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## PROJECT MEMORANDUM

### ANTELOPE TRANSMISSION PROJECT, SEGMENTS 1, 2 AND 3A

**To:** John Boccio, Project Manager, CPUC  
Justin Seastrand, Project Manager, ANF  
**From:** Vida Strong, Aspen Project Manager  
**Date:** May 22, 2009  
**Subject:** Weekly Reports 68 and 69: April 26 to May 9, 2009.

## INTRODUCTION

This report provides a summary of the construction and compliance activities associated with the SCE Antelope-Pardee 500 kV Transmission Project, Segment 1, and SCE Antelope Transmission Project, Segments 2 and 3A. A summary of the Notices to Proceed with construction and Variance Request activity are also provided (see Tables 1 and 2, respectively, near the end of this report). Finally, a summary of Temporary Extra Workspace and non-compliance activity are provided in Tables 3 and 4, respectively.

## SEGMENT 1: Antelope-Pardee

The Antelope-Pardee Project, Segment 1, is comprised of three sections:

- Section 1: Pardee Substation to the ANF boundary.
- Section 2: ANF
- Section 3: ANF Boundary to the Antelope Substation

During the subject period, construction activity continued under Notice to Proceed (NTP) #7 for construction of Section 1 and NTPs #2 and #11 for construction of Section 3, including the Antelope Substation. In addition, work continued under NTP #18 and the Special Use Permit (SUP) for construction of Section 2, Angeles National Forest. Equipment, materials, and office trailers are being staged in approved construction yards.

## SECTION 1

**CPUC/Aspen Environmental Monitors (EM):** Jenny Slaughter and Arturo Ruelas.

### Summary of Activity:

The Shoofly (temporary bypass of Santa Clara Vincent line) of the Antelope Pardee Transmission Line Project authorized under NTP #5 was energized between May 2008 and March 2009 and has been removed. NTP #7 for Section 1 of Segment 1 was issued by the CPUC on May 8<sup>th</sup>. Construction activities approved under NTP #7 include the removal of the Saugus-Del Sur 66 kV line and towers, the construction of the new 500 kV double circuit lattice towers, and the removal of the existing 220 kV Santa Clara Vincent line and towers. The lattice tower structures originally supporting the Santa Clara-Vincent 220 kV line have been replaced with the 500 kV double-circuit towers to accommodate both the Santa Clara Vincent and Antelope Pardee lines between the Pardee Substation and Structure 25 in Santa Clarita. Construction activities under NTPs #5 and #7 during the subject period consisted of the following activities.

1. All new 500 kV lattice steel towers have been erected in Section 1.
2. Final wire installation work along the new 500 kV double circuit towers has been completed between the Pardee Substation and Structure 25. Wire conductor installation between Structures 25 and 28 (the last towers in Section 1) is expected to occur once the towers in Section 2 are completed.



3. Removal of the original 220 kV Santa Clara-Vincent lattice towers began in Section 1. SCE crews plan to remove 4 out of the 14 wreck-outs that remain. The wreck-out towers replaced with new 500 kV towers 10 and 11 were removed by SCE crews during the subject period. The two other towers planned for dismantling by SCE crews will occur once the conductor has been removed in this area.
4. Road recontouring of the temporary Shoofly access roads is currently taking place. Revegetation of these areas is planned for later this year.

**Environmental Compliance:**

1. Burns and McDonnell environmental staff are conducting regular monitoring of Section 1 work areas and wreck-out towers for bird nesting activity.
2. An active bird nest was found along the access road to Shoofly 15. Work was able to occur in this location once the chicks fledged.
3. An active dove nest was reported on April 27<sup>th</sup> near Tower 19. The nest was within 60 feet of an area where the contractor needed to remove rock from the access road. Permission was granted to remove the rock within the 300-foot buffer for active nests by CDFG.
4. SCE submitted a request to reopen the Lower Pumpkin Yard for construction use. The request was approved by CDFG with the same conditions as before, that access to the yard would not take place during flows of Bouquet Creek which supports an endangered fish species and crosses the entrance to the yard. If water is present, crews are not permitted to cross the drainage and are required to notify CDFG and the CPUC.

No CPUC Non-Compliance Reports (NCR) or Project Memoranda (PM) was issued during the subject period for Section 1 Construction. Non-Compliance activities for the project to date are summarized in Table 4.

**Agency Representatives:**

None.

**SECTION 2, ANF & ADJACENT YARDS**

**ANF Representatives:** Justin Seastrand, George Geer, Mike Roberts, Janet Nickerman, Katie VinZant  
**CPUC/Aspen Environmental Monitors (EM):** Jenny Slaughter and Arturo Ruelas

**Summary of Activity:**

On October 23, 2008, the Angeles National Forest issued a Special Use Permit for construction of the new 500 kV towers and the removal of the existing 66 kV towers on National Forest System lands; a Notice to Proceed (NTP) from the CPUC was issued on October 27<sup>th</sup>. The 66 kV conductor removal has been completed and was permitted by a separate SUP issued by the ANF and NTPs issued by CPUC.

Construction of Section 2 on the ANF began on November 12<sup>th</sup>. Crews assemble each morning at the Pottery Yard on Bouquet Canyon Road at 6am. Crews plan to work 6 days a week if Project Activity Levels (PAL) allow. Sunday micropile work has also been authorized by the ANF. PAL levels for the subject period are summarized below:

<b>Date</b>	<b>Project Activity Level (PAL)</b>	<b>Activity Allowed/Conducted</b>
Sunday, April 26	D	Work is allowed
Monday, April 27	C	Work is allowed
Tuesday, April 28	B	Work is allowed
Wednesday, April 29	C	Work is allowed
Thursday, April 30	C	Work is allowed
Friday, May 1	D	Work is allowed
Saturday, May 2	D	Work is allowed
Sunday, May 3	A	Work is allowed
Monday, May 4	C	Work is allowed
Tuesday, May 5	D	Work is allowed
Wednesday, May 6	D	Work is allowed
Thursday, May 7	D	Work is allowed
Friday, May 8	EV	Work is allowed
Saturday, May 9	E	No Work is allowed without Variance

Construction activities during the subject period consisted of the following:

