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## PROJECT MEMORANDUM

### ANTELOPE-PARDEE PROJECT, SEGMENTS 1, 2 AND 3A

**To:** John Boccio, Project Manager, CPUC  
Justin Seastrand, Project Manager, ANF  
**From:** Vida Strong, Aspen Project Manager  
**Date:** November 20, 2008  
**Subject:** Weekly Reports 43 and 44, November 2 to November 15, 2008

## 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

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. On October 23<sup>rd</sup>, the Special Use Permit (SUP) for construction of Section 2, Angeles National Forest, was issued and work began on November 12. 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 line) of the Antelope Pardee Transmission Line Project authorized under NTP #5 was energized on May 10<sup>th</sup>. The lattice tower structures originally supporting the line are being replaced to accommodate construction of the new Antelope Pardee 500 kV structures within the Shoofly corridor.

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 in Section 1 include the removal of the Saugus-Del Sur 66 kV line and towers, the construction of the new 500 kV lattice towers, and the removal of the existing 220 kV Santa Clara Vincent line and towers. Construction activities under NTP #7 during the subject week consisted of the following activities.

1. Wire stringing in Section 1 continued between towers NC 2 and NC 11. All six phases of conductor have been pulled in and are currently being clipped in and sagged. A helicopter was used to install spacers between the subconductors to prevent them from slapping together (see Figure 1).
2. Wire stringing began between towers NC 12 and 16. Guard structures and traffic control were in place along Copper Hill and San Francisquito Roads during wire stringing.



3. Once the conductor was removed over the LADWP corridor in Haskell Canyon, work proceeded on the demolition of the two remaining 220 kV towers located within the Shoofly. Once the towers were dismantled, the construction of NC 22 and 23 were constructed in their place.
4. Foundation pouring took place at NC 22 and 23 once the old towers were removed. While removing the existing tower at the NC 22 location, it was determined that the complete removal of two tower foundations would have a negative impact on the new tower foundations and adjacent slope stability. The CPUC EM was notified and recommended that SCE request a Variance in order to leave the foundations in place.
5. Along the Saugus–Del Sur 66 kV line, all but two towers have been dismantled and removed in Section 1. These are planned to be removed concurrent with the tower removal in Section 2 in 2009.
6. Biological monitoring and associated biological clearance surveys of Section 1 construction areas are being conducted by Burns and McDonnell and BRC biologists. Paleontological monitors were present to monitor new ground disturbing construction activities.

#### **Environmental Compliance:**

1. PAR crews continue to use the Lower Pumpkin Yard along Bouquet Canyon Road accessed across a dry crossing of Bouquet Creek. Permission to access this yard is conditioned by the CDFG and the CPUC only when stream flows were not present in Bouquet Creek, which is potential habitat for an endangered fish species. If water is present, crews are not permitted to cross the drainage and are required to notify CDFG.
2. Erosion controls are being installed once construction crews have completed ground disturbing activities, such as new road construction.

No Non Compliance Reports (NCR) or Project Memoranda were issued during the subject period for Section 1 project activities. Non-Compliance reports issued to the project to date are summarized in Table 4 near the end of this report.

#### **Agency Representatives:**

None.

#### **SECTION 2, ANF & ADJACENT YARDS**

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

#### **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. The 66 kV conductor removal has been completed and was permitted by a separate SUP issued by the ANF. A Notice to Proceed (NTP) from the CPUC for the construction of the 500 kV transmission line was issued on October 27<sup>th</sup>.

Construction of Section 2 on the ANF began on November 12<sup>th</sup>. Crews assemble each morning at the Lower Pumpkin Yard on Bouquet Canyon Road at 7am. Crews plan to work 6 days a week if Project Activity Levels (PAL) allow. PAL levels for the week are summarized below.

