



30423 Canwood Street, Suite 215, Agoura Hills, CA 91301-4316  
Tel. 818-597-3407, Fax 818-597-8001, [www.aspeneg.com](http://www.aspeneg.com)

**PROJECT MEMORANDUM  
SCE TRANSMISSION PROJECTS, SEGMENTS 1 - 11**

**To:** John Boccio, Project Manager, CPUC  
**From:** Vida Strong, Aspen Project Manager  
**Date:** November 19, 2010  
**Subject:** Weekly Report 146 – November 07 to November 13, 2010

**INTRODUCTION**

This report provides a summary of the construction and compliance activities associated with the following SCE transmission projects:

- Antelope-Pardee 500 kV Transmission Project, Segment 1, including Antelope Substation expansion;
- Antelope Transmission Project, Segments 2, 3A and 3B, including the Windhub and Highwind Substations; and
- Tehachapi Renewable Transmission Project, Segments 4 through 11, including Whirlwind Substation and the expansion of Vincent Substation.

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.

**CPUC/Aspen Environmental Monitors (EM):** Stephanie Jayne, Jenny Slaughter and Allison Roth

**SEGMENTS 1-3: ANTELOPE-PARDEE AND ANTELOPE TRANSMISSION PROJECTS**

**Summary of Activity:**

1. Construction of Segments 1, 2, and 3A have been completed. Construction of Segment 3B, from Windhub Substation to and including Highwind Substation, has not started and no schedule has been developed by SCE.
2. Construction activities on the Antelope Substation expansion consisted of groundwork being conducted for the 500 kV switchrack, construction of the MEER building, the retention pond was lined with concrete, circuit breakers were installed, and one AA bank was delivered. No materials were stored in the laydown yard during this reporting period. The spoil pile in front of the Antelope construction trailers is being leveled out and will be covered with gravel. An SCE office trailer for TRTP 4-11 will be installed in this area.
3. Construction activities at the Windhub Substation included concrete, foundation, and civil work in the 220 kV area. Final grading is also being completed.
4. Material for Segment 3B and the future Whirlwind Substation is being stored at the Highwind Yard.
5. Habitat restoration has not been completed in Segment 1. ECORP and Nature's Image are conducting maintenance activities including weeding in areas previously seeded. Wire String Site 3 on Segment 1 still requires treatment.
6. Revegetation for Segments 2 and 3A is scheduled for Fall 2010.



**ENVIRONMENTAL COMPLIANCE:**

1. SCE is working to develop a solution for the channel incision that occurred immediately downstream of the riprapped stream channel at the Windhub Substation site. Once a plan is developed, it will be submitted to the CPUC. SCE is also pursuing the acquisition of the stream channel property.

No Non-Compliance Reports or Project Memoranda were issued for Segment 3 construction activities during the subject period. Non-Compliance activities for the project to date are summarized in Table 4.

**AGENCY REPRESENTATIVES DURING CONSTRUCTION (OTHER THAN CPUC EMS):**

None

**TEHACHAPI RENEWABLE TRANSMISSION PROJECT (TRTP) SEGMENTS 4-11**

The SCE Tehachapi Renewable Transmission Project was evaluated in accordance with the California Environmental Quality Act and a Certification of Public Convenience and Necessity (CPCN) was granted by the CPUC on December 17, 2009.

