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PROJECT MEMORANDUM
SDG&E'S SUNRISE POWERLINK PROJECT

To: Billie Blanchard, Project Manager, CPUC
From: Vida Strong, Aspen Project Manager
Date: August 4, 2011
Subject: Weekly Report 44 – July 17 to July 23, 2011

INTRODUCTION

This report provides a summary of the construction and compliance activities associated with the SDG&E Sunrise Powerlink Project. This report is organized as follows:

- Transmission Line Construction
- Substation Construction and Upgrades
- Construction Yards and Other Workspaces

A summary of the Notices to Proceed with construction and Variance Request activity are also provided (see Tables 1 and 2, respectively, near the end of this report). Finally, a summary of Temporary Extra Work-space and non-compliance activity are provided in Tables 3 and 4, respectively.

CPUC/Aspen Environmental Monitors (EM): Cassandra Garza, Brian Woodward and Valerie Yep

TRANSMISSION LINE CONSTRUCTION

Summary of Activity:

1. Link 1, 500 kV Overhead Transmission Line:

Non-Federal Lands:

- Caisson installation and welding occurred at Tower EP239.

BLM Lands:

- Grading occurred at:
 - Tower sites EP290, EP294, EP296, EP326, and EP347.
 - New spur roads associated with tower sites EP290, EP294, EP326, and EP347.
 - Existing Southwest Powerlink (SWPL) access roads from EP319 through EP341 and from Dunaway Yard through EP351.
- Conventional drilling was conducted at EP301, EP302-1, EP303-2, EP306-1 and EP307-1.
- Micropile preparation work took place at EP291 and EP315.
- Micropile drilling occurred at EP305, EP311-1, EP312, EP314, EP317, and EP324.
- Various foundation work including capping, curing, cage installation, etc., was conducted at EP298, EP299, EP300, EP302, EP305, EP306-1, and EP307-1.
- Concrete pouring took place at EP300-1, EP301, EP302-1, EP306-1 and EP307-1.
- Rebar installation and grounding occurred at EP300-1, EP302-1, EP303-2, EP306-1, and EP307-1.
- Steel was delivered to EP295.
- Tower assembly was conducted at EP316, EP319, EP328, EP341, EP358, EP360, EP361, EP362, and EP363.



- Clean up took place at EP298 and EP299.
- QA/QC was performed at EP332, EP333, EP335, EP338, EP348, EP353, EP354, EP355, EP358, and EP359.
- Raven perching deterrents were installed at EP358 and EP360.

2. Link 2, 500 kV Overhead Transmission Line:

Non-Federal Lands:

- No work activity occurred on Link 2 during this reporting period.

3. Link 4, 220 kV Underground Transmission Line (non-federal lands only):

- Grading and equipment delivery occurred via El Monte Road at the Bauer & Slay properties (see Figure 1).
- Potholing/Redevelopment/Revitalization occurred from Vault V7R to V8R and at Alpine Boulevard (near Alpine Elementary School).
- Trenching occurred between V7R to V8R, V8R to Tavern Road, V9R to V10R, V10L to V11L, V12R to V15R, and V18R to V19R.
- Pre-drilling/drilling occurred near V7R to V8R, V8R to Tavern Road, V9R to V10R, V10L to V11L, V12R to V15R, and V18R to V19R.
- Pouring of encasements occurred from V14R to V15R.
- Pre-racking and cleaning manholes occurred at V7L, V8L, V9L, V12R, V14R, V18R and V15L.
- Proofing occurred from V4R to V5R, V6R to V7R, and V9L to V10L.
- Milling and setting plates occurred at V8R to Tavern Road, V9R to V10R, V10L to V11L, V12R to V13R, and V19R to V20R.
- Paving (including preparation) occurred near V4R to V5R, V12R to V13R, V14R, and V15R to V16R.
- Cable pulling (and cable testing) occurred from V4L to V5L and V6R to V7R.
- Halos (grounding) were installed at V2R, V3R, V5R, and V13R to V14R.
- Drilling and foundation work occurred at the Loritz Property (see Figure 2).

4. Link 5:

Non-Federal Lands, 220 kV Overhead Transmission Line:

- Conventional drilling and rebar installation occurred at CP1A, CP2-1, CP20, CP24-1, CP95 (see Figure 3), and CP96.
- Concrete was poured at CP1A, CP2-1, CP20, CP24-1, and CP95.
- Micropile site preparation occurred at CP21.
- Micropile drilling occurred at CP23.
- Grouting occurred at CP42-1 (see Figure 4).
- Grounding was installed at CP1A, CP2-1, CP20, CP24-1, and CP95.
- Cleanup and demobilization occurred at CP20, CP24-1, and CP41-2.

