

**PUBLIC UTILITIES COMMISSION**

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298

July 30, 2009

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

RE: SCE Antelope-Pardee 500 kV Transmission Project, Segment 1 – Variance Request #53

Dear Mr. Johnson,

On July 29, 2009, Southern Californian Edison (SCE) submitted a variance requesting that the California Public Utilities Commission (CPUC) allow a modification to existing tower M24-T1 on Section 1, so that an excessive height differential between Const 25 and M24-T1 can be corrected on Segment 1, Section 1 of the Antelope-Pardee 500 kV Transmission Project, in unincorporated Los Angeles County. **This Variance Request is approved by CPUC for the proposed activities based on the following factors:**

- SCE submitted the following information:

Southern California Edison is requesting that the California Public Utilities Commission (CPUC) allow a modification to existing tower M24-T1 on Section 1, so that an excessive height differential between Construct 25 and M24-T1 can be corrected. This modification is necessary to reduce the uplift on the V-string insulators that exists with M24-T1 in its current configuration. The tower is located approximately 450 feet east of new Construct 25, at the end of paved Kathleen Street Court in unincorporated Los Angeles County. Due to the height modification for M24-T1, it will be necessary to place additional weights on all phases of the next sequential tower, M23-T5, of the Santa Clara-Vincent 220 kV line.

**Background**

The existing M24-T1 structure of the 220 kV Santa Clara-Vincent line was modified with new insulators when this line was connected to a joint tower with the new Segment 1 (500 kV Antelope-Pardee line), at Construct 25. The height differential from Construct 25 to M24-T1 caused uplift on the V-string insulators of the existing M24-T1 tower. To correct the uplift condition, a 39 foot body extension is to be added to M24-T1, longer legs installed and the location shifted a small distance. The center of the tower will shift 9.4 feet and three new foundations will be poured. The M24-T1 Leg A foundation will be reused and therefore remain in its current location. All four legs are to be replaced from salvaged material from the relocated portion of the 220 kV Santa Clara-Vincent line. The replacement legs and body extension will increase the structure height a total of 51 feet, from the nominal height of 94 feet to 145 feet, measured from the bottom of the tallest leg to the top of the tower. Even with the increased height, V-string weights are needed on M24-T1 to prevent uplift. The weights required are 3000 lbs to the center phase and 1200 lbs on the outer phases. Due to the height modification on M24-T1, 600 lb weights on all phases are also required on M23-T5.

**Construction**

The sequence for the additional work to be performed at structure M24-T1 in Segment 1 will be as follows: A pad site will be constructed at the structure site to provide a level area for operation of the foundation digger and the crane. This pad site construction will be performed within the new tower site disturbance area requested (100 foot radius) and the already approved disturbance area for wire setup site (WSS) 14. Once completed, heavy equipment will be moved onto the pad site by way of the existing road with assistance from D8 dozers due to the steep grade. Directly following the staging of the heavy equipment, the foundation work will begin. The foundation work will require

digging three foundations, Legs B, C and D. Holes approximately four feet in diameter and 12 feet in depth will be required. The existing Leg A will be utilized for the new tower. Legs B and C will be dug with a LoDrill pressure digger and Leg D will be dug by hand. In accordance with all regulations set forth by OSHA in regard to shoring, the Contractor will take proper measures to protect personnel working below ground. Once all three legs are dug, foundation placing and pouring will be completed consistent with standard foundation practices. Due to the steep terrain in the area, SCE is proposing to cut off the old stub angles and leave the cement footings in place for legs B, C, and D. This will help to maintain the stability of the hillside while minimizing the erosion potential and additional disturbance that would occur if the foundations were to be removed. Once the foundations have been placed and poured, the Contractor will take the previously scheduled clearance on the Santa Clara-Vincent 220 kV line. This clearance will require the line to be out of service for approximately 48 hours. Upon receipt of the clearance, the conductor wire will be grounded at Construct 25. Next, the wire will be unclipped at M24-T1 and will be allowed to float or be tag-lined in order to keep it from coming into contact with the steel structure. Rubber gutting will then be used as required to help protect the conductor. With the wire out of the way, a 90 ton crane will be used to remove the top bridge section from the tower body. This will be completed in one pick and the bridge will be set on the ground nearby. This will be followed by removing the complete tower body which will be set alongside the bridge section. Lastly, the old legs will be removed from all four of the existing foundations which will complete the removal of the existing tower. With removal complete, three new legs will be set on the new foundations (Legs B, C & D) and one new leg will be set on existing foundation (Leg A). Next, the new body extension can be erected, followed by the original main tower body which was previously removed. With the tower body set, the center conductor phase will be laid across the center of the tower while being protected by lagging. The original bridge can then be replaced on the tower. Finally, all three phases will be clipped in and the required weights installed.

