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**PROJECT MEMORANDUM
SCE EL CASCO SYSTEM PROJECT**

To: Lynne Mosley, CPUC
From: Vida Strong, Aspen Project Manager
Date: November 10, 2009
Subject: Report #13: November 1, 2009 – November 7, 2009

CPUC ENVIRONMENTAL MONITOR (EM): Lynn Stafford

CPUC EM, Lynn Stafford, was on site November 3rd and 4th, 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 occurred at El Casco Substation site and at the new access road during the week of February 23rd through 27th, 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.

During the subject week, grading of the new access road continued. Five cottonwood trees and one eucalyptus tree were removed during the subject week to allow for the construction of a drain on the south side of the road. The new access road is being raised several feet above the original ground level (see Figure 1). The material for the heightened road is being hauled in from the over-excavation area of the substation site (see Figure 2). This area is being over-excavated to allow the placement of a more firm base for the substation.

Terracing of the hillside continued during the subject week. 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. A tension cable anchor system is being constructed on and into the hillside



to put pressure on the clay layer and thereby prevent land slippage. Fourteen terraces will be constructed in stair step fashion on two prominent ridges of the hillside. There will be four terraces on the shorter ridge, and ten on another higher ridge. The face of each terrace will be fitted with a tie-back wailer structure that will provide anchors for several approximately 120-foot-long cables per wailer placed in oblique bores dug into the hill. Each bore will have a concrete caisson at the bottom for the lower cable anchor. Each cable will then be tightened to create tension between the upper wailer tie-back and the lower caisson. The terrace will then be backfilled, and the operation moved to the next lower terrace. It is estimated that approximately two hundred anchors will be constructed.

During the subject week, the second terrace on each of the two ridges was excavated. Construction of the tie-in wailers and boring of the anchor holes at the second terraces began (see Figure 3).

During the subject week, construction of the second water pipeline/tower system was completed adjacent to San Timoteo Canyon Road immediately west of Fairview Canyon Housing Development on Riverside Land Conservancy property. Both this system and the previously installed pipeline/tower system from Fisherman's Retreat Campground to the project entrance area are currently the source of construction-related water needs, including compaction and dust control.

During the subject week, two SCE project field trailers were hauled in and installed on the sites graded during the prior week.

The utility line which will supply the Project, including the field trailers, with power, was in the process of being installed during the subject week. This line will run from the utility line along San Timoteo Canyon Road at the entrance gate to the substation site.

The Mowbray tree-trimming crew removed the above-mentioned trees, and removed dead brush and tree-trimmings from the edge of San Timoteo Creek at the location along the substation access road where a 220 kV line passes overhead. SCE maintenance trimmed the riparian vegetation during late-winter 2009, but had not yet removed the vegetation.

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. This request was approved by CPUC on October 15, 2009.

Trenching for and placement of electrical wiring occurred within the northern section of the substation during the subject reporting period. This area was previously unused by the substation and is being prepared to house the expansion of the substation required by the El Casco Systems Project. All work occurred within the perimeter fence of the existing substation.

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 approvals for Zanja Substation include: hydrology submittals and geotechnical investigation 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. During the prior week, the CPUC EM conducted the field validation of the biological surveys and submitted comments on this validation. SCE is revising the survey report and associated NTP request to address questions and concerns raised during the validation visit.

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. This request was approved by CPUC on October 15, 2009.

Construction within the Cities of Banning and Beaumont began on June 16 at the western end of the 5000-foot underground conduit system within Sun Lakes community, and was completed in early August. The construction activity consisted of installation of two 5-inch conduits within a 36-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, 2009. 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.

During the subject week, four types of construction activity occurred. These included tree-trimming in preparation for above ground FOC installation, above ground FOC installation, underground conduit installation, and work on the Banning temporary shoo-fly route.

The Mowbray tree-trimming crew continued work on Live Oak Canyon Road in Redlands and on San Timoteo Road in Riverside County during the subject week. The activity required traffic control. A biological monitor was with the crew at all times.

SCE FOC crews installed framing arms and hardware on poles along Bryant Street within the Zanja to Yucaipa segment.

Underground conduit work by PAR crews occurred at several locations during the subject week. Installation of conduit was completed at Date Street and Bryant Street in Yucaipa. Trenching was conducted at the Desert Lawn/San Timoteo Road location in Beaumont. Also in Beaumont, trenching occurred at First

Street and Pennsylvania Avenue. Trenching began on Lincoln Avenue in Banning next to the Banning Substation. Within the Banning Substation a single crew installed conduit from the control room to the trenches.

SCE FOC crews continued stringing cable on the Banning shoo-fly segment during the subject week. They hung support ropes and pulled cable between the ridge on the Morongo Indian reservation at the eastern end of the shoo-fly across San Gorgonio Creek wash to the edge of the canyon west of Bluff Street, then continued on westward towards Sunset Street across private lands. The crews then moved to the Calimesa shoo-fly and installed arms, hardware, and rope in the orchard and vineyard adjacent to Plantation Drive.

