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**PROJECT MEMORANDUM
SCE EL CASCO SYSTEM PROJECT**

To: Lynne Mosley, CPUC
From: Vida Strong, Aspen Project Manager
Date: October 27, 2009
Subject: Report #11: October 18, 2009 – October 24, 2009

CPUC ENVIRONMENTAL MONITOR (EM): Lynn Stafford

CPUC EM Lynn Stafford was on site October 20th, 21st, and 22nd, 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 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. On October 23, SCE submitted a Variance Request to put a 1000-gal diesel fuel tank at the El Casco Substation site to better enable fueling. The request is under review.

During the subject week, grading of the new access road was temporarily halted. The width of the new access road construction zone was discussed in connection with five 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 completed tie-backs on the uppermost terrace on each ridge were tested for strength, and tension was applied to the cables. Each tie-back has been fitted with a cable placed through a bore hole to a concrete anchor caisson below. Backfilling of the two terraces will begin soon. Then the operation will move down the ridges to the next set of terraces.

During the subject week, construction was completed 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. This pipeline is placed on the south shoulder of San Timoteo Canyon Road. It is connected to a temporary water tank just inside the entrance gate (see Figure 1). The water is being used for all construction related water needs at the El Casco Substation work site. 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 installed 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.

Placement of fill material 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.

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. During the subject week, the CPUC conducted the field validation of the biological surveys. Comments on this validation were provided to SCE on October 26.

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 installation, underground installation, and work on the Banning and Calimesa temporary shoo-fly routes. Work occurred Tuesday through Saturday.

The tree-trimming crew continued work on several streets in Yucaipa, both between the Zanja Substation and the Yucaipa Substation, and west of the Yucaipa Substation.

FOC crews spliced cable on the Mentone to Zanja segment, and then began work on the Banning and the Calimesa shoo-fly segments during the subject week. Two SCE crews worked on the electrical installation along the Banning shoo-fly route while a Henkels and McCoy crew completed installation of additional poles at the Banning shoo-fly (see Figure 2), and began installation of poles at the Calimesa shoo-fly. For a short time, three SCE crews were used to span steep, rugged canyon terrain on the Banning route.

Conduit trenching and placement for the remaining underground portions of the FOC route continued during the subject week with two crews. Construction activities occurred within, and adjacent to, the Mentone, Yucaipa, and Maraschino Substations. The underground portion of the FOC route on Colton Avenue in Mentone was changed to an overhead placement on existing poles because of the discovery of an abandoned, unmarked pipe in the pathway of the planned underground portion. This situation is discussed below in the Environmental Compliance section.

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 to lesson several geotechnical and hydrological pre-construction mitigation measure requirements 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. The request was partially/conditionally approved on October 23, 2009.

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 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 contractor at the El Casco Substation site, Cattract, corrected the diesel fuel leak situation of the prior week that was due to overtopping of equipment fuel tanks.
- 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.
- 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 ground water depth. 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. CPUC requested that an animal escape ramp be established within the pit to prevent entrapment. This structure was in the process of being built at the end of the subject week.
- SCE determined during the subject week that three large cottonwood trees, in addition to the two small trees near the eucalyptus grove identified during the prior week, need to be removed for the access road building activity (see Figure 3). These trees apparently were not identified in the engineer drawings for the access road work. Riverside County officials, including an arborist, visited the site to determine if some of the trees can be left in place. The trees are within the permanent disturbance zone for the access road building.

- The contractor at the 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.
- On Monday morning at 0916 hours of the subject week, an FOC Par Electric trenching crew ruptured an unmarked abandoned pipe on Colton Street in front of the Mentone Substation. SCE immediately informed the CPUC EM. The USA DigAlert process had been used prior to construction and did not indicate the presence of the pipe. Water that apparently contained fuel oil escaped onto the paved road edge. Wattles and earthen berms were used to collect the water. No water from the pipeline reached any storm drain, nor did any adjacent soil become contaminated. A hazmat service company responded with a Vac truck and a Vac trailer. The water and some contaminated soil were placed in two bins for proper disposal (see Figure 4). Several agencies were then contacted. The pipeline apparently is owned by Union Pacific Railroad. The source of the contaminated water is an old underground tank several hundred feet east of the incident site (see Figure 5). The Railroad and San Bernardino County will complete the soil cleanup along the pipeline at a later time. Because of the location of the pipeline, SCE will abandon plans to place the FOC in an underground trench as planned along that section of Colton Street. It will be rerouted above ground on existing poles. A Variance Request for this activity was submitted on October 27. SCE and its contractor utilized proper containment and communication procedures in dealing with the situation.
- The validation site visit for the Zanja Substation biological pre-NTP survey report was conducted by the CPUC EM during the subject week. Comments on the validation were provided to SCE on October 26. The Pre-construction Clearance bio-survey report for the Zanja to Yucaipa segment of the FOC Route construction was given to the CPUC EM on Tuesday of the subject week and was validated by the end of the 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 10-27-09)

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 10-27-09)

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 10-27-09)

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	Partial/conditional approval 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. A site visit including SCE and Aspen personnel is scheduled for October 5, 2009. The request was partially/conditionally approved on October 23, 2009.
#6	10/23/09	Under Review	Install a 1000-gal diesel fuel tank at the El Casco Substation site to better enable fueling.
	10/27/09	Under Review	Temporary above ground installation of fiber optics conduits near the Mentone Substation as a result of discovery of an abandoned UPRR fuel line within the proposed trench line alignment.

TABLE 4
TEMPORARY EXTRA WORK SPACE REQUESTS
 (Updated 10-27-09)

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, the above-ground water pipeline along San Timoteo Road between a source well at the Fisherman’s Retreat Campground and the entrance gate of the El Casco Substation site was completed, and placed in operation. The water is pumped into the blue settling tank, and then into the raised water tower where Project water trucks are filled. The photograph was taken just inside the Project entrance gate and faces westward.



Figure 2: Additional poles were placed in the construction of the temporary Banning shoo-fly FOC route. The photograph was taken east of Bluff Street in the hills north of Banning and faces northward.



Figure 3: The three cottonwood trees in the center of the photograph are immediately adjacent to the new access road site at El Casco Substation. They may need to be removed as well as the two smaller trees on the left and right sides of the photograph. The photograph was taken near the eucalyptus grove and faces southeastward.



Figure 4: During trenching for installation of underground FOC in front of the Mentone Substation on Monday of the subject week, an unmarked pipe was ruptured just in front of the photograph. The bins on the left contain contaminated soil that was removed. The trench was re filled and paved without placement of the FOC. The unmarked pipe is located on the left side of Colton Street for several hundred feet in the distance. The photograph faces eastward.



Figure 5: The source of the contaminated water in the ruptured pipeline is this abandoned underground storage tank. It is in a field on the north side of Colton Street. The photograph faces westward. The Mentone Substation is located a few hundred feet in the distance.