1. On May 1<sup>st</sup>, a project helicopter had to make an emergency landing on the bank of the Bouquet Reservoir. The helicopter landed partially in the water and LADWP was immediately notified. LADWP and PAR Environmental Staff reported that there was no spill of hazardous materials on site. The ANF Permit Administrator was also notified of the emergency landing. The CPUC Project Manager has requested an incident report, but none has been provided to date.
2. On May 5<sup>th</sup>, ANF representatives Justin Seastrand and Nathan Still toured the proposed new access road to WSS 23, near the Bouquet Reservoir. The alternative access was requested by SCE to avoid adjacent cabin owners and because the original access road has adjacent trees which would require trimming in order for the large equipment to access the stringing site. Because the alternate access is on ANF and LADWP property, both agencies will have to issue approval for road use. A Variance allowing use of this alternate access is currently under review by the ANF and the CPUC.
3. An active Raven nest has been identified in Tower 33 on the ANF. PAR plans to conduct wire stringing between Towers 33-41 in the near future and will coordinate with the ANF on approval to work in this location.
4. A partially constructed Raven's nest was removed from Tower 36 on April 27<sup>th</sup> and again on April 30<sup>th</sup>.
5. Brush clearing crews have completed clearing vegetation in disturbance areas on the ANF; however, some tower assembly areas and fly yards may require additional vegetation mowing if they will continue to be used for construction.
6. Footing preparation crews have completed hand digging on all ANF tower sites. The hand excavations/footing preparation takes place prior to the mobilization of the micropiling crews.
7. Micropiling crews are constructing foundations between Structures 78-87 on the ANF. Grouting crews are working out of the Hydrant Yard for the micropiling operations; grout is flown into the micropile sites from the Hydrant Yard. All towers on the ANF are constructed with micropile foundations except for the road accessible sites (4 towers total).
8. Tower foundation capping is taking place after micropiling has been completed. The foundation capping crews worked between structures 74 and 87 during the subject period. Concrete for the foundation caps is being flown out the assembly areas on Del Sur Ridge and out of the Hydrant Yard.
9. Tower section assembly is occurring within the tower assembly areas on the ANF, as well as in nearby yards.

10. The heavy lift helicopter, an Ericsson skycrane, is scheduled in June to fly in and assemble tower sections for structures 31, 57-87.
11. United Construction crews (PAR's subcontractor) finished removing the 66 kV lattice towers from the ANF; however, some of the foundations have been left in place. During the subject period, construction crews removed most of the 66 kV footings. Project environmental staff were present to verify removal and remove any microtrash left on site.

### **Environmental Compliance**

1. Microtrash on the ANF continued to be present in assembly areas and at tower sites. The ANF Permit Administrator indicated that microtrash must be collected at all work areas at the end of each day. This issue will be continually monitored during construction on the ANF. Burns and McDonnell have dedicated monitors to survey the work areas for microtrash.
2. A sage sparrow nest (now containing eggs) was identified within 50 feet of SR 41. Biologists will continue to monitor the nest during construction activities.
3. An inspection of the newly constructed roads on the ANF was conducted by Mike Roberts, ANF. Mr. Roberts noted several road drains would require regular cleaning out and run off silting in areas of riprap along SR 52 should be monitored.
4. All vehicles and equipment are being washed before entering ANF lands at the Pumpkin Yard wash station. The wheel wash, which is on the north side of Bouquet Creek and does not require use of the stream crossing for access, will remain in its current location. Other wheel wash stations have been set up at the entrance to Spur Roads 41 and 52, Spunky Edison Road, and the access to Towers 76-77. All vehicles and tracked equipment must be washed prior to entering these new roads in order to minimize the spreading of invasive plant species in the recently disturbed soils.
5. Changes to two activities were granted by the ANF Project Administrator. Tower assembly and chipping of vegetation in Landing Zones can continue beyond 1pm on EV days. These two activities can occur as long as a water truck is present with a minimum of 300 gallons of water and a charge hose, and all the vegetation has been cut down to two inches.
6. The ANF Permit Administrator has requested that all topsoil storage sites (SR 41, 52, and 73 and associated WSS sites) be flagged and identified with ESA signs.
7. There must be a ten foot clearance around all equipment and engines, and all the vegetation must be cut to a minimum height of two inches.
8. SCE must provide updated bird nest tracking tables and maps on a weekly basis to all project biological monitors and CPUC EMs.
9. A horned lizard was reported in a helicopter landing zone near Tower 80.

No CPUC Non-Compliance Reports (NCR) or Project Memoranda (PM) was issued during the subject period for Section 2 construction. Non-Compliance activities for the project to date are summarized in Table 4.

### **Agency Representatives during Construction (other than ANF representatives and the CPUC EMs):**

None.

## **SECTION 3, ANTELOPE SUBSTATION, & ADJACENT YARDS**

**CPUC/Aspen Environmental Monitor (EM):** Jenny Slaughter and Arturo Ruelas.

### **Summary of Activity:**

Section 3 includes the construction of the 500 kV towers, the dismantling of the Saugus–Del Sur 66 kV transmission line, the construction of the 12 kV distribution line, and the Antelope Substation expansion for the Antelope Pardee Project.

NTPs #10 (for the 12 kV component of Section 3 of Segment 1) and #11 (for the 500 kV tower constructions and dismantling of the 66 kV transmission line) were issued by the CPUC on June 25<sup>th</sup>. In Section 3, a combination of single circuit lattice towers and tubular steel poles are used to support the new 500 kV line. Construction activities approved under NTP #2 continued for the Antelope Substation expansion work. Construction of the 12 kV distribution line as authorized under NTP #10 has been completed, and the line was energized on September 2<sup>nd</sup>.

Construction activities under NTPs #2 and #11 during the subject period consisted of the activities noted below. PAR Construction is responsible for constructing the 500 kV structures.

1. Most towers in Section 3 have been assembled, with the exception of towers entering the Antelope Substation. Wire stringing, clipping in, sleeving, and sagging was completed between Towers 96 and 112. Installation of the static and fiber optic lines between Towers 96 and 112 is on hold due to active great horned owl and kestral nests within 200 feet of Tower 103.
2. Grading, grounding, and fencing of the Antelope Substation expansion area has been completed. An earthen berm was constructed surrounding the expansion area to assist in drainage. Crews continued the construction of the new substation components within the expansion area.