**SEGMENTS 4, 5, AND 10 - ANTELOPE VALLEY**

**Summary of Activity**

1. Electrical, 220 kV work, cable trenching, and steel installation for the 500 kV racks in 1X and 2X positions occurred within the Vincent Substation. Cable trenching, BMP repairs, and concrete pouring occurred in the expansion area. SCE will be submitting an Addendum for some permanent work including the relocation of a dirt road and the installation of riprap outside of the project limits.
2. No work was conducted on Segment 4 during this reporting period. Further construction activity on Segment 4 is pending the issuance of an Incidental Take Permit from CDFG.
3. The Racetrack Yard is currently in use for contractor equipment storage and parking. H&M office trailers are completely setup for daily operations. Material delivery continued at Material Yard 28. The Rodeo Yard is currently in use for contractor equipment storage and parking.
4. On Segment 5, tower assembly work continued at Towers 60 and 61. The existing 220 kV towers near 60 and 61 were wrecked out. Wire has been removed from the existing 220 kV wreck-out lines between Towers 30 and 44, and 58A to 62. Guard poles were delivered and installed near Tower 64 and Hwy 14.
5. Other work on Segment 5 took place between Towers 30 and 47. This included BMP installation (i.e. fiber rolls), foundation drilling for new towers, rebar cage placement, concrete pour and wreck-outs of existing 220 kV towers (see Figure 1). Wire removal from the existing 220 kV wreck-out lines occurred between Towers 39 and 45 (see Figure 2). Wire was not removed from the wreck-out lines between Towers 45 and 57 due to windy conditions.
6. Also on Segment 5, the foundation for TSP 1 was drilled and concrete was poured. All five TSPs were delivered and staged at each disturbance site.

**Environmental Compliance:**

1. On September 24, survey crews staking new tower positions damaged an archaeological feature at a tower site on the Segment 5. The CPUC was not notified of this damage for four days. An initial incident report was submitted to the CPUC and the ANF on October 4 and was followed by a treatment plan for the damage to the site. The treatment plan is currently under review by the Lead Agencies.
2. The CPUC EM and Burns & McDonnell EC's verified disturbance staking and ESA flagging from the Antelope Substation to Tower 14 on Segment 5. A few locations require further clarification.

No SCE non-compliances were issued during the subject period for TRTP construction activities. No CPUC Non-Compliance Reports or Project Memoranda were issued for Segment 4, 5 & 10 construction activities during the subject period. Non-Compliance activities for the project to date are summarized in Table 4.

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

None

**SEGMENTS 6 AND 11 - ANGELES NATIONAL FOREST**

**Summary of Activity**

1. The Final EIS was released by the Angeles National Forest (ANF) on September 14, 2010. The ANF Record of Decision was issued on October 4, 2010, and the Special Use Permit is anticipated for release in early December. Construction is expected to begin in late 2010 or early 2011.

**SEGMENTS 7 AND 8 - LOS ANGELES AND SAN BERNARDINO COUNTIES**

**Summary of Activity**

1. Segments 7 & 8, 66 kV: During the subject period, Wilson crews continued work on the Rio Hondo Substation to Ramona Boulevard portion of the Rio Hondo–Amador-Jose-Mesa line in the City of Irwindale (see Figure 3). Work included setting new poles, installing conductors and stringing wire. Additionally, SCE crews continued work between Lower Azusa Road and Rio Hondo Substation on the Rio Hondo–Amador and Rio Hondo–Anita No. 2 lines in the City of Irwindale. Work included reframing poles and installing conductors.
2. Strawberry Yard: DCX began development at Strawberry Contractor Yard on November 10<sup>th</sup>. Work included minor grading as well as fence installation (see Figure 4).
3. Segment 7: Tri-State demobilized at interset tower M57-T3a. Crews pulled casings out of an already-drilled foundation hole and then filled the hole with concrete slurry.
4. Segment 8, Phase 1: Wilson crews worked within Tonner Canyon in the City of Industry to prepare the area surrounding M57-T3 for a shoofly installation. Additionally, DCX crews continued scraping towers; materials were cut and then hauled off-site.
5. Segment 8, Phase 2: Wilson crews delivered steel to Towers M0-4 through M0-6, began erection work at Tower M0-T2 and completed assembly on Tower M0-3 (see Figure 5). Additionally, Tri-State continued foundation work at Towers M0-T2 and M0-T6.