Wednesday November 12: PAL Level D-work yes

Thursday November 13: PAL Level EV-work yes until 1pm, with restrictions

Friday November 14: PAL Level EV/Red Flag Warning-work no, surveying continued

Saturday November 15: PAL Level EV/Red Flag Warning-work no, surveying continued

1. The ANF and SCE hosted a construction kick off meeting which took place on November 3 for work in the ANF. Distribution and review of the Special Use Permit/Construction Plan took place for the benefit of field personnel and construction management.
2. On Thursday, November 6, a preconstruction Environmental and Safety training took place at SCE Antelope Valley Service Center building in Lancaster. PAR Electric construction crews and supervisors, Burns & McDonnell biologist and inspectors, BRC, Cogstone and Pacific Legacy monitors, Southern California Edison personnel, CPUC/Aspen EM's, and ANF staff were present. All personnel working in Section 2 will be issued an ANF specific hard hat sticker to indicate that they have attended this training.
3. Construction began on the ANF on Wednesday November 12<sup>th</sup>. Vehicles and construction equipment were washed at the Pumpkin Yard prior to entering the Forest lands.
4. Wheel wash stations were installed at the entrance to new roads to towers 41 and 52 (see Figure 2). The following information was provided by Mike Roberts (ANF), "The equipment wash areas were installed at the areas where SR-41 & 52 begin. PAR's lead environmental monitor Dennis Lederer, FS Rep. George Geer, and myself went over a small drainage issue at SR-52 related too the wash area. It was decided to put the wash area where it was planned and deal w/ the drainage area w/BMP's."
5. Road improvement took place along Course Gold Road between Bouquet Canyon Road and the ANF gate, and along the existing access road to tower 33. The following information was provided by Mike Roberts (ANF), "Road construction began on SR-33. This temp road is an old ridgeline road that will require very little surface blading to gain access to Tower 33. PAR Construction Sup. Ron Barnett & I road out SR-33 to discuss grading and control of natural run-off, and the use of BMP's (Best Management Practices). With the minimum amount of work necessary on this road, work should be completed in (2) days +/- weather permitting."
6. A discrepancy was discovered on the beginning alignment for SR-41. The field flagged line did not match the engineered drawing location for the alignment of the road. Mike Roberts (ANF) brought this to the attention of Burns & McDonnell field monitor Kimberly Toal for further evaluation. The situation was initially addressed as a level 1 change, but may be elevated to a level 2 change, depending on the explanation from Finley Engineering.

#### **Environmental Compliance:**

1. ANF Representative George Geer conducted verification of the Fire Plan required equipment on project vehicles and equipment.
2. It was noted that several populations of Mariposa Lilies were not shown on project resource maps. Burns & McDonnell will provide updated maps showing these locations.
3. ANF representatives looked at the tower disturbance area for NC 33 to verify that the necessary work to be conducted fell within the approved disturbance area.
4. ANF Representative George Geer reminded crews to have fire fighting equipment staged within 20 feet of brush clearing equipment while working.

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

### **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 construction and dismantling of the 66 kV transmission line) were issued by the CPUC on June 25<sup>th</sup>. 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, with the exception of an underground component, and the line was energized on September 2<sup>nd</sup>.

Construction activities under NTPs #2, #10, and #11 during the subject period consisted of the activities noted below. PAR Construction is responsible for constructing the 500 kV structures.

1. The underground component of the 12 kV construction started on November 6 (see Figure 3). While PAR began the clearing and excavation of one trench, the CPUC EM observed that no disturbance area flagging had been installed. In addition, biological monitors were unable to conduct a clearance survey of all of the proposed disturbed areas, since these were not marked. Once the construction plans were reviewed, disturbance areas were delineated and the areas were surveyed.
2. Grading, foundation drilling, and set-up of the 500kV towers started on August 20<sup>th</sup>. Tower assembly took place on several lattice towers near the Antelope Substation (see Figure 4). On Section 3, a combination of single circuit lattice towers and tubular steel poles are used to support the new 500 kV line.
3. 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 continue the construction of the new substation components within the expansion area.

#### **Environmental Compliance:**

1. A spill resulting from a broken hydraulic hose was reported in Section 3 on October 14<sup>th</sup>. No spill incident report has been submitted to date.
2. Archaeological and Native American Monitors were present during 12 kV underground and 500kV construction when required.

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

### **SEGMENT 2**

#### **Summary of Activity:**

The Notice to Proceed for Segment 2 construction (NTP #14) was issued by the CPUC on September 30<sup>th</sup>. No construction has occurred in Segment 2 to date.

1. As conditioned in the NTP, all sensitive resources will be flagged for avoidance and verified by the CPUC EM. Flagging of biological resources, disturbance areas, and access roads was completed between Towers 18 and 28, and was verified by the CPUC EM. No work has started in this area of Segment 2.
2. SCE crews conducted wire stringing work on the section of 66 kV wood poles between the Antelope Substation and 90<sup>th</sup> Avenue.
3. The existing 66 kV wood poles currently supporting the line will be removed during an outage in December.

**Environmental Compliance:**

1. A biological clearance survey report for Segment 2 is still outstanding from SCE.
2. Protocol level surveys for Western Burrowing Owls in portions of Segment 2 identified in the LSA Burrowing Owl Survey Report are expected to be conducted within 30 days of the initiation of construction.
3. Maps showing final road design and disturbance areas are still outstanding for Segment 2 and are required to be submitted prior to construction.

**SEGMENT 3A**

The NTP for Segment 3A (NTP #17) was issued by the CPUC on October 22, 2008. Several properties in Segment 3 are in the condemnation process. No construction activities have taken place to date.