### **Environmental Compliance**

1. Several new nests were identified in Section 3. Partial raven nests under construction in the new towers were removed from Towers 91, 96, 98, 105, 108, 110, and 112 in Section 3.
2. A great horned owl and a raven nest have been identified in the Antelope Substation. According to SCE, both nests will not be impacted by nearby construction and will be left in place.
3. An active house finch nest was identified in a boom truck located in the Avenue J yard on April 26<sup>th</sup>. The truck was red flagged and will not be moved until the chicks fledge.
4. A horned lizard was reported at the Avenue J yard on May 6<sup>th</sup>.

No CPUC Non-Compliance Reports (NCR) or Project Memoranda (PM) was issued during the subject period for Section 3 construction. Non-Compliance activities for the project to date are summarized in Table 4.

### **Agency Representatives during Construction (other than CPUC EMs):**

None.

## **SEGMENT 2: Antelope-Vincent**

### **Summary of Activity:**

The Notice to Proceed for Segment 2 construction (NTP #14) was issued by the CPUC on September 30<sup>th</sup>. Segment 2 involves the construction of a new 21.0-mile single-circuit 500 kV transmission line initially to be energized at 220 kV and 0.6 miles of a new 220 kV transmission line connecting SCE's Antelope Substation in the City of Lancaster to the Vincent Substation in incorporated Los Angeles County. Segment 2 also includes demolition and relocation of 4.4 miles of existing 66 kV sub-transmission line to

accommodate construction of the new 500 kV transmission line in the right-of-way and modifications to the Vincent Substation.

1. The 66 kV line has been relocated and energized between the Antelope Substation and the California Aqueduct. All of the original wood poles have been removed. Two of the new wood poles were replaced with Tubular Steel Poles (TSPs) during an outage.
2. During the subject weeks, PAR crews began working around two of the three “Hijack” areas: Northern Hijack Towers 23-30 and Middle Hijack Towers 33-37. Construction activities included the stringing of the new conductor (wire) between Towers 23-30, the modification of existing transmission structures, and the setting of guard structures (guard poles) for the protection of roadways and other transmission or distribution lines during the wire stringing operation.
3. PAR crews started work on the existing Sagebrush Transmission Line Modifications at three locations. North of Elizabeth Lake Road, North of Sierra Highway, and Vincent substation. These modifications are required in order to construct Segment 2. The new Midway-Vincent transmission line, built on new infrastructure, would travel underneath other existing transmission lines in the existing Midway-Vincent right-of-way.
4. Wire stringing for the Northern Hijack between Towers 25-33 was partially completed during the subject weeks, and was conducted during an outage. The remainder of the stringing work will take place in these areas when another outage is scheduled.
5. Modification of Sagebrush Structure 211 continued. The existing single pole tangent structure was replaced with a 2-steel pole H-frame structure (211-1/211-2) in the same location.
6. Modification of Sagebrush Structures 249 and 250 continued. These single pole structures are being replaced with 2-steel pole H-framed structures (249-1/249-2 and 250-1/250-2) in the same locations.
7. At the Vincent Substation, PAR replaced existing Tower 266 with a taller 2-steel pole H-framed structure (02-1/02-2) in the same location.
8. All the TSPs for the shoofly component near the Vincent Substation have been installed. During the subject weeks, crews removed the wire along the Eagle-Vincent 220 kV between Structures 18-3 and 27-1 during the schedule outage and under Variance #38.
9. All access roads for the 500 kV towers have been completed in Segment 2 including the access road (AR-62) near Tower 83 after the lark sparrow chicks had fledged.
10. Pad grading for all tower sites have been completed.
11. Drilling and pouring of foundations for all tower sites except 115 were completed during the subject weeks.
12. Steel assembly continued at Towers 0-2, 5-18, 23, 35-39, 41, 46-47, 52, 56, 58, 59, 105-107, 110, VSF-2, and VSF5. Assembly at Towers 3, 4, 19, 20, 21, 22, 24-34, 34A, 40, 42, 43, 44, 48, VSF1, VSF3, and VSF4, Sagebrush 2A, 211, 249, 250 has been completed.
13. Grading and clearance of the two Wire Stringing Sites (WSS) 39 which were on hold due to an active birds nest was started after the California thrasher chicks had fledged.

#### **Environmental Compliance:**

1. On April 21<sup>st</sup>, the CPUC EM learned that SCE had contacted USFWS and CDFG for approval to remove three active house finch nests from equipment in Segment 2 and at the Avenue J Yard. The CPUC EM reminded Burns and McDonnell environmental staff that the CPUC requires documentation of approvals granted by resource agencies prior to this activity occurring. Artificial nesting boxes were used to relocate the nests into, but the adult birds did not follow and incubate the eggs in all three cases.