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 115 kV Subtransmission Line Element. Variance #5 was partially approved by CPUC on October 23. The approval was conditioned that the analysis of the effect of installation of a large numbers of new poles that was not anticipated in the original EIR be reviewed and approved by CPUC. CPUC requested information from SCE regarding pole number and placements, as well as associated impacts, by construction segment. SCE provided an information package November 3, 2009, which is currently under review.

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 and LSA consultant field monitors at both the El Casco Substation and the FOC work areas. In addition, SCE provided air quality monitoring at the El Casco Substation site. Monitors representing pertinent environmental issues were present with each construction crew at all times during construction. No environmental monitors were present at the Banning Substation site, because all work was contained within the substation and no environmental issues were involved.
- Equipment was continually checked for air pollution control compliance and drip pans were placed where necessary to contain leakages. The CPUC monitor noticed a few oil spills where heavy equipment had been parking overnight. The SCE site reps were notified, and gave assurance that the contractor would be given instruction to have the contaminated soil picked up and properly removed.
- 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 tie-back installation occurred. At least three water trucks are onsite, including one large one. The two recently installed water pipeline/tower systems are in operation and able to keep up with water demands.

- A concrete truck wash-out basin has been established on the top of the hill where terracing is occurring. Other smaller temporary basins are being established as necessary.
- The contractor at the El Casco Substation established a dewatering operation at the pit at the north edge of the Substation site near San Timoteo Creek that was excavated to determine depth of ground water. A temporary pump and mobile storage tank is in place and in operation. SCE plans to continue the dewatering operation in this area until future over excavation and proper compaction occur. The contractor filled the inner well containing the dewatering pump with gravel to prevent entrapment of animals during the subject week.
- 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. 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.
- SCE submitted a variance request on October 23, 2009 to enable a Portable Fuel Tank installation at the El Casco Substation site. Variance #6 was approved on October 27, 2009. The design and proposed placement of the tank ensure protection from diesel spill. CPUC determined that no further biological and cultural resource surveys were necessary because of prior surveys in the area. The tank has not yet been installed.
- The second water pipeline/tower system for the El Casco Substation construction water needs was constructed and in operation by the subject week. The tower area is adjacent to San Timoteo Canyon Road. The water is piped from a hydrant in an adjacent housing development (see Figure 4). The area around the tower has been fenced off including a gate (see Figure 5). A shaker plate and a gravel loop driveway for the water truck have been built to reduce soilage on the public road. Silt fencing also is in place to prevent runoff.
- On Monday of the subject week an accident occurred between a Project scraper operated by CatTrac , the El Casco Substation contractor, and a private vehicle. The scraper had been traveling eastbound on San Timoteo Road from the El Casco Substation entrance towards the water tower near the housing development. As it made a left turn to enter the tower site, a vehicle approached from behind and collided, apparently at high speed. SCE personnel have been assured by CatTrac that the equipment is street legal, and was using flashers and turn signals. The operator apparently was wearing a seat belt. The single occupant of the private vehicle was airlifted by helicopter to a hospital. The police report and the contractor’s report are not yet available.

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 11-10-09)

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 11-10-09)

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 11-10-09)

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 the El Casco Substation site.
#3	09/30/09	10/15/09	FOC Temporary Circuitry: Banning and Calimesa Shoo Flies.
#4	09/30/09	10/15/09	Alternate Access to the Banning Substation from John Street.
#5	09/22/09	10/23/09	SCE has asserted within the variance request that several Geo & Hydro Mitigation Measures should not be required for the 115 kV Subtransmission Line Element.
#6	10/23/09	10/27/09	Installation of a Portable Fuel Tank at the El Casco Substation site.
#7	10/27/09	10/29/09	Project Description change from underground to overhead installation for fiber optics circuitry along Colton Avenue in the vicinity of the Mentone Substation.
#8	10/29/09	10/29/09	Removal of five Fremont cottonwood trees that are impacted by the construction of the access road to the El Casco Substation site.

TABLE 4
TEMPORARY EXTRA WORK SPACE REQUESTS
 (Updated 11-10-09)

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: During the subject week, grading of the new access road continued. The new access is being raised several feet above the original ground level, and the level of the pre-existing access road on the right. The photograph faces westward.



Figure 2: The material for the heightened road is being hauled in from the over-excavation area of the substation site. This area is being over-excavated to allow the placement of a more firm base for the substation. The photograph faces northwestward.



Figure 3: During the subject week, the second terrace on each of the two ridges was excavated. Construction of the tie-in wailers and boring of the anchor holes at the second terraces began. An anchor hole is being bored at terrace N. The tie-ins at Terrace M, above it, have been backfilled. The second, higher ridge is out of sight. Its terraces begin with A at the top. Terrace B is under construction presently. The photograph faces southeastward.



Figure 4: The water for the second water pipeline/tower system for the El Casco Substation construction is piped from a hydrant in an adjacent housing development in the distance. The water tower is behind the photograph, which faces northeastward.



Figure 5: The second water tower is adjacent to San Timoteo Road (to the left of the photograph). The tower area has been fitted with a shaker plate, a gravel loop road for water loading, a perimeter fence and gate, and a silt fence for run off prevention. The photograph faces westward.