**Summary of Activity:**

1. Archaeological testing of CA-KER-2821/H began on October 28<sup>th</sup> and is expected to take three weeks to complete. A second site (PL-SCE-Techachapi-38) was tested on October 31<sup>st</sup>. A plan documenting the results of the testing is expected to be submitted to the CPUC prior to work in these areas.
2. Protocol level surveys for Western Burrowing Owls is scheduled to begin the week of November 3<sup>rd</sup>.
3. Geotechnical boring and testing on Segment 3A started during the subject period.

**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 11-20-08)

<b>NTP #/ Permit</b>	<b>Date Requested</b>	<b>Date Issued</b>	<b>Segment #</b>	<b>Description</b>
<b>CPUC NTPs</b>				
#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 conductor on the Saugus-Del Sur line during the outage scheduled for March 27, 2008.
#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.

<b>NTP #/ Permit</b>	<b>Date Requested</b>	<b>Date Issued</b>	<b>Segment #</b>	<b>Description</b>
#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 conductor 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 conductor 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)
#19	10/31/08	Under review	3	Windhub substation construction.
<b>ANF PERMITTING</b>				
	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 11-20-08)

Variance Request	Date Requested	Date Issued	Segment #	Description
VR #1	04/01/08	04/03/08	1	Change in construction of a 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 crossing.
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.
VR #20	11/05/08	11/20/08	1	Use of existing disturbance areas as helicopter landing zones, Section 3.

**TABLE 3**  
**TEMPORARY EXTRA WORKSPACE (TEWS) REQUESTS FOR SEGMENT 1**  
(Updated 11-07-08)

<b>TEWS Request</b>	<b>Date Requested</b>	<b>Date Approved</b>	<b>Description</b>
TEWS 1	May 15, 2008	May 16, 2008	Extra Workspace for steel placement outside of disturbance limits adjacent to New Construct tower (NC 3) in Section 1.
TEWS 2	May 19, 2008	May 21, 2008	Extra Workspace for steel placement adjacent outside of disturbance limits to New Construct tower (NC 12) in Section 1.
TEWS 3	May 20, 2008	May 20, 2008	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	May 27, 2008	May 27, 2008	Access for crew trucks to 66 kV wreck out tower 6-1.
TEWS 5	July 3, 2008	July 16, 2008	Extra Workspace for steel placement and tower assembly near NC 12.
TEWS 6	September 4, 2008	September 4, 2008	Use of Staging area adjacent to NC 2 in Section 1.
TEWS 7	September 4, 2008	September 4, 2008	Use of dirt road adjacent to ten acre yard, Section 3.
TEWS 8	September 11, 2008	September 11, 2008	Helicopter landing site, Section 3.
TEWS 9	September 18, 2008	September 18, 2008	Use of 3 acres of disturbed land adjacent to the Lower Pumpkin Yard.
TEWS 10	October 3, 2008	October 3, 2008	Use of 2 acres of disturbed land in the Lane Ranch for parking equipment, Segment 2.



## NON-COMPLIANCES & INCIDENTS

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

**TABLE 4**  
**NON-COMPLIANCES, PROJECT MEMORANDA, AND OTHER INCIDENTS**  
 (Updated 11-07-08)

<b>Type</b>	<b>Date</b>	<b>Location</b>	<b>Description</b>
Project Memorandum	March 25, 2008	Segment 1, Section 1	Deposition of soil into drainage at Soil Disposal site.
Project Memorandum	April 18, 2008	Segment 1, Section 1	Encroachment into Environmentally sensitive area during stringing operations.
Project Memorandum	April 30, 2008	Segment 1, yards	No clearance surveys of construction yards being conducted during bird nesting season.
Project Memorandum	May 21, 2008	Segment 1, Section 1	Inaccurate and incomplete resource maps.
Project Memorandum	August 26, 2008	Segment 1, Section 3	Completion of 12 kV wreck-out of 21 poles outside of disturbance area prior to Variance approval.
Incident	Sept. 10, 2008	Segment 1, Section 3	Spill resulting from overturned cement truck. Incident report documenting spill amounts submitted on October 15.
Incident	October 13, 2008	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	October 15, 2008	Segment 2, 66 kV	66 kV crews delivered materials to the right-of-way before disturbance areas had been flagged and biologically surveyed.
Incident	October 16, 2008	Segment 1, Section 3	Spill resulting from a broken hydraulic hose. Incident report pending.
Incident	November 6, 2008	Segment 1, Section 3	12 kV underground crews began work before disturbance areas had been flagged and biologically surveyed.

## PROJECT PHOTOGRAPHS



**Figure 1:** A helicopter was used to install spacers between the subconductors in Section 1.



**Figure 2:** The installation of a wheel wash station at the start of access road SR-41 on the ANF, Section 2.



**Figure 3:** 12 kV underground work in Section 3.



**Figure 4:** On Section 3, crews continue to construct the new single circuit towers near the Antelope Substation.