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**PROJECT MEMORANDUM
SCE EL CASCO SYSTEM PROJECT**

To: Lynne Mosley, CPUC
From: Vida Strong, Aspen Project Manager
Date: October 14, 2009
Subject: Report #9: October 4, 2009 – October 10, 2009

CPUC ENVIRONMENTAL MONITOR (EM): Lynn Stafford

CPUC EM, Lynn Stafford, was on site October 7th, 8th, and 9th, 2009.

The SCE El Casco Project includes the following components:

- Construction of the new El Casco 220/115/12-kilovolt (kV) substation within the Norton Younglove Reserve, Riverside County, California;
- Replacement of approximately 15.4 miles of existing single-circuit 115 kV subtransmission lines with new, higher capacity single-circuit 115 kV subtransmission lines and replacement of support structures within existing SCE ROWs in the Cities of Banning and Beaumont and unincorporated Riverside County;
- Rebuilding 115 kV switchracks within Zanja and Banning Substations in the Cities of Yucaipa and Banning, San Bernardino and Riverside Counties, respectively;
- Installation of telecommunications equipment at the El Casco Substation and at SCE's existing Mill Creek Communication Site, San Bernardino County; and
- Installation of fiber optic cables within public streets and on existing SCE structures between the Cities of Redlands and Banning in San Bernardino and Riverside Counties, respectively.

The following compliance and construction activities occurred during the subject time period:

EL CASCO SUBSTATION

Summary of Activity:

The initial vegetation removal activity at El Casco Substation site and at the new access road occurred during the week of February 23rd through 27, and was reported in Report #1.

On May 8, 2009, SCE submitted the Notice to Proceed (NTP) request for the construction of the El Casco Substation and associated HDD bore work and conduit installation under San Timoteo Creek, and construction of three adjacent towers. NTP #5 for the El Casco Substation NTP request was granted by CPUC on August 31, 2009. On October 1, SCE submitted a Variance Request to allow the installation of two water tanks and above ground water piping to facilitate watering activities at the El Casco Substation site. This request was approved by CPUC on October 9, 2009. Two conditions were added to the Water Towers and Pipelines request concerning protection of nearby riparian vegetation (see Figures 1 and 2).

The pre-construction clearance biological resource survey at the El Casco Substation was conducted by Natural Resource Consultants (NRC) on August 31 and September 1, 2009, access road, and proposed culvert construction sites and was reported on by September 1, 2009. The CPUC EM conducted and reported on a field validation of the survey on September 3, 2009. Construction activity at the culvert relocation site on the access road and at the substation site began during the week of September 14, 2009.

During the subject week, grading of the new access road began (see Figure 3). The equipment and material yard and vehicle parking area next to the Substation site is currently functional (see Figure 4).



Terracing of the hillside began on Wednesday of the prior week. Fourteen terraces will be constructed in stair step fashion on two prominent ridges of the hillside. There will be four terraces on one ridge, and ten on another (see Figure 4). The face of each terrace will be fitted with a tie-back wailer structure that will provide an anchor for an approximately 120 foot long cable placed in an oblique bore dug into the hill (see Figure 5). Each bore will have a concrete caisson at the bottom for the lower cable anchor. The cable will then be tightened to create tension between the upper wailer and the lower caisson. Geologists have determined there is a layer of clay within the hill that has approximately the same slope as the hillside. Building of the substation will require the removal of the toe of the slope. This removal may increase the likelihood of slippage of the material above the clay layer. The intended function of the tension cable anchor system is to put pressure on the clay layer and thereby prevent land slippage (see Figure 6).

During the subject week, the uppermost terrace on each ridge was fitted with tie-backs that were shotcreted in place.

BANNING SUBSTATION

Summary of Activity:

The NTP for the Banning Substation work was granted by CPUC on August 13, 2009. MOD #1 to NTP #3 for additional work to be conducted at three existing transmission line poles located outside of the substation was approved by CPUC on August 26, 2009. On October 1, a Variance Request was submitted to allow alternate access into the Banning Substation. The request is under review.

No work occurred at the substation during the subject reporting period.

ZANJA SUBSTATION

Summary of Activity:

The NTP request was submitted to CPUC by SCE on June 19, 2009 for the Zanja Substation work. The pre-construction compliance processes are currently underway. Pending pre-construction compliance submittals for Zanja Substation include: outstanding hydrology submittals, geotechnical investigation submittals, as well as visual mitigation submittals. Potential EIR Addendum materials for work not previously analyzed in the EIR are also outstanding. On September 29, biological surveys were submitted for the Zanja Substation work. Field validation is required.