2. On April 25<sup>th</sup>, another house finch nest containing one egg was moved into a nest box at the Hydrant Yard by Burns and McDonnell environmental staff. In this case, prior approval from CDFG and USFWS was not granted before this nest removal took place. This nest was also abandoned by the adult birds. SCE was reminded again that the documentation for active nest removals must be provided to the CPUC prior to moving the nests.
3. On May 7<sup>th</sup> one more house finch nest with four eggs was relocated into a nest box near Tower 33 after approval was granted by the CDFG and USFWS (see Figure 3). The nest was found inside the cab of a V-Groove puller needed to complete the outage work on the Eagle Rock-Vincent Transmission line and to minimize the risk to the public. The relocation was unsuccessful and the eggs were taken to the Ojai-Raptor Center for incubation.
4. Several new nests were reported in Segment 2 during the subject period. A scrub jay nest with young was found 150 feet from a wire site between Towers 65 and 65A, a lark sparrow and a California towhee nest within 150 feet of Tower 97, two mockingbird nests near Towers 99 and 37, and two house finch nests found in construction equipment near Tower 36. SCE gained approval from CDFG to continue work in these areas and plans to monitor the nests for the next few weeks. Partial raven nests were removed from Towers 3, 24, 26, 32, and M88 during the subject period.
5. A horned lizard was reported at the entrance to the R-8 yard by a biologist conducting surveys. This yard is not currently in use.
6. As conditioned in the NTP, all sensitive resources are being flagged for avoidance and verified by the CPUC EM prior to construction.
7. An addendum for modifications to the Sagebrush structures in Segment 2 was approved by the CPUC on March 16. Work associated with the modifications is occurring once the biological clearance surveys have been completed and field verified by the CPUC EM.
8. Juniper and Joshua trees impacted by construction are being tracked by Burns and McDonnell environmental staff for future mitigation.
9. For the Amargosa Creek crossing, additional Best Management Practices (BMP's) were added along the roadway to capture silt and other debris before it enters the creek. No rolling dips, straw wattles or water bars will be installed or constructed within the creek channel.
10. Several partially constructed or abandoned raven nests were removed in Towers 23, 26, 32, and 33. Nests in SCE towers to be removed for the Hijack near Structures 76 and 79 will be left in place since PAR does not anticipate work in those towers for some time.
11. On May 8<sup>th</sup> a red-tailed hawk was found injured in a ravine near Tower 70. The cause of the injuries was unclear, and the bird was transported to North Valley Veterinary Clinic in Lancaster.

No Non-Compliance Reports were issued by the CPUC EM for the subject week for work being conducted within Segment 2. Non-Compliance activities for the project to date are summarized in Table 4 near the end of this report.

**Agency Representatives during Construction (other than CPUC EMs):**

None.

**SEGMENT 3A: Antelope-Windhub**

The NTP for Segment 3A (NTP #17) was issued by the CPUC on October 22, 2008. Segment 3A involves the construction of a new 25.6-mile 500 kV transmission line initially energized at 220 kV connecting SCE's Antelope Substation in the City of Lancaster to the new Windhub Substation on Oak Creek Road in the Tehachapi area of Kern County. The NTP for the new Windhub Substation (NTP #19) was issued by the CPUC on December 1. Several properties in Segment 3A are in the condemnation process. Construction activities during the subject period are summarized below.

## Summary of Activity

1. Some areas of Segment 3A have not been released for construction because of real estate acquisition. As new areas become available, SCE submits the biological clearance survey information to the CPUC, the resources are flagged for avoidance and the CPUC EM verifies that the flagging is in place prior to construction. To date, the following areas have been verified by Aspen and are released for construction: Towers 2, 3, 10, 11, 17, 18, 21-42, 52-95, and 97-103.
2. On April 29<sup>th</sup>, the CPUC EM verified resource and disturbance area flagging at Towers 42, and 52-79. An active burrowing owl was identified at Tower 76 and was noted that this resource will be flagged with a 250-foot construction buffer.
3. Tortoise proof fencing was installed surrounding tower sites 9-11 during the subject period (see Figure 4). As required by USFWS and CDFG, fencing will be installed surrounding towers 7-14, the areas adjacent to the tortoise sightings.
4. Brush clearing at Tower sites 2, 3, 9-11, and 21-27 were completed during the subject period. Other structures near the Antelope Substation did not require brush clearing.
5. Tower foundations have been installed at Towers 2, 3, 9-11, 17-18, 21-34, 39, 89-95, and 97-103.
6. Vegetation clearing at the Windhub Substation site began on April 21<sup>st</sup>. Biological, archaeological, and Native American monitors were present during this activity. Windhub grading contractors plan to work Monday-Thursday each week.

## Environmental Compliance:

1. On May 5<sup>th</sup>, SCE reported that an active Swainson's Hawk (State listed- Threatened) nest was found within 200 feet of Tower 31, currently under construction (see Figure 5). The nest was originally identified by a project biologist on Thursday, April 30<sup>th</sup>. Work continued at Tower 31 for 3 1/2 days until Burns and McDonnell Environmental Staff realized that a ½ mile buffer was required surrounding this species. The CPUC EM issued a Non-Compliance Report (NCR) for non-notification of a special status species to the CDFG and CPUC, and for allowing work to continue within the required ½ mile resource buffer. As conditioned in the NCR, SCE must monitor the nest on a weekly basis and submit results to the CDFG and the CPUC. CDFG has not authorized any reduction of the ½ mile buffer surrounding this nest, and construction crews have been notified of this restriction.
2. On May 8<sup>th</sup>, two additional Swainson's Hawk nests were identified within ½ mile of the project near Towers 54 and 58. The nests were reported to CDFG and the CPUC and a ½ mile buffer was established around both nests.
3. On April 21<sup>st</sup>, the CPUC EM was notified that 2 desert tortoises were reported in the area between Tehachapi Willow Springs Road and Oak Creek Road (one on each side of the Segment 3A alignment between Towers 17 and the Windhub Substation). The tortoise sightings were reported to SCE the prior week by non-project biologists surveying these areas for a future wind farm project overlapping the Segment 3A corridor. SCE conducted 2 years of protocol level surveys (in 2007 and 2008) focused for desert tortoise with negative results. The CPUC EM met with the Burns and McDonnell Environmental Lead for Segment 3A and the biologist who identified the tortoises to get more information on the exact location. The tortoise biologist indicated that 2 adult female tortoises were observed on each side of the Segment 3A project alignment (within .47 and 1.04 miles) and that other observations included scat and burrows (no locations were given for the scat or burrows). The desert tortoise is both a Federal and State Threatened Listed Species. The USFWS and CDFG were notified by SCE of the tortoise sightings on April 22<sup>nd</sup>.
4. In response to the sightings of desert tortoises in the area, CDFG and USFWS have required tortoise fencing adjacent to construction zones, tower and pulling sites that border the area where the tortoises were found. SCE has agreed to install tortoise fencing at tower/pulling sites between Towers 7-14, in the area where the tortoises were observed. Fencing will also be installed around the Windhub Substation site. Other measures SCE proposed to avoid impacts to the desert tortoise during construction include:

- a. An educational flyer be distributed with desert tortoise information and avoidance measures
  - b. Speed limit of 15 miles per hour
  - c. All equipment will be checked for tortoises underneath them prior to being moved
  - d. Flagging of project access roads to ensure that only approved project roads are used
  - e. Biological monitors used in Segment 3A to have previous desert tortoise experience
  - f. If a tortoise is observed in project areas, it can not be moved to facilitate construction
5. Maintenance of the tortoise fencing surrounding tower sites has been necessary. Because of the high winds in the area, the silt fencing is separating from its frame in many locations. Alternative fencing material has been approved by the CDFG and USFWS.
  6. At the Windhub Substation construction site, fugitive dust continues to be a problem. SCE has been reminded that they were responsible to control dust at construction sites at all times (grading crews are only working Monday – Thursday). In response, the grading contractor has installed a water storage pond on site (see Figure 6). Water trucks are delivering water to the pond to be used for dust control at the substation site. At the time of the pond construction, tortoise fencing of the substation had not been completed. Because of the risk of tortoises entering the site and becoming trapped in the pond, CDFG required that the pond be immediately fenced. Tortoise fencing installation surrounding the substation site began on May 6<sup>th</sup>.
  7. Soil binders were used at the Windhub Substation site to assist in dust control.
  8. A protocol level survey report for western burrowing owls was submitted on April 19<sup>th</sup> for all project areas in Segment 3A.
  9. An active burrowing owl burrow was reported at Tower 68 on May 7<sup>th</sup>. A 250-foot buffer has been installed surrounding the resource.
  10. A previously identified active burrowing owl burrow was reported to be abandoned at Tower 37. Project biologists used a “Peeper” to investigate the burrow and determined that it was inactive. This burrow had been previously investigated with the Peeper and found to possibly contain one egg. Once the second investigation revealed no current owl sign, the burrow was collapsed by project biologists. CDFG and the CPUC EM were not notified that the burrow investigation and subsequent collapse was planned.
  11. As proposed in the Segment 3A stream crossing report, several drainages require protection prior to construction activity to protect streambed and banks. Once these areas are addressed, construction can proceed in these areas.
  12. Capping of access roads for the protection of cultural resource sites is required in Segment 3A. To date, none of the access roads have been capped. The CPUC EMs have requested a timeline of when this is expected to occur.
  13. Partial authorization regarding the letter report for the Bean Springs archaeological site CA-KER-2821/H dated November 26, 2008 and received on February 3, 2009, was issued by CPUC on February 19<sup>th</sup>. Work at TSP 3A-43 was authorized by CPUC on May 18 after the Final Report was submitted by SCE and reviewed.

One Non-Compliance Report was issued by the CPUC EM during the subject period for work being conducted within Segment 3A. Non-Compliance activities for the project to date are summarized in Table 4 near the end of this report.

**Agency Representatives during Construction (other than CPUC EMs):**

None.

## CPUC NOTICES TO PROCEED (NTPS) & ANF PERMITTING

Table 1 summarizes the CPUC Notice to Proceed and ANF permitting activity for the Antelope-Pardee Project, Segments 1, 2, and 3, to date.

**TABLE 1**  
**CPUC NTPs & ANF PERMITTING**  
(Updated 05/22/09)

NTP #/ Permit	Date Requested	Date Issued	Segment #	Description
CPUC NTPs				
#1	10/10/07	10/16/07	1 & 3	Mojave Marshalling Yard. Per the request, the yard will primarily be used to store construction equipment and materials for the project.
#2	11/16/07	12/10/07	1	Antelope Substation construction and expansion, as well as the use of two adjacent contractor laydown yards.
#2 Mod	12/21/07	01/02/08	1	Allow grading activity at the Antelope site/yards and replacement of an existing 80-foot microwave tower with a new 120-foot tower immediately outside of the communications room within the fenced area of the Antelope Substation.
#3	01/10/08	01/16/08	1	Use of five contractor laydown yards as named Pumpkin Yard, Pottery Yard, Pardee Substation Yard, Mechanics Yard and Avenue I Yard.
#4	01/29/08	02/04/08	1 & 3	Use of the Racetrack Marshalling Yard.
#5	02/19/08	02/28/08	1	Shoofly Construction, Section 1.
#5 Mod #1	03/11/08	03/19/08	1	Use of a new soil disposal site for the Shoofly construction, Section 1.
#5 Mod #2	03/24/08	03/26/08	1	Removal of the 66 kV conductors on the Saugus–Del Sur line during the outage scheduled for March 27, 2008.s
#6	03/19/08	03/29/08	1	Use of three additional construction yards, Rodeo, Blue Cloud, and Pumpkin expansion. Rodeo yard approved under NTP #9.
#7	04/03/08	05/08/08	1	Section 1 Construction.
#8	05/01/08	05/09/08	1	10-acre marshalling yard near Antelope Substation.
#9	03/18/08	06/18/08	1, 2, 3	Rodeo Yard
#10	06/02/08	06/25/08	1	12 kV line (Hughes Lake Distribution Line).
#11	06/03/08	06/25/08	1	Section 3 construction.
#12	06/27/08	07/08/08	1	Hydrant Yard
#13	07/17/08	07/18/08	1	Removal of the 66 kV conductors within the ANF, Phase 1, from tower 7-3 (near southern Forest boundary) to 16-3 (near Bouquet Reservoir).
#14	Initial submittal 07/11/08	09/29/08	2	Segment 2 construction.
#15	09-24-08	09/24/08	1	Removal of the 66 kV conductors within the ANF, Phase 2.
#16	10/01/08	10/09/08	1	Section 3, Reitano Marshalling yard.
#17	Initial submittal 09/12/08	10/22/08	3	Segment 3A construction
#18	10/24/08	10/27/08	1	Section 2 construction (Angeles National Forest)