**Environmental Compliance:**

1. Some of the existing poles on the Rio Hondo–Amador and Rio Hondo–Anita No. 2 lines in the City of Irwindale were identified as needing to be replaced because of age and rot. The pole replacements were put on hold by SCE pending the development of a Health and Safety Plan for those lines.
2. Segment 8, Phase 1: An unapproved access road between Towers M58-T1 and M57-T4 was being used by crews for safety reasons; the approved access road between towers was too steep for equipment. SCE is currently preparing a variance to use the second road.
3. Segment 8, Phase 2: Crews are accessing Tower M0-T6 from a route not specified on NTPR maps because of real estate concerns. The access is shown as a new, permanent access road coming from San Antonio Avenue, and instead crews and equipment are accessing the site from Edison Avenue. The CPUC EM notified SCE of this issue on November 15<sup>th</sup>.

No Non-Compliance Reports or Project Memoranda were issued during the subject period for Segment 7 and 8 construction activities. Non-Compliance activities for the project to date are summarized in Table 4.

**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 Transmission Project, Segments 1, 2, and 3, to date.

**TABLE 1**  
**CPUC NTPs & ANF PERMITTING**  
 (Updated 11/19/2010)

NTP #/ Permit	Date Requested	Date Issued	Segment #	Description
CPUC NTPs, Segments 1-3				
<i>For CPUC NTP and Addendum activity on Segments 1-3 prior to 2010, please see Table 1 in Weekly Reports 106-107.</i>				
#26	12/18/09	01/05/10	1	Expansion of Antelope Substation.
CPUC Addendum	12/21/09	01/19/10	1	Permanent AR 19 and access road to Const 34A.
CPUC Addendum	12/21/09	01/19/10	1	Permanent refueling basin at Hydrant Yard.
#27	12/23/09	01/05/10	3B	Oak Peak Communication Site
CPUC Addendum	01/25/10	02/01/10	2	Reclassification of two temporary roads to permanent and relocation of transposition poles.
Revised CPUC Addendum	02/10/10	02/19/10	2	Relocate two previously approved transposition towers from Const 110 to Const 105.
#28	02/10/10	02/18/10	3B	Highwind Marshalling Yard
#29	02/10/10	03/02/10	1	Relocation of the Sagebrush Transmission Line at the Antelope Substation expansion area.
CPUC Addendum	03/17/10	03/26/10	3A	Vertical mulching, capping of a portion of the existing roadway, and making this overland route a permanent access for SCE operations and maintenance to Const 43.
CPUC Addendum	04/06/10	04/27/10	3B	Elimination of transposition towers in Segment 3B.
CPUC Addendum	04/16/10	04/22/10	1	Installation of fiber optics surrounding the Antelope Expansion.
CPUC Addendum	05/25/10	06/04/10	1	Permanent overland travel routes for Operation and Maintenance inspections.
CPUC Addendum	05/25/10	06/04/10	2	Permanent overland travel routes for Operation and Maintenance inspections.
CPUC NTPs Segments 4-11				
#1	01/13/10	02/11/10	4, 5, 10	Yard 28
#2	01/28/10	03/10/10	9	Vincent Substation Expansion
#3	03/09/10	04/01/10	7,8	Rancho Vista Yard
CPUC Addendum	04/09/10	04/19/10	9	Changes to Substation components.
#4	01/27/10	04/26/10	7, 8	Segment 7 and 8 Cell Sites
#5	01/27/10	04/30/10	7	Segment 7 Telecom
#6	03/29/10	05/12/10	7,8	Mesa Materials Storage Yard
#7	05/12/10	05/28/10	8	Segment 8 telecommunications.