With all work requiring the clearance now complete, the Contractor will remove the grounds at Construct 25 and release the clearance. Please note that the additional weights required at M23-T5 will be installed during the clearance utilizing a one-ton truck and a clipping crew. A tower site disturbance area and use of an existing access road is being requested to complete the weight installation. This work will not affect the work being completed at M24-T1. Immediately following the removal of the heavy equipment, tower site restoration can be completed. This will complete all work associated with M24-T1. A map depicting the additional disturbance areas required to perform the work can be found in Attachment B. A typical disturbance area of 100 foot radius is requested around towers M23-T5 and M24-T1. Use of an existing road to M23-T5 is also requested. No grading will be performed at M23-T5, and grading work associated with M24-T1 has been described in the first portion of this letter. The existing access road to M23-T5 will not be upgraded and will be used as is.

For the foundation work, SCE would like to complete the work as soon as possible. As for the structure and wire work, the Contractor plans to utilize the outage planned for the Santa Clara – Vincent 220 kV line (wire stringing from Construct 25 to 26A) to complete the work on M24-T1. The outage date is dependent on the delivery date of the replacement steel for Construct 26A. At this time the replacement steel for Construct 26A has not arrived on site.

- **Biological Resources:** Biological surveys of the subject area were conducted on July 1, 2009. Transects approximately 30 feet apart were walked within the impact area to visually search for focus species. An additional 500-foot buffer from the limits of proposed ground-disturbing work was also surveyed for nests. All plant and wildlife species observed were identified and documented and identified sufficiently to determine sensitivity status. Relative to MM B-12, areas west of Const Tower 22 (west of Haskell Canyon) support coastal sage scrub/chaparral habitat, and represent potential, yet marginal, habitat for coastal California gnatcatcher. Protocol surveys were conducted in 2007 and 2008 with no recorded gnatcatchers. No target special interest (i.e., rare) plant or wildlife species were found during the biological survey. A old Red-tailed hawk nest located approximately 150 feet southwest of M24-T1 tower was determined to be inactive. Common wildlife species were noted including California quail (*Callipepla californica*), fence lizard (*Sceloporus occidentalis*), and mourning dove (*Zenaida macroura*). No active nests were found within the survey area. No

signification impacts to biological resources are anticipated with the implementation of the conditions noted below.


- **Cultural Resources:** The disturbance area associated with M24-T1 was surveyed in 2008. The survey did not identify cultural resources at or adjacent to the M24-T1 disturbance area. As a result, no further cultural resources study is recommended at M24-T1. In addition, a records search for the area encompassing M23-T5 was conducted in 2006. The results of the records search indicate that no cultural resources have been recorded at or adjacent to Tower M23-T5. As no cultural resources have been recorded within the vicinity of M23-T5 and since earth-moving activities are proposed at this location, no further cultural resources study is recommended. No significant impacts to cultural resources are anticipated.

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

- Biological surveys shall be re-conducted and results submitted to the CPUC for review and approval prior to equipment and vehicles mobilizing to the project 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 conducted prior to site occupation, including nesting bird surveys.
- SCE has assigned Biological Monitors to the Project. They are responsible for ensuring that impacts to special-status species, native vegetation, wildlife habitat, or unique resources are minimized to the fullest extent possible. The Biological Monitor shall be on-site to monitor all work and shall conduct sweeps of the approved areas which will be impacted. 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 only with the approval of the CDFG and/or USFWS (Please note that the CPUC must be notified prior to the onset of construction). 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. If nesting birds move into the work area SCE will monitor the nest to ensure that their activities do not result in the loss or failure of the nest. A preliminary 300-foot buffer area around the nest will be established and SCE shall coordinate with the CPUC, CDFG and/or USFWS.
- After use, all areas proposed under this Variance shall be completely restored to preexisting conditions following the construction activities.
- If construction debris or spills enter into environmentally sensitive areas, the jurisdictional agencies and CPUC EM shall be notified immediately.
- If not already provided, copies of all landowner agreements/lease agreements shall be submitted to the CPUC prior to use.
- Prior to the commencement of construction activities, all crew personnel including crane, 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 construction. No movement or staging of construction vehicles or equipment shall be allowed outside of the approved areas.

- Storm Water Pollution Prevention Plan (SWPPP) will be implemented at all times during the use of the project area, as will Best Management Practices. Implementation of all necessary erosion control devices will be properly installed and maintained throughout the duration of project area use. A copy of the SWPPP will be available on-site for reference.
- 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.
- Copies of all relevant permits, compliance plans, and this Variance shall be available on site for the duration of construction activities where applicable.

Sincerely,



John Boccio

CPUC Environmental Project Manager

cc: V. Strong, Aspen