NTP #/ Permit	Date Requested	Date Issued	Segment #	Description
#19	10/31/08	12/01/08	3	Windhub substation construction.
#20	03/20/09	04/02/09	2	R-8 marshalling yard, City of Palmdale.
CPUC Addendum	01/29/09	03/16/09	2, 3	Modifications to Sagebrush Structures in Segment 2, addition of a 12 kV distribution line at Windhub Substation.
CPUC Addendum	03/12/09	4/23/09	3	Addition of a water well at Windhub Substation
CPUC Addendum	4/15/09	4/28/09	3B	Modifications to Wilderness structure in Segment 3B
CPUC Addendum	04/24/09	Under review	3B	Change towers 78 and 79 from tubular steel poles to lattice steel towers.
ANF PERMITTING				
	11/29/07	12/14/07	1	Radio Repeater – installation of a temporary radio repeater site on Sierra Pelona Ridge to provide communication during construction activities tied to the project. Improvement installation began Jan. 11
	09/27/07	12/14/07	1	Geotechnical testing – 23 geotechnical borings are authorized on National Forest lands to provide additional information that will be used in the design of the transmission towers. Notice to proceed was signed Jan 31 to begin work the week of Feb. 3
		07/14/08	1	Removal of the 66 kV conductor within the ANF, from tower 7-3 (near southern Forest boundary) to 16-3 (near Bouquet Reservoir) Phase I.
		09/23/08	1	Removal of the 66 kV conductor within the ANF, Phase II
		10/23/08	1	Construction of the 500 kV transmission line and wreck-out of the 66 kV towers in the ANF, Section 2.

## VARIANCE & TEMPORARY EXTRA WORKSPACE REQUESTS

Variance Requests and Temporary Extra Workspace (TEWS) Requests submitted to date are summarized in Tables 2 and 3, respectively.

**TABLE 2**  
**VARIANCE REQUESTS**  
(Updated 05/22/09)

Variance Request	Date Requested	Date Issued	Segment #	Description
VR #1	04/01/08	04/03/08	1	Change in construction of an overland travel road to Shoofly pole 18, to a temporary road construction method.
VR #2	04/18/08	04/19/08	1	Several expanded stringing sites, new staging areas, and guard pole installation sites for the removal of the 220 kV line.
VR #3	04/24/08	05/25/08	1	Weekend work along the Shoofly portion of Section 1, within the City of Santa Clarita and Los Angeles County, and at the Antelope Substation, Avenue J, in the City of Lancaster.
VR #4	05/08/08	05/09/08	1	Weekend work along the 66 kV line in Section 1
VR #5	07/15/08	VR will be submitted as separate requests		Expansion of guard pole structure areas in Haskell Canyon, New wire stringing site between NC 11 and 12, and crane pad near NC 20.
VR #6	07/30/08	07/30/08	1	Modification to the notice and review requirements under Mitigation Measures L-5 and L-6.
VR #7	08/12/08	08/16/08	1	Wire Stringing site in Section 1 between NC 11 and 12.
VR #8	08/20/08	08/27/08	1	Guard poles at Haskell Canyon outside of approved disturbance areas.
VR #9	08/19/08	09/09/08	1	Valuzet Movie Ranch Helicopter Landing Zone, Section 1.
VR #10	08/21/08	08/27/08	1	Permission to leave one tower foundation in place at wreck-out tower 24/2 in Section 1, due to likelihood of slope failure.
VR #11	09/12/08	09/16/08	1	New temporary road construction to NC 97 in Section 3.
VR #12 (revised)	09/17/08	Withdrawn	2	Permanent access roads for Segment 2 (see NTP #14).
VR #13	09/16/08	09/17/08	1	Turn around for equipment at NC 28 in Section 1.
VR #14	09/18/08	Denied 09/25/08	2	Permanent and temporary access roads in excess of 10% gradient on Segment 2 (see NTP #14).
VR #14 (revised)	10/03/08	Withdrawn	2	Temporary access roads in excess of 10% gradient on Segment 2.
VR #15	9/20/08	9/26/08	1	Access road changes, Section 3.
VR #16	09/26/08	Withdrawn	3	Permanent access roads for Segment 3A.
VR#17	10/14/08	10/15/08	1	Extended weekend work hours between NC 22 & 23 Haskell Canyon utility crossings.
VR#18	10/15/08	10/16/08	1	Wreck-out Tower 25/5 disturbance area and access road and footing removal. Segment 1 section 3.
VR #19	11/05/08	11/14/08	1	Use of existing disturbance areas as helicopter landing zones, Section 1.

Variance Request	Date Requested	Date Issued	Segment #	Description
VR #20	11/05/08	11/20/08	1	Use of existing disturbance areas as helicopter landing zones, Section 3.
VR #21	11/24/08	12/10/08	1	Approval to leave two foundations in place at wreck-out tower 25/1
VR #22	12/08/08	12/10/08	2	Use of existing disturbance areas as helicopter landing zones, Segment 2.
VR #23	01/07/09	01/12/09	1	Additional disturbance area near Construction Tower 25 and WSS14 on Section 1.
VR #24	01/08/09	01/27/09	1	Underground fiber optic line for Tower 13 on Section 1
MOD VR #24	02/20/09	03/24/09	1	Modify fiber optic line alignment to Tower 13.
VR #25	01/13/09	01/14/09	1	Work on Sunday, Jan 18, during LADWP outage over Haskell Canyon.
VR #26	01/20/09	01/22/09	1	Permanent lift structure M88-T1A southwest side Antelope substation.
VR #27	01/29/09	01/30/09	1	Extension of approved construction work hours Structures 22 and 23 (Haskell Canyon Crossing).
VR #28	02/02/09	02/04/09	1	2 <sup>nd</sup> wire stringing site for Tower 16.
VR #29	01/29/09	02/06/09	3A	Use of existing disturbance areas as helicopter landing zones, Segment 3A.
VR #30	02/02/09	02/09/09	2	New dead-end lattice tower, New Construction #115.
VR #31	02/19/2009	02/23/2009	2	Modify road alignment for Access Road 56 to Construction 67.
VR #32	03/03/09	03/03/09	1	Nighttime wire removal across Newhall Ranch Road, City of Santa Clarita.
VR #33	03/09/09	03/05/2009	1	Hydrant Yard nighttime emergency helicopter repairs Monday through Saturday.
VR#34	03/12/2009	03/12/2009	1	Work on Sunday March 15 <sup>th</sup> in order to complete the permanent transfer of the temporary shoofly transmission structures to the new permanent Antelope-Pardee 500 kV double- circuit transmission line, Segment 1, Section 1.
VR #35	03/21/09	03/26/09	2	New Access Road to Tower 83, Segment 2
VR #36	03/09/09	03/31/09	1	Heavy- lift helicopter Segment 1 Section 2 allows for the sky crane to begin flying at 6am for two ten days operations and to fly on one Sunday for each operation. Fly yards outside the ANF will also be used: Upper Pumpkin Yard, Hydrant and Reitano.
VR #37	03/30/09	03/31/09	1	Installation of an underground conduit near Tower 11, Section 1.
VR #38	04/06/09	04/08/09	2	Wire removal structure 27-1 to existing structure 18-3 on the Eagle-Rock Vincent Transmission Line near the Vincent substation.
VR #39	04/06/09	4/10/09	2	Guard pole relocation near hijack towers 34A and 3.
VR #40	04/14/09	04/15/09	2	Sunday work on April 19 <sup>th</sup> , April 26 <sup>th</sup> , May 3 <sup>rd</sup> , and May 10 <sup>th</sup> to take advantage of a scheduled outage.