On April 23, a Temporary Extra Workspace (TEWS) was issued by the CPUC EM for storage of fiber optic materials within the existing Zanja Substation, Yucaipa, San Bernardino County. SCE was notified that if they wish to continue to use the Zanja Substation for material storage beyond 60 days that a variance request needs to be approved by CPUC. The approved TEWS area has not been used to date; however, SCE has requested permanent use of the subject area during construction as part of their NTP request for the Zanja Substation.

MILL CREEK COMMUNICATION SITE

Summary of Activity:

The NTP request for the Mill Creek Communication Site was submitted to CPUC by SCE on June 19, 2009. The pre-construction compliance process is currently underway. Pending pre-construction compliance submittals for the Mill Creek element include: biological surveys, regulatory permit submittals, outstanding hydrology submittals, geotechnical investigation submittals, as well as visual mitigation submittals. Potential EIR Addendum materials for work not previously analyzed in the EIR are also outstanding.

FIBER OPTIC CABLE (FOC) INSTALLATION

Summary of Activity:

The NTP request for the entirety of the fiber optic work (not including the HDD bore) was submitted to CPUC by SCE on March 5, 2009. However, on May 15, SCE requested authorization from the CPUC to commence with construction of the underground fiber optic elements in the Cities of Banning and Beaumont.

This separate NTP request was due to pending pavement rehabilitation work in this area by the City of Beaumont. The request was granted as NTP #2 by CPUC on May 22, 2009. NTP #4 for the remainder of construction of the fiber optic elements of the El Casco System Project was approved by CPUC on August 27, 2009. On September 30, a modification request to NTP #4 was submitted to allow tree trimming activities along the FOC work. NTP #4 Mod #1 was approved by CPUC on October 2. On October 1, SCE submitted a Variance Request to allow work on two shoo-fly segments. The request is under review.

Construction within the cities of Banning and Beaumont began on June 16 at the western end of the 5000-foot underground conduit system, and was completed in early August. The construction activity consisted of installation of two 5-inch conduits within a thirty-six-inch deep trench excavated into First Street in Beaumont and Sun Lakes Boulevard (contiguous roadways) in Banning. Seven manholes, for cable pulling purposes, also were installed in five-foot-deep excavations.

Installation of the FOC segment between the Mentone and Zanja Substations began on September 17, during the prior reporting period. The pre-construction biological survey by NRC had been completed on September 2 and 3, 2009, and reported on September 4. The CPUC validation was conducted on September 9, and reported on September 10, 2009.

The tree-trimming crew completed the Mentone Substation to Zanja Substation route during the subject week, and proceeded southward through Yucaipa on Juniper, Bryant, Date, Douglas, Avenue E, Wildwood streets to Avenue H (see Figure 7). On Monday of the following week, they will pass the Yucaipa Substation and proceed westward towards Live Oak Canyon Road in Redlands.

FOC crews continued to pull cable on the Mentone to Zanja segment and the Zanja Shoo-fly during the subject week.

115 kV SUB-TRANSMISSION LINE REPLACEMENT

Summary of Activity:

The NTP request for the 115 kV sub-transmission work was submitted to CPUC by SCE on March 3, 2009. The pre-construction compliance process is currently underway. Pending pre-construction compliance submittals for the sub-transmission element include: regulatory permit submittals, and outstanding hydrology, geotechnical, visual and biological survey submittals.

The report on the methods, results, and conclusions of the Pre-NTP Survey for Biological Resources on Segment 2 of the proposed Subtransmission Cable Route was submitted to SCE by NRC on July 27, 2009. This report has been field validated by the CPUC EM.

On September 22, 2009 SCE submitted a Variance Request for several geotechnical and hydrological Mitigation Measures related to the 115kV Subtransmission Line Element. A site visit including SCE and Aspen personnel occurred on October 5, 2009 to review the Variance Request.

CONSTRUCTION YARDS & OTHER WORKSPACE NEEDS

Variance Request #1 for a laydown yard immediately south of SCE's existing Maraschino Substation in the City of Beaumont, Riverside County, was requested on April 1 and approved by CPUC on April 16, 2009. Construction of the laydown yard began on May 28 and was completed by June 12, 2009. The yard is currently being used for the storage of materials, including transmission towers.

No requests for additional construction yards or other workspace needs have been submitted to date.

