary focused plant survey results from 2010 indicate the presence of adobe yampah (*Perideridia pringlei*), California androsace, Peirson's morning glory, short-joint beavertail, and slender mariposa lily (*Calochortus clavatus* var. *gracilis*) (ICF 2010m).

Fourteen incidental special-status species were detected during the 2009 and 2010 survey efforts: Cooper's hawk (*Accipiter cooperii*), ferruginous hawk (*Buteo regalis*), Le Conte's thrasher (*Toxostoma leonteri*), long-eared owl (*Asio otus*), merlin (*Falco columbarius*), San Diego horned lizard (*Phrynosoma coronatum blainvillii*), silvery legless lizard (*Anniella pulchra pulchra*), golden eagle (*Aquila chrysaetos*), northern harrier (*Circus cyaneus*), loggerhead shrike (*Lanius ludovicianus*), yellow-breasted chat (*Icteria virens*), tri-colored blackbird (*Agelaius tricolor*), willow flycatcher (*Empidonax traillii*), and yellow warbler (*Dendroica petechia*).

- **Cultural Resources.** SCE has submitted the following Cultural Resources Survey Reports for Segment 5 (review status of each report is noted in parenthesis following the report name):
  - *Isolated Historic Refuse Deposit – Determination of Eligibility (Appendix K) for Archaeological Site CA-LAN-3821H, SCE TRTP, Segment 5, Kern County, CA* (Comments provided in AE memorandum dated 7-9-10.)
  - *Isolated Historic Refuse Deposit – Determination of Eligibility (Appendix K) for Archaeological Site CA-LAN-3733H, SCE TRTP, Segment 5, Kern County, CA* (All parties concur with the findings, 7-19-10.)
  - *TRTP Segments 4, 5, and 10 – Proposed Capping of Cultural Resources (Draft 7/05/2010)*. (Under review.)
  - *Supplemental Archaeological Survey Report #1, TRTP Segment 5, Los Angeles County, CA* (AE Memorandum dated 9-6-10 concurs with report.)
  - *TRTP, Segment 5 and 7: NRHP/CRHR Review of SCE Company Antelope-Mesa 220 kV Transmission Line, Los Angeles County, CA*. (Under review.)
  - *Supplemental Archaeological Survey Report #2, TRTP Segment 5, Los Angeles County, CA* (Under review.)

A paleontological sensitivity review was conducted in 2010 (Paleo Solutions 2010). In accordance with the final version of the Paleontological Resources Management Plan (PRMP) and the paleontological sensitivity report, paleontological resources monitoring is recommended during any earth moving activities associated with the Segment 5 T/L.

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

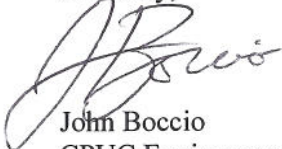
- All sensitive resource buffers shall be flagged prior to construction/site occupation. Resource flagging shall be field verified by the CPUC EM prior to site use.

- 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.
- All 2010 focused biological survey reports applicable to the project areas in this NTP shall be reviewed and approved by the CPUC prior to construction or site occupation at these locations.
- A biological preconstruction survey, including maps of identified resources, shall be submitted to and approved by the CPUC prior to site occupation/disturbance. All threatened or endangered species observations from the 2010 protocol level surveys shall be included on these project maps. Confirmation of agency notification of listed species observations in the project areas shall be submitted to the CPUC prior to site occupation.
- 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.
- No construction or site occupation shall occur in the project areas under consultation with CDFG for the 2081 Incidental Take Permit and 1602 Streambed Alteration Agreement until those permits are issued and all applicable conditions for Swainson's hawk, least Bell's vireo and southwest willow flycatcher are implemented.
- The Segment 5 T/L 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.
- Topsoil shall be salvaged and stored properly for replacement in the areas trenched for the fiber optic cable (FOC).
- Prior to helicopter use for work on Segment 5 T/L, a biological report shall be submitted to the CPUC regarding potential impacts to sensitive species.
- 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.
- Prior to site occupation and/or construction, SCE shall have all applicable cultural resources reports reviewed and approved by the participating agencies. Conditions noted within the subject reports shall be implemented.



- In accordance with the final version of the PRMP and the paleontological sensitivity report, paleontological resource monitoring shall be conducted during any earth moving activities associated with the Segment 5 T/L.
- If unanticipated biological, cultural or paleontological resources are detected, the CPUC EM shall be notified immediately.
- The Phase I ESA for Segment 5 T/L shall be reviewed and approved by the CPUC prior to the commencement of construction activities.
- The City of jurisdiction's 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.
- SCE shall provide a letter to the CPUC from a California registered geotechnical engineer following the completion date of all of the foundation activities for each segment. The letter will confirm that SCE followed the geotechnical report recommendations and the common engineering practice in southern California at the time of the project.
- For the TRTP project-wide Fire Management Plan (non-ANF), SCE requested that they be allowed to submit a separate Operations and Maintenance Fire Management Plan 60 days prior to energizing transmission lines rather than prior to construction. The CPUC agreed to this change in the timing of the submittal.
- 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.
- 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