NTP #/ Permit	Date Requested	Date Issued	Segment #	Description
#7 Mod	08/20/10	08/20/10	8	Minor re-routes to Segment 8 Telecom
#8	04/27/10	06/04/10	8	Segment 8 Contractor Yards
#9	07/21/10	07/29/10	7	Segment 7 Contractor Yards
#10	04/08/10	08/03/10	7, 8	66 kV re-route and relocation
#11	05/08/10	08/12/10	8	Segment 8 Transmission Line, Chino Hills, Phase I
#12	07/28/10	08/20/10	4, 5, 10	Segment 4, 5, 10 Contractor Yards
#13	07/19/10	08/24/10	8	Segment 8 Transmission Line, Phase 2 and 3
#14	08/25/10	09/03/10	4	Partial Transmission Line work associated with an LADWP outage
#15	08/13/10	09/10/10	5	Segment 5 Transmission Line
#16	08/30/10	09/13/10	4	Segment 4 Transmission Line
#17	08/10/10	09/24/10	7	Segment 7 Transmission Line
#18	10/13/10	10/15/10	7	Potrero Grande Contractor Yard
#19	10/29/10	11/12/10	4, 5, 10	Avenue F Contractor Yard
	06/22/10	Under review	9	Whirlwind Substation
	10/08/10	Under review	10	Segment 10 Telecom
	11/10/10	Under review	8	Segment 8 West, Phase 4 Transmission Line. Biological reports pending.
	11/18/10	Under review	6 & 11	Vincent North Material Yard.
	11/18/10	Under review	6 & 11	Vincent South Material Yard.
ANF PERMITTING – Segment 1, 6 & 11				
	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 11/19/2010)

Variance Request	Date Requested	Date Issued	Segment #	Description
Variance Requests, Segments 1-3				
<i>For Variance Request activity on Segments 1-3 prior to 2010, please see Table 2 in Weekly Reports 106-107.</i>				
VR #66	01/11/10	01/19/10	1	Modify the requirements of Mitigation Measure B-1a (Provide Restoration/Compensation for Impacts to Native Vegetation Communities) to fulfill a request from the property owner.
VR #67	01/15/10	01/19/10	3A	Modify requirements of Mitigation Measure B-27b and APMs BIO-2 and BIO-7 to preserve cut Joshua trees onsite instead of off-site disposal to the extent possible for habitat creation purposes.
VR #68	04/09/10	04/12/10	1	Release restoration requirements on road to wreck-out tower 20-4 in Section 3.
VR #69	05/04/10	05/07/10	1	Contractor Yards surrounding Antelope Substation.
VR #69 MOD	07/29/10	08/02/10	1	Additional space for storage at Antelope Substation for material being delivered for Antelope, Vincent and Whirlwind substations.
VR #70	06/02/10	06/04/10	1	Additional disturbance areas adjacent to the pole erections for the 220 kV Sagebrush relocation work around the Antelope Substation.
VR #71	06/22/10	06/23/10	1	Change in construction work hours for work on the Sagebrush 220 kV transmission line.
VR #71 MOD #1	06/24/10	06/25/10	1	Expansion of construction hours for Sagebrush 220 kV T/L and foundation installation work at Antelope Substation.
VR #71 MOD #2	07/08/10	07/09/10	1	Further expansion of construction hours for Antelope Substation construction.
VR #71 MOD #3	11/18/10	11/19/10	1	Further expansion of construction hours for Antelope Substation construction.
Variance Requests, Segments 4-11				
VR #1	03/25/10	03/26/10	9-Vincent	Expand grading area of Vincent substation by 15 feet for temporary turn around areas for equipment.
VR #2	05/25/10	05/27/10	7	Relocation of helicopter landing zone for Segment 7 telecommunications work.
VR #3	06/08/10	06/10/10	7	Clarification of Segment 7 Telecom construction operating hours and to work the weekend dates of June 12, 13, 19, and 20, within the City of Irwindale
VR #4	08/11/10	08/13/10	9-Vincent	Utilize a fire hydrant along an unpaved spur road and also place two 10,000-gallon elevated water storage tanks adjacent to the hydrant.
VR #5	08/20/10	08/20/10	7	Night work for Segment 7 Telecom
VR #6	08/26/10	08/26/10	8	Work on weekends for Segment 8 Telecom.
VR #7	09/10/10	09/16/10	8	New wire setup and pull sites for Segment 8 Phase 1

