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**PROJECT MEMORANDUM**  
**SCE SONGS PROJECT**

**To:** Jensen Uchida, Project Manager, CPUC  
**From:** Vida Strong, Aspen Project Manager  
**Date:** November 8, 2010  
**Subject:** Status Report, September 9 – October 1, 2010

The SCE SONGS Unit 3 Replacement Project involves the following activities:

- Preparation of transport route through Marine Corps Base Camp Pendleton (MCBCP)
- Ocean transport of the Replacement Steam Generators (RSGs) from the Port of L.A. to MCBCP
- Onshore transport of the RSGs to the SONGS facility
- Installation of four RSGs into the SONGS facility

**CPUC/Aspen Environmental Monitors (EM):** Jenny Slaughter and Cassandra Garza

**Summary of Activity:**

During the subject period, the onshore transport of the two Replacement Steam Generators (RSGs) from the Del Mar Boat Basin to the SONGS facility covered under the CPUC Notice to Proceed #1 for the SONGS Project took place. The installation of the RSGs into their positions inside Unit 3 at the SONGS facility will take place during an outage beginning in October 2010 and estimated to take 100 days.

The transport route for the Unit 3 RSGs Replacement Project is the beach and road route, which is entirely west of Interstate 5 except for a short stretch along I-5 to bypass Skull Canyon. The route is located within MCBCP, Caltrans, and State Park jurisdictions. Transport of the Unit 3 RSGs took place along the same route taken by the Unit 2 RSGs completed in 2009.

SCE utilized the same transport contractor used for the Unit 2 RSGs in 2009, Emmert International. Transport of the two Unit 3 RSGs was conducted one at a time using a tracked crawler for the beach route portion up to the Las Pulgas staging area and then transferred to the Goldhofer trailer for the remainder of the route along both paved and dirt roads into the SONGS facility. The following process was implemented for the transports of the two Unit 3 RSGs:

1. Dredging of the barge landing area in the Del Mar Boat Basin to accommodate the barge containing the RSGs was completed in July. Dredging spoils were processed in accordance with the project sand management plan at the SONGS Mesa. Approximately 70 cubic yards of sand was estimated to have been removed.
2. The Unit 3 RSGs arrived via barge to the Del Mar Boat Basin on MCBCP on August 23<sup>rd</sup> and were offloaded into a staging area near the beach campground. Marine mammal training was conducted prior to sailing from the Long Beach Harbor. Marine Mammal Monitors accompanied the barge to ensure that the vessel avoided marine mammals along the transport route.
3. Minor road grading for route preparation took place on MCBCP. Areas cleared for the previous RSG transport were utilized and no additional areas required vegetation removal.
4. Transport of the first RSG (Unit 3B) began on September 9<sup>th</sup> successfully crossing the Santa Margarita River, and continued to the first layover area for overnight staging (see Figure 1). The beach transport was conducted following the daytime high tide into the night to reach beach layover areas. Graders



and bulldozers were ahead of the crawler creating a smooth, even driving surface for the crawler along the beach (see Figure 2). Transport of the first RSG along the beach route was completed in three days, using two out of three beach layover areas for overnight staging (see Figure 3) and ending at the Las Pulgas staging area on September 11.

5. In preparation for the remainder of the transport route, steel plates were placed at the entrance and exit of Interstate 5, at the Y-turn on MCBCP, and along portions of Old Highway 101 for pavement and utility protection (see Figure 4). During this time, the RSG was transferred from the crawler to the Goldhofer at the Las Pulgas staging area.
6. On September 14<sup>th</sup>, the crawler was driven back to the Del Mar Boat Basin along the same beach route to load the second RSG (Unit 3A) and prepare for the second transport. The return trip of the crawler was completed in two days staging one night at Layover Area Number 1 and crossing the Santa Margarita River at low flows and low tide.
7. Once the Unit 3B RSG was transferred to the Goldhofer, it was inspected by the California Highway Patrol prior to the Interstate 5 road transport.
8. Transport from Las Pulgas to the SONGS facility on the Goldhofer began on September 16<sup>th</sup>. The road transport took place along the southbound lanes of Interstate 5 during the night and took approximately one hour to complete the ½ mile of freeway transport. Cal Trans and California Highway Patrol were on site to assist with the move and oversee traffic control operations. One lane of southbound traffic was open during the closure. The remainder of the transport route along dirt roads on Marine Corps Base Camp Pendleton (MCBCP) and on paved roads (old Highway 101 and through the San Onofre State Park) was completed on September 20<sup>th</sup>.
9. Once the Goldhofer offloaded the first RSG into the SONGS staging area, it was driven back to the Las Pulgas staging area to prepare for the second RSG transport.
10. Transport of the second RSG (Unit 3A) began on September 23<sup>rd</sup> and completed the Santa Margarita River crossing at low flows and during low tide. The crawler transporting the second RSG completed the beach portion in three days using the same beach layover areas as Unit 3B and arrived at the Las Pulgas staging area on September 25<sup>th</sup>.
11. Transport of the Unit 3A RSG along Interstate 5 and through MCBCP roads, Old Highway 101, and San Onofre State Park was completed between September 29<sup>th</sup> and October 1<sup>st</sup>.
12. Transport equipment and materials including the crawler and Goldhofer were demobilized from the Las Pulgas Staging area, Del Mar Boat Basin, and the SONGS facility.
13. Route restoration took place along the dirt roads used for transport during October. Reseeding of temporary disturbance areas is planned for the fall. Erosion controls have been installed in restored areas.