MCAS Miramar (Federal) Lands, 69 kV Reconductoring Line

- TL639:
 - Wire stringing occurred between Locations 61 and 83.
 - Conductor was replaced between Location 1 and the Sycamore Substation.

- TL6916:
 - Reframing of poles and installation of rollers occurred from Locations 5 to 7 and Locations 10 to 14.
 - Sagging and clipping occurred from Locations 5 to 25.
 - Reconductoring occurred from Locations 6 to 48.

Environmental Compliance:

1. Biological, Cultural, and Native American monitors were present as applicable during all transmission line construction activities.
2. BMPs were installed or refreshed on access roads, TSAPs, and pads associated with towers on Link 1:
 - Non-Federal Lands:
 - EP227, EP232-1, EP239, and EP240.
 - BLM Lands:
 - EP291 through EP317 (see Figure 5), along SWPL access road from EP297 through EP304, EP301 pull site East and West, EP322/EP323 pull site, EP323, EP324, EP338/EP339 pull site, EP333/EP334 pull site, EP346, EP348/EP349 pull site, EP348, EP349, EP355/EP356 pull site, EP355, along SWPL access road from EP355 through the IV Substation, and EP356.
3. BMPs were installed or refreshed on access roads, TSAPs, and pads associated with towers on Link 2 (non-federal lands only):
 - BMPs were maintained from EP79, EP87 TSAP, and from EP84 to EP87 and EP89-1 to EP93.
4. BMPs were installed or refreshed on Link 4 (non-federal lands only):
 - BMPs were maintained at Bauer Bridge (see Figure 6).
 - Street sweeping occurred along Alpine Boulevard.
5. BMPs were installed or refreshed on access roads, TSAPs, and pads associated with towers on Link 5 (non-federal lands):
 - 69 kV:
 - No BMP maintenance occurred during this reporting period.
 - 230 kV:
 - BMPs were maintained from CP17-1, CP18-1, CP19-1, CP21, CP22-1, CP24-1, CP25-2, CP26, CP29-1, CP40-2 through CP42-1, CP95-1, and CP96-1.
6. Two unanticipated paleontological fossil discoveries were made on Link 1. Samples were collected and the appropriate agencies were notified in accordance with the approved Paleontological Monitoring and Discovery Treatment Plan.
7. Desert pavement was stockpiled at the EP347 work site and spur road. (Link 1)
8. On July 20, it was noted to Link Leads that night time lighting at S2 Yard needed adjusting. Concerns were addressed and adjustments were performed. (Link 1)
9. A prescribed burn was conducted near EP209 and was not project releted.
10. On Link 4, one California legless lizard (*Anniella pulchra*) was found dead on Alpine Boulevard.
11. Pre-Construction surveys were performed throughout Link 1, 2 and 5 with appropriate monitors.

No Non-Compliance Reports or Project Memoranda were issued during the subject period for Transmission Line Construction activities. Non-Compliance activities for the project to date are summarized in Table 4.

Agency Representatives during Construction (other than EMs):

None.

Substation Construction AND UPGRADES**Summary of Activity:**

1. Suncrest Substation, Link 3 (non-federal lands): Rough grading on the substation pad and along Bell Bluff Truck Trail (BBTT) continued. Permanent drainage systems, culverts and headwalls were installed along BBTT. Underground utility vaults were excavated along BBTT (see Figure 7). Rock crushing for select fill material was conducted. Rock and soil were hauled from the northern and eastern portions of the pad to the southern portion of the pad. Select fill material was hauled to the center of the pad. Pier drilling for foundations took place. Form construction and concrete pouring for foundation pads occurred (see Figure 8). Drilling and blasting was performed on the northern section of the pad.
2. Imperial Valley Substation Upgrade (BLM lands): Work on the wiring in the control house in the 500 kV portion of the substation occurred. Conventional tower assembly was conducted.
3. San Luis Rey Substation (non-federal lands): A crew finished pulling the 230 kV line through installed conduit on the north side of the new transformer. A relay crew worked on wiring in the control house and prepared for underground wiring and Bank 70 to be energized. Wiring in the control house continued. Scaffolding for installation of potheads and completing terminations was constructed near the newly installed transformer. A crew opened disconnects and worked on switching in preparation for putting Bank 70 in-service. A crew worked in Bay 2 and 3 in the 230 kV portion of the yard.
4. Encina Substation (non-federal lands): Excavation around pads was conducted for wire pull boxes conduit trenches, and transformer pads between Bays 1 through 8 and 8 through 11. Work continued on concrete pads for two new transformers in Bay 11. Wiring, conduit installation, and grounding occurred. A crew installed wiring panels in new control house. Crews worked between Bays 2 and 3 installing disconnects and wire drops. Work on the northern perimeter fence of the switchyard occurred. Demolition on two switch stand pads occurred to remove them from the substation.
5. Sycamore Substation (non-federal lands): Work was conducted below grade at Bays 21 and 26. Holes in Bay 26 were prepared to pour concrete. Large diameter holes were drilled and concrete poured for transmission poles CP1A (see Figure 9 & 10) and CP2-1 in the northern portion of the substation. Wire rebar cage was installed in Bay 26 in preparation for concrete pouring of a switch stand pad.
6. Scripps Ranch Substation (non-federal lands): No construction activity occurred during this reporting period.