ENVIRONMENTAL COMPLIANCE

- Biological, cultural resource, and other mitigation monitoring was conducted by NRC, LSA, and RMT consultant field monitors at both the El Casco Substation and the FOC work areas. In addition, SCE provided air quality monitoring. Monitors representing pertinent environmental issues were present with each construction crew at all times during construction.
- Equipment was continually checked for air pollution control compliance, and for leakages (see Figure 8).

- Dust control was maintained throughout the El Casco Substation and access road sites, including the eastern access road to the top of the hill where terracing and wailer installation occurred.
- A concrete truck wash-out basin was established on the top of the hill where terracing occurred (see Figure 9). This basin is located on top of the hill because the remoteness of the concrete placement activity would cause the residual concrete in the empty trucks to dry before they were able to reach the equipment yard below.
- During excavation of one of the hillside terraces of Friday of the prior week, a dead patch-nosed snake, a special status subspecies, was found, apparently having been run-over by heavy equipment. The normal procedure having a biological monitor precede equipment during ground disturbance to locate and remove animals was impossible at this location because of the steep slope and the resultant danger to the monitor. At first, the snake was thought to be a garter snake, not a special status species. By Tuesday of the subject week, the specimen was correctly identified. A telephone message was left for the appropriate CDF&G biologist on Tuesday. The CPUC EM was informed on Wednesday of the subject week. CPUC has subsequently asked SCE to inform the CPUC EM immediately in future similar cases. It is apparent that the incident of the take was unavoidable given the circumstances.
- The erection of silt fencing on the San Timoteo Creek border of the existing access road and the edge of the El Casco Substation site was completed during the prior week. This fence will prevent siltation from the site into San Timoteo Creek, and restrict Project activity near the creek.
- The contractor at El Casco Substation is using access roads south of the Substation site to reach the top of the hill within the Substation site with vehicles, equipment, concrete trucks, and water trucks (see Figure 10). These are pre-existing roads. There will be no disturbance of natural habitat off the roads.
- Security is now on duty at the entrance gate twenty-four hours, seven days per week.
- Documents for the permitting of the trenching and placement of fiber optic cable conduit in the underground portions of the FOC route not already having conduit in place are being prepared by SCE.
- The CPUC EM has received pre-construction clearance biological resource reports for the Banning Substation access variance, the Zanja Substation work, and the El Casco Substation Water Tower and Pipelines variance. Field validation of all of these reports except the Zanja Substation work was conducted by the CPUC monitor on October 8 and 9. The reports were validated. Two conditions were added to the Water Towers and Pipelines request concerning protection of nearby riparian vegetation. The validation site visit for the Zanja Substation biological pre-NTP survey report will be conducted by the CPUC EM during the following week.

Table 1 provides a summary of the Non-Compliance Reports (NCRs) and Project Memorandum (PM), and other incidents (i.e., spills, etc.) for the SCE El Casco System Project.

TABLE 1
NCRs, PROJECT MEMORANDUM, & OTHER INCIDENTS
 (Updated 10-14-09)

Type	Date Issued	Description
PM #1	03/16/09	Failure to comply with Mitigation Measure B-18 before, during and after vegetation clearing at the El Casco Substation site. Construction equipment went outside of approved Project boundaries.
	8/21/09	A SCE internal noncompliance at the Banning Substation was issued for mobilization of the site before environmental training and biological pre-construction sweep were conducted.
PM #2	8/27/09	The initiation of construction activity before CPUC authorization and validation of the biological survey at the site of the NTP #3, MOD #1 pole work in Banning.

NOTICE TO PROCEED (NTP) SUMMARY

Table 2 summarizes the NTPs submitted, reviewed, and issued to date for the SCE El Casco System Project.

**TABLE 2
NOTICES TO PROCEED
(Updated 10-14-09)**

NTP #	Date Requested	Date Issued	Description
#1	02/20/09	02/23/09	Vegetation clearing activities at the future El Casco Substation Site located in the Norton Younglove Reserve Area in Riverside County.
#2	05/15/09	05/22/09	Construction of the underground fiber optic elements of the El Casco System Project in the Cities of Banning and Beaumont.
#3	04/10/09	08/13/09	Banning Substation
#3 Mod #1	08/21/09	08/26/09	Modify work within Banning Substation and add work at 3 existing transmission poles located outside of the substation.
#4	03/05/09	8/27/09	Fiber optic cable installation, remaining (see NTP #2).
#4 Mod #1	09/30/09	10/02/09	Tree trimming.
#5	05/08/09	8/27/09	El Casco Substation construction.
	03/03/09	Under Review ¹	115 kV Sub-transmission lines replacement.
	06/19/09	Under Review ¹	Zanja Substation
	06/19/09	Under Review ¹	Mill Creek Communication Site

1. Compliance submittals pending.

VARIANCE & TEWS REQUEST SUMMARY

Tables 3 and 4 summarize the Variance and Temporary Extra Workspace (TEWS) Requests submitted, reviewed, and issued to date for the SCE El Casco System Project, respectively.