Variance Request	Date Requested	Date Issued	Segment #	Description
VR#8	09/16/10	09/16/10	8	Clarification of construction hours for Segment 8 Phase 1
VR #9	09/14/10	09/20/10	Yard 28 & Rancho Vista Yard	Hotwork (welding and cutting) at Yard 28 and Rancho Vista Yard.
verbal	10/08/10	10/08/10	8, Phases 2 & 3	Wire sites for construction on Sunday, October 10.
VR #10	10/08/10	10/13/10	8	Additional Phase 2 & 3 wire sites.
VR #11	10/01/10	10/15/10	8	Relief from focused biological survey requirements because of restricted property access, Phase I.
VR #12	10/06/10	10/15/10	8	Additional Phase I wire sites.
VR #13	11/09/10	11/17/10	5	Additional wire stringing sites.
VR #14	11/17/10	11/19/10	8	Additional Shoofly pole in Tonner Canyon, Segment 8, Phase 1
VR #15	11/18/10	11/19/10	5	Additional guard poles between Highway 14 and Sierra Highway.
VR #16	11/12/10	Under review	5	Realign an existing access road at the southeastern corner of the Vincent Substation 500 kV expansion area to allow for the construction of the Segment 5 T/L.
	Revised 11/17/10	Under Review	8	Additional 66 kV material storage near Rio Hondo and Chino Substations

**TABLE 3**  
**TEMPORARY EXTRA WORKSPACE (TEWS) REQUESTS**  
(Updated 11/19/2010)

TEWS Request	Date Requested	Date Approved	Segment #	Description
TEWS, Segments 1-3				
<i>For TEWS activity on Segments 1-3 prior to 2010, please see Table 3 in Weekly Reports 106-107.</i>				
TEWS, Segments 4-11				
#1	09/30/10	09/30/10	7	Re-phasing work at a tower not previously identified on Rio Hondo–Amador-Jose-Mesa 66 kV
#2	10/8/10	10/8/10	4	Park a boom truck on LADWP access road during the outage
#3	10/12/10	10/12/10	8	Use a wire setup site not previously identified on Chino–Mira Loma No. 1
#4	10/20/10	10/20/10	5	Extra space from wire truck parking near Vincent Substation.
#5	10/21/10	10/21/10	7	Use a site not previously identified for staging of equipment and materials at Tower M54-T3a.
#6	11/1/10	11/1/10	5	Use of an existing SCE access road.
#7	11/1/10	11/3/10	5	Use of an existing road (Parkwood Drive).
#8	11/2/10	11/2/10	8	Use a site not previously identified for vehicle parking and as a helicopter landing zone.