Variance Request	Date Requested	Date Issued	Segment #	Description
VR #40 MOD	04/14/09	04/15/09 (verbal)	2	Sunday work on May 17 <sup>th</sup> and 24 <sup>th</sup> .
VR #41	04/24/09	05/04/09	2	Three additional wire stringing sites between Towers 106-108.
VR #42	04/28/09	05/06/09	1	Expansion of WSS-13, Section 1.
VR #43	05/01/09	05/08/09	3A	Changes to cultural resource mitigation and changes to access roads to avoid sites.
VR #44	05/15/09	Under Review	3	Waive $\leq 15$ mph speed restriction for site preparation at Windhub Substation.
VR #45	4/29/09	Under review	1	Use of alternate access near Bouquet Reservoir to access WSS 23.
	05/21/09	Under review	1	Start at 5:00 am in anticipation of the skycrane operations that are scheduled to begin at 6am, Section 2.

**TABLE 3**  
**TEMPORARY EXTRA WORKSPACE (TEWS) REQUESTS**  
(Updated 05/22/09)

TEWS Request	Date Requested	Date Approved	Segment #	Description
TEWS 1	05/15/08	05/16/08	1	Extra Workspace for steel placement outside of disturbance limits adjacent to New Construct tower (NC 3) in Section 1.
TEWS 2	05/19/08	05/21/08	1	Extra Workspace for steel placement adjacent outside of disturbance limits to New Construct tower (NC 12) in Section 1.
TEWS 3	05/20/08	05/20/08	1	Extra Workspace for equipment parking outside of disturbance limits along shoulder of private road adjacent to New Construct tower (NC 2) in Section 1.
TEWS 4	05/27/08	05/27/08	1	Access for crew trucks to 66 kV wreck-out tower 6-1.
TEWS 5	07/03/08	07/16/08	1	Extra Workspace for steel placement and tower assembly near NC 12.
TEWS 6	09/04/08	09/04/08	1	Use of Staging area adjacent to NC 2 in Section 1.
TEWS 7	09/04/08	09/04/08	1	Use of dirt road adjacent to ten acre yard, Section 3.
TEWS 8	09/11/08	09/11/08	1	Helicopter landing site, Section 3.
TEWS 9	09/18/08	09/18/08	1	Use of 3 acres of disturbed land adjacent to the Lower Pumpkin Yard.
TEWS 10	10/03/08	10/03/08	2	Use of 2 acres of disturbed land in the Lane Ranch for parking equipment, Segment 2.
TEWS 11	12/05/08	12/05/08	1	Overland travel access in disturbed areas for 12 kV pole removals.
TEWS 12	01/15/09	01/15/09	1,2 and 3	400-foot by 400-foot disturbance area for the MV 88-T1A lift structure and a 100-foot radius disturbance area on the two Midway Vincent #3 structures to the north and to the south of the lift structure.
TEWS 13	01/29/09	01/29/09	2	Extra Workspace for steel placement outside of disturbance limits adjacent to tower 2 Segment 2.

TEWS Request	Date Requested	Date Approved	Segment #	Description
TEWS 14	04/07/09	04/07/09	1	Extra Workspace for stringing between Towers 110 and 112.
TEWS 15	04/07/09	04/07/09	2	Extra Workspace required to access conductor on Sagebrush line near Tower 106.
TEWS 16	04/15/09	04/16/09	3A	Extra Workspace needed to avoid fiber optic vault along access road near Tower 2.
TEWS 17	04/15/09	04/15/09	2	Extra Workspace needed to access area near Tower 37 adjacent to Elizabeth Lake road in order to install guard pole structure in "flower pots".
TEWS 18	04/17/09	04/22/09	2	In order to complete work at Sagebrush tower 2A PAR crews need to access an existing SCE tower (SCE4) a 100 x 100-foot disturbance area is requested.
TEWS 19	04/23/09	04/24/09	2	SCE is installing a tubular steel pole (TSP) for the 66 kV line, relocating wires from wood pole to TSP and then removing wood pole.
TEWS 20	04/25/09	04/25/09	2	Between Towers 33 and 34A drive and crush on an existing access road for bucket truck (grounding tower for energized work).

#### NON-COMPLIANCES & INCIDENTS

A summary of Project Memorandum, Non-Compliance Reports, and other incidents to date is provided in Table 4.

**TABLE 4**  
**NON-COMPLIANCES, PROJECT MEMORANDA, AND OTHER INCIDENTS**  
(Updated 05/22/09)

Type	Date	Location	Description
Project Memorandum	03/25/08	Segment 1, Section 1	Deposition of soil into drainage at Soil Disposal site.
Project Memorandum	04/18/08	Segment 1, Section 1	Encroachment into Environmentally sensitive area during stringing operations.
Project Memorandum	04/30/08	Segment 1, yards	No clearance surveys of construction yards being conducted during bird nesting season.
Project Memorandum	05/21/08	Segment 1, Section 1	Inaccurate and incomplete resource maps.
Project Memorandum	08/06/08	Segment 1, Section 3	Completion of 12 kV wreck-out of 21 poles outside of disturbance area prior to Variance approval.
Incident	09/10/08	Segment 1, Section 3	Spill resulting from overturned cement truck. Incident report documenting spill amounts submitted on October 15.
Incident	10/13/08	Segment 1, Section 1	Spill resulting from overturned portable toilets at the Pottery Yard during high winds. The CPUC EM was not notified until a spill report was submitted on October 30. Spill was not cleaned up until the next day.
Incident	10/15/08	Segment 2	66 kV crews delivered materials to the right-of-way before disturbance areas had been flagged and biologically surveyed.
Incident	10/16/08	Segment 1, Section 3	Spill resulting from a broken hydraulic hose. Incident report pending.

