

**ISPEN** Environmental Group

## PROJECT MEMORANDUM SCE – VIEJO SYSTEM PROJECT

To: Jensen Uchida, CPUC
From: Vida Strong, Aspen Project Manager
Date: March 15, 2005
Subject: Weekly Report #32: March 6 – March 12, 2005.
CPUC Environmental Monitor (EM): Christopher Meyer

The CPUC EM conducted a site visit on March 11 and reviewed the substation, 220 kV, and 66 kV construction activities, and Best Management Practices (BMPs).

# SUBSTATION CONSTRUCTION

# **Summary of Activity:**

- 1. SCE continued working on the A-bank transformers during the site visit. After finishing the first A-bank transformer, the crew used the special vacuum truck to pull the moisture from the second A-bank transformer during the site visit.
- 2. The grounding transformers have been set for both A-bank transformers (see Figure 1). Crews continued to test the panels throughout the substation site after installation. The technicians tested each connection on the panels to verify the panels were correctly fabricated at the factory.
- 3. Union has completed the excavation and pouring of the foundation for the block wall that will eventually surround the substation site. SCE increased the width of the foundation for increased stability in the wall. A specialized crew worked to set the concrete blocks during the site visit (see Figure 2). The wall will be grouted to approximately 3 feet in elevation; however, the crews were not able to proceed with the grouting while awaiting an inspection by the city.
- 4. Several small crews worked throughout the substation site to connect foundations to the grounding grid and make final connections in the system. A special mold is used to fuse the copper grounding wires. A small metal disk is placed over the wires in the mold to be fused and a powder charge is added. A reactive powder is added last to create the heat to melt the disk over the copper cables (see Figure 3).
- 5. A small crew worked to adjust the disconnect switches on the 220 kV section of the substation site (see Figure 4). The disconnect switches can only be operated manually from a crank located below the switches. The bars that are attached to the crank need to be adjusted so that the switches align properly while in the closed position.

# **Environmental Compliance:**

For all operations, the CPUC EM observed that construction was in compliance with mitigation measures adopted in the MND and other permitting requirements. SCE has placed additional rock on the substation site, reducing the turbidity and sediment travel in rain events.

The site vegetation has been removed from the substation site and a LSA Environmental Inspector (EI) has not been on-site full-time. The LSA EI is periodically checking the excavations and foundation holes for sensitive and common animals. Several fossils have been discovered and collected for examination by the paleontologist during the course of the project. The majority of the excavation has been completed on the substation site and no fossil discoveries were reported during the subject week.

The Best Management Practices (BMPs) installed on the substation site have been installed and maintained. No off-site impacts were noted during the site visit and the maintenance of the BMPs appeared to be effective as SCE prepared for any future rains. The substation crews have been constantly improving the BMPs as work is completed in sections of the substation site.

## 220 KV TRANSMISSION LINE SEGMENT

#### **Summary of Activity:**

No construction occurred on the 220 kV transmission line segment during the site visit.

### **Environmental Compliance:**

The BMP issues at the steel pole pad on the 220 kV transmission right-of-way have been addressed and no other storm water related issues were noted during the site visit.

Several birds were noted in the habitat adjacent to the 220 kV right-of-way, including a gnatcatcher with breading plumage (see Figure 5). No construction work was occurring in the vicinity.

#### 66 KV TRANSMISSION LINE SEGMENT

#### **Summary of Activity:**

The NTP for the 66 kV work within the City of Lake Forest was issued on February 1, 2005. Form work and concrete pouring occurred on the 66 kV transmission line segment during the site visit. Work on the 66kV system included the following:

1. Inland Valley Construction prepared the forms to pour the two sections of v-ditch along the access road on the 66 kV segment above the substation site (see Figure 6). The concrete truck arrived later in the morning to start the pours at the prepared forms.

## **Environmental Compliance:**

The LSA EI pulled back the jute netting in several sections of the slopes on the 66 kV pads that were subject to erosion and placed seed.

Many of the BMPs stopped sediment from leaving the construction area; however, some continue to need maintenance. The v-ditches will need to be cleaned of sediment prior to any predicted rain events.

#### NOTICES TO PROCEED (NTP):

NTP #1 was approved for substation construction by the CPUC on July 15, 2004, and NTP #2 was approved for the 220 kV upgrade on September 29, 2004. NTP #3 for 66 kV within the City of Lake Forest was issued by CPUC on February 1, 2005.

VARIANCE REQUESTS: No variance requests were submitted for review during the subject week.

**UPCOMING ITEMS:** None.

#### AGENCY PERSONNEL CONTACTS: None

# Photographs



Figure 1 – The grounding transformers for the A-bank transformers have been set on pads and will be connected to the system shortly.



**Figure 2** – A specialized crew set the concrete blocks on the west side of the substation during the site visit.



**Figure 3** – A small crew worked to fuse connections on the grounding grid that runs throughout the substation site.



**Figure 4** – A small crew worked to adjust the disconnect switches on the 220 kV portion of the substation site.



Figure 5 – Nesting behavior was noted in the habitat adjacent to the 220 kV transmission line right-of-way.



**Figure 6** – Crews worked to build forms for the v-ditches on the 66 kV section of the project. Jute netting has been placed on the slopes of the complete steel pole pads.