Environmental Compliance:

1. All applicable Biological, Cultural, Paleontological, and Native American monitors have been present during ground disturbing activities at all substations.
2. Wildlife escape ramps were built and installed in oil containment pits for transformers at Imperial Valley Substation. (Link 1)
3. Wattles were installed for slope stabilization on completed sections of the Suncrest Substation pad. (Link 3)

No Non-Compliance Reports or Project Memoranda were issued during the subject period for Substation Construction and Upgrade activities. Non-Compliance activities for the project to date are summarized in Table 4.

Agency Representatives during Construction (Other than CPUC EMs):

None.

CONSTRUCTION YARDS AND OTHER WORKSPACES:

Summary of Activity:

Non-Federal Lands:

1. Alpine Construction Yard – Materials staging, steel deliveries, and hand clearing/vegetation maintenance with Avian Biological Monitors as needed.
2. Alpine Headquarters – No significant activity occurred during the reporting period.
3. Bartlett-Hauser Yard – Helicopter operations, weed maintenance, and re-grading of the access road occurred.
4. Jacumba Valley Ranch (JVR) Yard – Steel staging and welding of caissons occurred.
5. Hartung Yard – Tower assembly preparation for large crane demobilization occurred (see Figure 11).
6. Helix Yard – Helicopter operations and staging for foundation work occurred.
7. Kreutzkamp Yard – Tower assembly and large crane demobilization occurred.
8. Rough Acres Yard – Helicopter operations, tower assembly, and materials staging occurred in the yard.
9. SWAT Yard – Tower assembly and material deliveries occurred.
10. Sycamore Yard – Helicopter operations and foundation work staging (see Figure 12) occurred.
11. Thomas Yard – Materials staging and steel deliveries were made.
12. Wilson Yard – Materials staging for Suncrest Substation and water deliveries to the water storage pond were made.
13. S2 Yard – Nighttime tower assembly and daytime materials deliveries occurred.
14. AER Yard – Driveway installation and grading occurred at the entrance to AER Yard.

BLM Lands:

15. Dunaway Yard – Wire reel delivery occurred. This yard was also used as a water supply for dust control.
16. Imperial Valley Yard – Used as a water supply for surrounding areas only.
17. Plaster City Yard – Helicopter activities, foundation work staging, materials deliveries, and tower assembly took place. This yard was also used as a water supply for dust control for the surrounding areas.

Environmental Compliance:

1. Biological, Cultural, and Native American monitors have worked with crews at the construction yards to define approved work areas and sites to avoid.
2. Five flat-tailed horned lizards (*Phrynosoma mcallii*) were relocated to suitable habitat, away from construction activities at EP318, EP353, EP326, and EP360. Additional finds were made, but insufficient information was provided to the CPUC EMs at the time of this weekly report being published. (Link 1)
3. At the Kreutzcamp Construction Yard, one Two-striped gartersnake (*Thamnophis hammondi*) was run over and killed by construction equipment on the access road. One Two-striped gartersnake and one Coronado skink (*Plestiodon skiltonianus interparietalis*) were relocated from the yard. (Link 2)
4. A wash station was installed at the Sycamore Construction Yard (see Figure 13). (Link 5)
5. Helicopters avoided sensitive land owners by use of their GPS units, which are updated daily to reflect any changes in sensitive areas along the alignment.

No Non-Compliance Reports or Project Memorandums were issued during the subject period for Construction Yards and other workspace activities. Non-Compliance activities for the project to date are summarized in Table 4.

