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**PROJECT MEMORANDUM
SCE EL CASCO SYSTEM PROJECT**

To: Lynne Mosley, CPUC
From: Vida Strong, Aspen Project Manager
Date: October 21, 2009
Subject: Report #10: October 11, 2009 – October 17, 2009

CPUC ENVIRONMENTAL MONITOR (EM): Lynn Stafford

CPUC EM, Lynn Stafford, was on site October 15th and 16th, 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.

During the subject week, grading of the new access road continued. The width of the new access road construction zone was discussed in connection with two small cottonwoods trees immediately adjacent. This issue is discussed below in the Environmental Compliance section.

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 an anchor for an approximately 120 foot long cable placed in an oblique bore dug into the hill. 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 tie-back and the lower caisson.

During the subject week, the tie-backs on the uppermost terrace on each ridge were completed, and were curing. Each tie-back has been fitted with a cable placed through a bore hole to a concrete anchor caisson below. When the curing has completed and the concrete tie-backs have passed strength tests, the cables will be tightened to create tension. Then the two terraces will be backfilled before the operation moves to the next lower pair of tie-back systems.

During the subject week, construction began on the above-ground water pipeline between a source well at the Fisherman's Retreat Campground and the entrance gate of the El Casco Substation site (see Figure 1). This pipeline is being placed on the south shoulder of San Timoteo Canyon Road. It will connect to a temporary water tank just inside the entrance gate. Variance Request #2 permitting this pipeline and tower also permits the construction of another pipeline/tower system further east on San Timoteo Canyon Road. This second system will not be build unless needed.

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.

Grading occurred within the northern section of the substation during the subject reporting period (see Figure 2). This area was previously unused by the substation. It will house the expansion of the substation required by the El Casco Systems Project.

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. 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, 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, 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.

The tree-trimming crew completed work on Avenue H in Yucaipa and on Live Oak Canyon Road in Redlands during the subject week. On Monday of the following week, they will complete work along Juniper Ave. and Bryant St. in Yucaipa.

FOC crews pulled cable Wednesday through Saturday of the subject week and completed the Mentone to Zanja segment. They will begin on the Banning Shoo-Fly the following week. A tailboard meeting is scheduled for Tuesday, October 20, at the east end of the Shoo-Fly near Bluff Street.

Conduit trenching for the remaining underground portions of the FOC route began on Thursday of the subject week at the Mentone Substation and proceeded eastward on Colton Avenue. Pipe installation, slurry, and backfill occurred. On Monday of the following week, trenching will continue on Colton Ave. in Mentone and a second operation will begin at the Maraschino Substation in Beaumont.

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. 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 drip pans were placed where necessary to contain leakages. On Friday of the subject week, the CPUC EM discovered a diesel fuel leak on one parked bulldozer. The SCE site representative and RMT monitor investigated the incident. Apparently the fuel tank was topped off excessively during cool hours of the prior day. Daytime temperatures exceeding 95⁰ F on Friday pushed the expanding fuel out of the tank. The contractor will be notified of the situation.
- 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.
- In addition to the concrete truck wash-out basin previously established on the top of the hill where terracing is occurring, smaller basins are being established on the terraces during shotcreting (see Figure 3). Some thin concrete spillage has coated the ground in some areas during the operations (see Figure 4). This concrete has dried quickly. It will eventually be buried during the backfill operation. No wet concrete used in the terracing activities will reach any watercourse.
- The contractor at the El Casco Substation has dug a pit approximately twenty-five feet away from the bank of San Timoteo Creek to determine depth of groundwater at the location where previous geotechnical testing identified soils prone to liquefaction and lateral spreading along this portion of the substation site (see Figure 5). Groundwater was discovered at approximately fifteen feet below the surface. A dewatering operation was set up during the subject week pumping groundwater from the pit with a temporary pump and storing it in a mobile tank (see Figures 6 and 7). SCE plans to continue the dewatering operation in this area until future over excavation and proper compaction occur.
- On Friday of the subject week, SCE and contractor personnel informed the CPUC EM that two small cottonwood trees near the eucalyptus grove need to be removed for the access road building activity (see Figure 8). These trees apparently were not identified in the engineer drawings for the access road work. This issue will be discussed during the Wednesday, October 21 conference call with SCE and CPUC personnel. The trees are within the permanent disturbance zone for the access road building.
- 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.
- The CPUC EM received and validated a second pre-construction clearance biological resource report for the Banning Shoo-Fly FOC installation. The validation site visit for the Zanja Substation biological pre-NTP survey report will be conducted by the CPUC EM during the following week. Also, the Pre-construction Clearance biosurvey report for the Zanja to Yucaipa segment of the FOC Route construction will be given to the CPUC EM on Tuesday of the following week for field validation.

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 10-21-09)

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 10-21-09)

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 10-21-09)

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.
#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.
	09/22/09	Under Review	SCE has asserted within the variance request that several Geo & Hydro Mitigation Measures should not be required for the 115 kV Subtransmission Line Element. A site visit including SCE and Aspen personnel is scheduled for October 5, 2009.

TABLE 4
TEMPORARY EXTRA WORK SPACE REQUESTS
(Updated 10-21-09)

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: Construction began on the above-ground water pipeline being placed on the south shoulder of San Timoteo Canyon Road between a source well at the Fisherman's Retreat Campground and the entrance gate of the El Casco Substation site. The photograph faces westward.



Figure 2: During the subject week, grading began at the Banning Substation in preparation for upgrading. The photograph was taken from the John Street entrance and faces southward.



Figure 3: Small concrete wash-out basins were created at each terrace on the hillside at El Casco Substation.



Figure 4: Some concrete spillage occurred at the terraces. The concrete will dry and be buried during the backfill operation.



Figure 5: At the El Casco Substation site, a thirty-foot wide pit was dug within twenty-five feet of the San Timoteo Creek bank in order to determine ground water level.



Figure 6: Water is currently being continually pumped out of the excavated pit.



Figure 7: The excavated pit at El Casco Substation site is in the distance behind the orange fence. The blue tank on the right is storing the pumped groundwater. The generator supplying power is the dark structure behind the portable toilets. It has been placed within a spill containment structure.. The photograph faces northwestward.



Figure 8: The contractor at the El Casco Substation site needs to remove two small cottonwood trees near the eucalyptus grove in order to build the new Access Road. The two trees are one multiple-branched one on the right and the small one just left of center. The larger cottonwood on the left would not be removed. The photograph was taken from the new Access Road site, and faces southwestward.