## 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 11/19/2010)

Type	Date	Location	Description
Non-Compliances, Project Memoranda & Other Incidents, Segments 1-3			
<i>For Non-Compliances, Project Memoranda &amp; Other Incidents activity on Segments 1-3 prior to 2010, please see Table 4 in Weekly Reports 106-107.</i>			
Project Memorandum	04/27/10	3A	Delivery of equipment to Tower 43 within an ESA without monitors present.
Incident	05/10/10	2	Relocation of artifacts from archaeological site near Tower 21 during Segment 2 construction.
Incident	05/12/10	Antelope Substation	Fugitive dust leaving grading area.
Non-Compliances, Project Memoranda, & Other Incidents, Segments 4-11			
Incident/Level 1 SCE NCR	03/24/10	Vincent Substation	Construction encroachment into California Thrasher nest buffer.
Incident	04/20/10	Rancho Vista Yard	Equipment mobilized to site before resource fencing was verified by CPUC EM.
Incident/Level 1 SCE NCR	05/12/10	Vincent Substation	Resource buffer encroachment, construction within nesting bird buffers along Rockyford road.
Incident/Level 1 SCE NCR	05/13/10	Vincent Substation	Resource buffer for common raven encroachment within substation.
Incident	05/28/10	Windhub Substation	1 gallon fuel spill outside of Windhub substation.
Incident	06/02/10	Antelope Substation	Active nest disappeared from inside the engine compartment of a water truck at the expansion area over the holiday weekend.
Incident	06/03/10	Antelope Substation	Construction activities taking place without biological clearance surveys taking place. Resource buffer staking were in place.
Incident	06/04/10	Antelope Substation	Resource buffer encroachment in the expansion area. Vehicle entered a nest buffer area, nest was not found.
Incident/Level 2 SCE NCR	06/13/10	Segment 7 Telecom	Helicopter unloaded personnel and equipment in an unauthorized area.
Incident/Level 2 SCE NCR	06/17/10	Vincent Substation	Cement truck stopped within nesting bird buffer along Rockyford road.
Incident/Level 2 SCE NCR	6/22/2010	Yard 28 Materials Yard	Vehicle drove through bird buffer exclusion zone.
Project Memorandum	06/23/10	Segment 8 West CY	Vegetation clearing without preconstruction biological or clearance surveys within TRTP right-of-way.
Incident/Level 1 SCE NCR	06/24/10	Yard 28 Materials Yard	Verizon employee parked within a bird buffer exclusion zone.
Incident/Level 1 SCE NCR	7/6/10	Yard 28 Materials Yard	All Day Electric employee drove through a bird buffer exclusion zone.



Type	Date	Location	Description
Incident/Level 1 SCE NCR	8/3/10	Segment 7 Telecom	Crews began work without a monitor present.
Incident/Level 1 SCE NCR	09/9/10	Mesa Material Storage Yard	Water truck spraying water into jurisdictional drainage.
Incident/Level 1 SCE NCR	9/21/10	Mesa Material Storage Yard	SCE contractor on-site before biological sweep was completed.
Incident	9/21/10	Segment 8, Phase I	Wire drop at Tower M57-T2. Incident report has been requested by the CPUC.
Incident/Level 1 SCE NCR	9/24/10	Segment 5	Resource damage to a cultural site by survey crews.
Incident/Level 1 SCE NCR	10/1/10	Racetrack Yard	ICF, International (Biological Monitoring) issued an NCR for parking of vehicles outside the Yard boundaries.
Incident/Level 1 SCE NCR	10/09/10	Segment 4	Vehicle parked on a berm outside of work areas north of Tower 35.
Incident/Level 1 SCE NCR	10/09/10	Segment 4	Another vehicle parked on a berm outside of work areas north of Tower 35.
Incident/Level 1 SCE NCR	10/11/10	Vincent Substation Expansion	Foundation holes not covered at the end of the day.
Incident/Level 1 SCE NCR	10/12/10	Vincent Substation Expansion	Foundation holes not covered at the end of the day.
Incident/Level 1 SCE NCR	10/13/10	Racetrack Yard	Micro-trash in the yard.
Incident	10/19/10	66 kV	Storage of materials outside of approved areas, Variance request pending.
Incident/Level 1 SCE NCR	10/18, 19, 20, 21, and 22	5	Out-of-state license plates on the project ROW.
Incident/Level 1 SCE NCR	11/05/10	Racetrack Yard	Micro-trash in the yard.
Incident	11/15/10	8	Two instances of using access roads not approved for the project.

## PROJECT PHOTOGRAPHS



**Figure 1:** Wreck-out of existing 220 kV tower near new Tower 37 on Segment 5.



**Figure 2:** H&M wire crew unclipping wire and installing travelers on existing 220 kV tower on Segment 5.



**Figure 3:** A Wilson crew sets a lightweight steel pole on the Rio Hondo–Amador-Jose-Mesa 66 kV line in the City of Irwindale.



**Figure 4:** A DCX crew prepares Strawberry Field Contractor Yard in the City of Irwindale.



**Figure 5:** A Wilson crew assembles new Tower M0-T3, Segment 8, Phase 2.