**TABLE 3
VARIANCE REQUESTS
(Updated 10-14-09)**

Variance #	Date Requested	Date Issued	Description
#1	04/01/09	04/16/09	Usage of an empty fenced lot immediately south of SCE's existing Maraschino Substation, Beaumont, Riverside County, as a laydown yard to support Project construction.
#2	10-01-09	10-09-09	Placement of two water tanks and above ground pipe to feed water needs at he El Casco Substation site.
	09/22/09	Under Review	SCE has asserted within the variance request that several Geo & Hydro Mitigation Measures should not be required for the 115kV Subtransmission Line Element. A site visit including SCE and Aspen personnel is scheduled for October 5, 2009.
	10/01/09	Under Review	FOC Shoo-fly
	10/01/09	Under Review	Allow the installation of two water tanks and above ground water piping to facilitate watering activities at the El Casco Substation site.
	10-2-09	Under Review	Alternate Access to the Banning Substation.

TABLE 4
TEMPORARY EXTRA WORK SPACE REQUESTS
 (Updated 10-14-09)

TEWS #	Date Requested	Date Issued	Description
#1	04/17/09	04/23/09	Fiber Optic material storage at the pre-existing Zanja Substation, Yucaipa, San Bernardino County
#2	07/20/09		Staging area in a vacant lot north of First Street and west of Highland Springs Road.

PROJECT PHOTOGRAPHS



Figure 1: The water source for the primary elevated water tower will be a well-head at Fisherman's Retreat (in the background). The four-inch pipeline will lay on the dirt fringe of San Timoteo Canyon Road (left side) and run a distance of 2500 feet to the entrance gate area for the El Casco Substation. There is a small amount of riparian vegetation close to the well-head that will be avoided. The photograph faces westward.



Figure 2: The water source for the auxiliary elevated water tower will be a hydrant at the end of a cul-de-sac in Fairway Estates housing development (in the background). The four-inch above-ground pipeline will cross a small creek and riparian area on the concrete skirting in the foreground. The pipe will connect to the water tower that will be situated at the edge of San Timoteo Canyon Road.



Figure 3: The grading of the new access road to El Casco Substation began during the subject week. California walnut and cottonwood trees at the edge of the grove in the background were avoided. The grading activity was accompanied by biological and cultural resource monitors at all times. The photograph faces westward.



Figure 4: Terracing of the hillside began on Wednesday of the prior week. Fourteen terraces will be constructed in stair step fashion on two prominent ridges of the hillside. There will be four terraces on the ridge in view, and ten on another ridge to the left of the photograph. The staging area is in the distance on the left. The photograph faces northward.



Figure 5: The face of each terrace will be fitted with a tie-back structure that will provide an anchor for an approximately 120 foot long cable placed in an oblique bore dug into the hill.



Figure 6: Geologists have determined there is a layer of clay within the hill that has approximately the same slope as the hillside. Building of the substation will require the removal of the toe of the slope. This removal may increase the likelihood of slippage of the material above the clay layer. The intended function of the tension cable anchor system is to put pressure on the clay layer and thereby prevent land slippage. The photograph faces southeastward.



Figure 7: During the subject week, tree-trimming for FOC installation occurred on Bryant Street in Yucaipa. A biological monitor (to the left of the truck) accompanied the crew at all times. The photograph faces southward.



Figure 8: Equipment and vehicles were checked regularly for fluid leaks. This paddle-wheel excavator at the El Casco Substation staging area has been fitted with a drip pan until it is repaired.



Figure 9: A concrete wash basin was built on the top of the hill at El Casco Substation site in order that concrete trucks supplying the terrace work can be cleaned before the residue concrete dries inside the trucks. The photograph faces eastward.



Figure 10: Access roads south of the El Casco Substation site are being used to reach the top of the hill within the Substation site with vehicles, equipment, concrete trucks, and water trucks. These are pre-existing roads. There will be no disturbance of natural habitat off the roads. The roads are being watered regularly for dust control. The photograph faces eastward.