STATE OF CALIFORNIA ARNOLD SCHWARZENEGGER, Governor
PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

March 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 #36

Dear Mr. Johnson,

On March 9, 2009, Southern Californian Edison (SCE) submitted Variance Request #36 to allow a variance to the Building Construction Noise regulations during heavy-lift helicopter operations, County of Los Angeles, Segment 1. **This Variance Request is approved by CPUC for the proposed activities based on the following factors:**

- SCE submitted the following information:

Heavy-lift helicopter operations are anticipated to occur twice for a duration of ten days each over the course of construction on Segment 1 of the Tehachapi Renewable Transmission Project. SCE is requesting a 6:00 a.m. start time for the twenty days (ten days per period) of these operations. SCE is also requesting that Sunday work be allowed in order to facilitate these operations; the Sunday work amounts to a total of two Sundays which would be affected. Once the specific dates of heavy-lift helicopter operations have been established, they will be provided to SCE for submittal to the CPUC. Also, a noise variance will be obtained from the Los Angeles County Department of Public Works (LADPW) prior to the commencement of the variance work.

Description of Work

General Overview
The towers to be constructed on the Angeles National Forest (ANF) are steel lattice structures. The steel structure components are delivered to the work areas known as Assembly-Fly Yards (hereafter referred to as "fly yards") so that they can be assembled by bolting the pieces together into sections and then preparing them for helicopter flight. The weight of the components will dictate how each structure is assembled. One structure may have the base, the mid-section, and the top assembled as three separate sections. Final determination will be made based on the weight of the structure and the amount of weight that the large helicopter can safely lift. Further information regarding factors which affect the lift capacity of the helicopter is discussed below.

Fly Yard Locations
For the heavy-lift portion of the Project, PAR Electrical Contractors, Inc. (PAR) will primarily utilize two types of helicopters – a Sikorsky S64 (Air Crane) and a Kman Kmax – to fly approximately 59 towers in multiple lifts from fly yards both on and off the ANF to the tower locations. Those designated fly yards off the ANF also serve as marshalling yards for the Project, and are known as the Pumpkin Upper Yard, the Hydrant Yard, and the Reitano Yard. The first yard is located on Bouquet Canyon Road just southwest of Vasquez Canyon Road near Santa Clarita (Pumpkin Yard), the second yard is located on Los Angeles Department of Water and Power property on Spunky Canyon Road just northwest of Bouquet Canyon Road (Hydrant Yard), and the third yard is located on Elizabeth Lake Road east of San Fransisquito Canyon road in Leona Valley (Reitano Yard). Unlike the fly yards in the ANF which are located in remote areas, the off-ANF yards will more likely expose the public to noise during heavy-lift operations.

Sequence of Activities
During the heavy-lift operations, crews will be on site at both the fly yard and at the tower site receiving location (Right-of-Way), in addition to the other support crews present for operations. The fly yard crew is responsible for, among other duties, connecting the stationary chokers to the chokers on the aircraft's anti-rotational device. The Right-of-Way crew is

responsible for securing the tower section to the lower section of the tower after the aircraft has released the load. The tower section is then visually inspected for obvious defects from the ground. After the visual inspection is complete and the suspended tower section is deemed safe, the lead lineman will climb the step bolt leg for a closer visual inspection, checking for any other rigging defects before allowing the other crew members to climb into working position. The tower section will then be secured in place by the Right-of-Way crew.

Helicopter Types and Purpose of Use

There are three main classes of helicopters which will be in use by PAR during the helicopter assembly operations. These three are: heavy lift, medium lift, and light (support) helicopters. Two Kmax helicopters (medium lift) will fly in the lower sections of the towers. The Sikorsky S64 (heavy lift), which has a 18,500 pound lifting capacity, will fly in the lattice steel upper sections as they require heavier lifts. An Astar ASD350 (medium lift) and Hughes 500F (support helicopter) will also be used to coordinate crew movement, tower setting, and erection support. Multiple support helicopters will be utilized for operations, as SCE and Burns and McDonnell may also utilize support helicopters for their inspections personnel during these operations.