#### **Environmental Compliance:**

1. SCE proposed two changes to the previous 2009 RSG transport project description with respect to the timing of the transport. In order to take advantage low tides in September, SCE proposed starting the Unit 3 RSGs before the end of the breeding season (September 15) for the California least tern and the western snowy plover and to conduct some nighttime transport activities. United States Fish and Wildlife Service (USFWS) amended their informal consultation already conducted for the 2009 transport to include these changes. The amended informal consultation included conservation measures to ensure that additional impacts to these species would not occur. As conditioned in the amended informal consultation, MCBCP provided a status update for the California least tern and western snowy plover breeding and rearing of young within 48 hours of the scheduled transport. Based on the annual nest monitoring data collected by MCBCP, nesting activities were determined to have been completed and

the transport was allowed to proceed. During nighttime transport, SCE followed the Transport Lighting Mitigation Plan, already approved for the project.

2. Transport permits for the Interstate 5 closure and the CHP inspection report were submitted prior to the freeway transport.
3. The CPUC EM verified that the beach route and layover areas were clearly marked in advance of transport. Flagging was used to delineate the mean high tide line and layover areas. Transport along the beach route was conducted during low tides in order to stay below the mean high tide line and avoid vegetation and bird nesting areas. Although three layover areas were marked for overnight staging along the beach route above the mean high tide line, the transport of both RSGs were able to minimize disturbance to two areas (Layover Areas 1 and 3). These areas were identified ahead of time by biologists and were located in areas recommended by USFWS and MCBCP biologists. The layover areas were chosen in locations with little or no vegetation and were located outside of known bird nesting areas.
4. A pre-transport weather analysis was submitted to the CPUC describing the tidal conditions and the flow analysis of the Santa Margarita River crossing prior to each RSG transports and prior to the empty crawler transport back from Las Pulgas. Crossings of the Santa Margarita River along the beach route were timed to avoid high flows and to occur during low tide to minimize impacts to the tidewater goby. Fisheries biologists were present to survey and monitor the Santa Margarita River crossing prior to and during RSG transport over this crossing to survey for tidewater gobies, a federally protected fish potentially present in the river estuary. The fisheries biologists conducted seining of the Santa Margarita River along the beach transport route, and did not identify any tidewater gobies. Representatives from MCBCP Environmental Security observed the crossing of the river.
5. On site biological monitoring was conducted by AMEC consultants, a contractor to SCE. The biological monitors were present during route improvements and all RSG transport activities to avoid impacts to the Western snowy plover. Although the monitoring biologists identified several Western snowy plovers along the beach during the RSG transports, the birds were easily able to avoid the slow moving transport equipment travelling between 0.2-0.6 miles per hour.
6. Daily pre-transport meetings were held to discuss safety and environmental concerns prior to transport activities. Equipment used for the RSG transports was washed prior to use to prevent the introduction of weeds.
7. SCE Hazardous Materials personnel and equipment were present during all transport activities.
8. Along the beach transport route, no refueling of transport or grading equipment took place. During night layovers, only the crawler and support vehicles remained on the beach. Grading equipment was removed from the beach every night and refueled at designated areas off the beach. SCE Environmental delineated beach layover areas consistent with MCBCP and USFWS requirements to avoid resource areas and minimize any beach disturbance. Ramps created to access the layover areas were re-contoured after use. Project biologists cleared any scattered clumps of seaweed (known as beach wrack) from layover areas and placed them in surrounding undisturbed areas to preserve the food source for shorebirds, including the Western snowy plover.
9. During transport of the Unit 3B RSG, a support vehicle blew a seal and leaked transmission fluid onto the sand. The spill was immediately contained and the vehicle was removed from the beach.
10. An unintentional discharge from a backpack mounted container of liquid peanut oil, used as a lubricant, took place during the demobilization process of the crawler at the Las Pulgas staging area on September 26<sup>th</sup>. Less than 2 cups of peanut oil was discharged on the ground. The lubricant was contained and SCE's Hazardous Materials team removed the contaminated soil for disposal.

11. During route restoration on Las Pulgas Mesa, an unmarked shallowly-buried pipe riser connected to a disposal line for treated wastewater was inadvertently damaged resulting in an uncontrolled release. SONGS Hazmat and Base Public Works, Facilities Maintenance, and Environmental Security personnel were contacted, and all required agency notifications were made. The pipe was repaired, and all affected material was removed and disposed of.
12. Revegetation of temporarily disturbed areas is expected to take place in the Fall of 2010 and is being coordinated with the MCBCP Environmental Security Group.

No Non Compliance Reports (NCR) or Project Memoranda were issued during the transport of the Unit 3 RSGs.

## SONGS PROJECT PHOTOS



**Figure 1:** RSG on the crawler crossing the Santa Margarita River along the beach route on MCBCP.



**Figure 2:** The beach route was prepared using graders and bulldozers below the mean high tide line to create an even driving surface for the crawler.



**Figure 3:** The RSG at a layover area above the mean high tide line along the beach route. The RSG was staged overnight in the layover areas and resumed transport during the next low tide. Ramps created for RSG access/egress were re-contoured after use.



**Figure 4:** Project biologists relocated beach wrack from beach layover areas to preserve the shorebird food source.



**Figure 5:** RSG transport along Interstate 5 on the Goldhofer. Steel plates were used to protect curbs and pavement.