Type	Date	Location	Description
Incident	11/06/08	Segment 1, Section 3	12 kV underground crews began work before disturbance areas had been flagged and biologically surveyed.
Incident	11/18/08	Segment 1, Section 2	No topsoil was separated prior to grading near NC 33.
Non-Compliance	12/01/08	Segment 1	Construction vehicles crossing through flowing waters of Bouquet Creek to access the Pumpkin Yard.
Non-Compliance	12/03/08	Segment 2	SCE 66 kV crews working without notifying Environmental staff and no disturbance areas had been flagged.
Incident	12/17/08	Segment 1, Pumpkin Yard	Jet fuel, diesel, and other hydrocarbon spill resulting from helicopter accident. Incident report submitted December 29.
Project Memorandum	01/23/09	Segment 2	Heavy equipment causing ground disturbance within Environmentally Sensitive Area (ESA).
Incident	01/27/2009	Segment 2 Avenue I Yard	Diesel spill approximately 15 to 20 gallons from a subcontractor diesel truck. 30-40 tons of contaminated soil was removed.
Incident	02/02/09	Segment 2	Five gallon spill of antifreeze on Access Road 55.
Incident	02/04/09	Segment 2	Less than one pint of diesel fuel was spilled on the access road to Structure 47; approximately five gallons of contaminated soil was collected.
Incident	02/04/09	Segment 2	One quart hydraulic fluid spilled at Structure 22 when backhoe tipped over.
Incident	02/05/09	Segment 1, Section 2	Hydrant Yard - excavator for steel disassembly blew out a hydraulic line spilling one quart of fluid.
Incident	02/05/09	Segment 2	Diesel theft from Terex crane at Structure 5 resulted in ½ to 3 gallon spill.
Incident	02/11/09	Segment 2	Unknown hydrocarbon soil stain approximately 1 square foot all contaminated materials removed near Const 24.
Incident	03/06/09	Mojave Yard	Hydrocarbon staining from leaking equipment in storage yard.
Incident	03/09/09	Segment 1	1 cup hydraulic spill at Lower Pumpkin Yard, Segment 1.
Incident	03/09/09	Segment 1 Section 2	¼ cup hydraulic spill at Tower 60, Section 2 ANF.
Incident	03/09/09	Segment 1 Section 2	Form oil staining on ground near Towers 33, 34, and 36 on Section 2, ANF.
Incident	03/10/09	Segment 2	Oil staining from equipment within Avenue J yard.
Incident	03/12/09	Segment 1 Section 2	Micro-trash observed in several steel assembly areas on Section 2, ANF.
Incident	03/13/09	Segment 2	Transmission oil spill at Tower 43, Segment 2.
Project Memorandum	03/19/09	Segment 3A	Road staking crews entered an Environmentally Sensitive Area while flagging new access roads.
Incident	3/24/09	Segment 2	Diesel spill at Tower 71.
Incident	3/26/09	Section 1, Segment 1	Wire removal next to active scrub jay nest with no biological monitors present.
Incident	3/30/09	Ave I yard	Spill of ¼ cup hydraulic fluid as result of equipment theft.
Incident	3/31/09	Section 1, Segment 1	¼ cup hydraulic spill at Shoofly 4 in Section 1.

Type	Date	Location	Description
Incident	3/31/09	Section 2, Segment 1	15-gallon hydraulic spill at AHS 19 resulting from broken line on cement truck.
Incident	4/01/09	Segment 2	1-gallon diesel spill at snub site near Tower 35.
Incident	4/09/09	Segment 3A	Grading along access road proposed as no improvement.
Incident	4/10/09	Segment 1, Section 2	Engine oil staining at AHS 10 on the ANF.
Incident	4/10/09	Segment 2	5-gallon fuel spill from an overturned truck near Towers 66-67.
Incident	4/18/09	Segment 2	3-gallon fuel spill near Tower 37.
Incident	4/22/09	Segment 1, Section 3	8-10 gallons of hydraulic fuel near Tower 110.
Incident	4/23/09	Segment 2	1-quart diesel spill near Tower 36.
Incident	4/24/09	Segment 2	3-gallon hydraulic spill near Tower 63.
Incident	4/25/09	Hydrant Yard	Nest removal conducted without authorization from USFWS and CDFG.
Incident	4/27/09	Segment 2	2 cup Hydraulic spill from ruptured hose near Tower 107.
Incident	4/27/09	Segment 2	3-gallon hydraulic spill from ruptured hose near Tower 63.
Incident	4/28/09	Hydrant Yard	3-quart hydraulic spill from forklift in Hydrant Yard.
Incident	5/01/09	Section 2, Segment 1	A project helicopter had to make an emergency landing on the bank of the Bouquet Reservoir. <b>Incident report pending.</b>
Incident	5/02/09	Pottery Yard	2-3 ounce hydraulic spill at Pottery Yard.
Non-Compliance	5/06/09	Segment 3A	Work was allowed to occur within 200 feet of an active Swainson's Hawk nest near Tower 31. CDFG and CPUC were not immediately notified of the nest.

## PROJECT PHOTOGRAPHS



**Figure 1:** SCE crews dismantling Tower is Section 1.



**Figure 2:** Concrete pouring of foundation caps in Section 2 on the ANF.



**Figure 3:** A house finch nest was relocated into a nest box from a wire puller near Tower 37, Segment 2. The adult birds did not follow the nest, which was later taken to a bird rehabilitation center for incubation.



**Figure 4:** Tortoise proof fencing installed around Tower 10, Segment 3A



**Figure 5:** Swainson's hawk nest in Joshua tree near Tower 31, Segment 3A.



**Figure 6:** Water storage pond at the Windhub Substation site, Segment 3A.