Mitigating Factors

The fly yards represent a very specific set of locations calculated out for the distance that the helicopter can fly with a load-bearing weight. Helicopters are scheduled to fly with maximum loads and minimum fuel. Fuel must be minimized to allow for carrying capacity of the tower weights, while still keeping enough fuel for the helicopter to carry the tower to its site and safely return to the fueling landing zone (LZ). The balance between fuel load, steel weights, and carrying distance is very critical, where even the slightest added distance can have enormous impacts, if not make the task physically impossible and unsafe. In addition to the physical difficulties in carrying enough fuel to transport a load for long distances, there is the safety involved in flying with a suspended load. The fly yards need to be located where the helicopter can transport the suspended load from the pickup site to the tower site without flying over residences, businesses, or public places, and also where the flight path over roads and other transportation lanes is minimized. Any flight of a suspended load over a public road would require that all traffic be stopped while the load crosses, thus increasing public inconvenience.

Due to the diligent planning required to schedule the heavy-lift helicopters, PAR intends to mobilize the Sikorsky S64 to the Project only twice. The Sikorskys are utilized by many other agencies and entities, such as fire suppression during large scale fires, and because of this coordination their availability is limited and must be scheduled in one continuous block of time.

Heavy-lift Operation Dates

Due to many factors which can influence the progress of the Project, SCE currently does not have the dates for the two 10-day operations needed in this variance. Weather, especially, has been a very influential factor in the progress of operations. As soon as construction operations have progressed to a point where heavy-lift operations may be accurately schedules, PAR will notify the appropriate parties (L.A. County, ANF, and CPUC) of the scheduled dates.

- The Hydrant Yard is owned by LADWP. The LADWP permit for use of the Hydrant Yard does not specifically list helicopter use starting at 6:00 a.m., including Sundays, as a prohibited activity at the yard.

- There are residents located within visual and audible proximity of the subject yards. When use of the Hydrant Yard started, a compliant(s) was received because the portable light banks were being left on past 10:00 p.m. by security crews. This problem was resolved and no subsequent complaints have been received. Complaints have also been received regarding helicopter flight patterns from the Pumpkin Yard. These complaints were also resolved. No significant impacts to nearby residents are anticipated due to proposed heavy-lift helicopter operations with the implementation of the conditions noted below and given the temporary nature of heavy-lift helicopter use.

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

- As proposed, the use of the heavy-lift helicopters shall be restricted to two periods, each not to exceed 10 days, unless weather conditions warrant otherwise.

- Prior to the commencement of heavy-lift helicopter use, a variance will be obtained from the Los Angeles County Department of Public Works (LADPW) and provided to the CPUC EM.

- Because of the excessive noise generated by heavy-lift helicopters, prior to the commencement of their use, an update to the original noticing shall be sent to affected residents and property owners. The update shall specify the reason for heavy-lift helicopter use (avoid construction of excessive access roads within the ANF) and its temporary nature, anticipated time frames, duration, and noise abatement measures for residences (i.e., close windows, keep pets inside, etc.).

- Prior to the commencement of heavy-lift helicopter use at the Hydrant Yard as proposed (6:00 a.m. start, including Sundays), SCE shall provide concurrence from LADWP that such activity is allowed.

- A log of heavy-lift helicopter use shall be maintained that specifies the yard, date, timeframe, and type of helicopter. The log shall be provided to the CPUC EM on a weekly basis.

- All complaints received regarding heavy-lift helicopter use shall be immediately provided to the CPUC Project Manager and CPUC EM, including any proposed resolution measures.

- Copies of all relevant permits, compliance plans, and this Variance shall be available on site for the duration of construction activities.

Sincerely,

John Boccio
CPUC Environmental Project Manager

cc: V. Strong, Aspen