Agency Representatives during Construction (other than CPUC EMs):

None.

CPUC NOTICES TO PROCEED (NTPs)

Table 1 summarizes the CPUC Notice to Proceed activity for the SDG&E Sunrise Powerlink Project to date.

TABLE 1
CPUC NTPs
(Updated 08/04/2011)

NTP#	Date Requested	Date Issued	Segment #	Description
#1	01/04/10	04/28/10	25	San Luis Rey Substation Upgrades
#2	02/08/10	04/29/10	23	South Bay Substation Upgrades
#3	02/26/10	05/20/10	Yard	Alpine Yard 18
#4	01/26/10	05/28/10	Yard	Alpine Yard 18A
#5	02/05/10	09/28/10	Yard	Rough Acres Yard, Phase 1
#6	05/26/10	09/28/10	24	Encina Substation Upgrades
#7	05/28/10	09/28/10	Telecomm	White Star Communication Facility
#8	06/09/10	10/06/10	Substation	Pomerado Substation Upgrades
#9	06/09/10	10/06/10	Substation	Scripps Switchyard/Substation Upgrades
#10	10/13/10	11/23/10	15	Link 4, Alpine 230 kV Underground Construction
#11	10/19/10	12/15/10	13	Link 3, Suncrest Substation/Wilson Construction Yard
#12	11/30/10	12/23/10	Yard	Rough Acres Yard, Phase 2
#13	11/09/10	01/14/11	2-18, 20-22	Links 1, 2, and 5, overhead construction on non-federal lands
BLM #1	01/19/11	02/03/11	1	Imperial Valley Substation upgrades.
BLM #2	03/28/11	04/04/11	2-12, 16-17	Links 1, 2, and 5 overhead construction on BLM Lands.
Miramar	01/20/11	06/28/11	22	Overhead and substation construction.

VARIANCE & TEMPORARY EXTRA WORKSPACE REQUESTS

Variance and Temporary Extra Workspace (TEWS) requests submitted to date are presented in Tables 2 and 3, respectively.

TABLE 2
VARIANCE REQUESTS
(Updated 08/04/2011)

Variance Request	Date Requested	Date Issued	Segment #	Description
#1	11/04/10	11/10/10	Yard	Thomas Yard (El Centro, CA)
#2	12/22/10	03/18/11	Yard	Sycamore Estates Construction Yard. Response to inquiry received 02/23.
#3	01/06/10	01/18/11	All	Modification to tree trimming requirements.

Variance Request	Date Requested	Date Issued	Segment #	Description
#3 MOD	01/25/11	01/26/11	All	Modification to brush clearing requirements.
#4	01/13/11	03/01/11	Yard	Helicopter Temporary Landing Pad area at the Alpine Regional Field Offices.
#5	02/01/11	02/09/11	Yard	Site improvements at the Wilson Construction yard and along Bell Bluff Trail
#6	02/01/11	03/01/11	Link 5	Variance from Mitigation Measure H-1a (CC) to allow work outside of the dry season.
#7	02/11/11	02/17/11	Link 3	Additional work areas for construction trailers, parking, etc.
#8	03/02/11	03/08/11	Link 2	Alternate access route to Structure EP 27.
#9	03/29/11	04/06/11	All	Perform construction activities outside of hours allowed by local ordinances with local jurisdiction approval.
#10	04/04/11 (revised)	04/14/11	Link 4	Additional construction work space at Viejas Creek Bridge.
#11	04/06/11	04/22/11	Link 1	Additional workspace east of EP215.
#12	04/15/11	04/25/11	Link 1	Additional turnaround along the access road to EP 220-1.
#13	04/13/11	05/06/11	Links 1 & 2	Two fiber optic regeneration sites.
#14	04/28/11	05/03/11	Yards	Change visual screening at Project construction yards from slats to fabric.
#15	05/12/11	05/19/11	Link 2	Alternate access to EP 84.
#16	05/16/11	05/21/11	Link 4	Additional parking space for use during underground construction.
#17	05/18/11	05/24/11	Encina Substation	Driveway improvement.
#18	6/27/11	07/14/11	Link 1	Gate installation between mile markers 38.5 and 39.5.
#19	6/27/11	06/29/11	Link 1	Installation of training tower at Rough Acres Construction Yard.
#20	6/28/11	Under Review	Link 5	Additional disturbance for access, pull sites and topsoil stockpile at CP48-2 to CP51-2.
#21	07/07/11	07/15/11	Link 1	Guard structure from EP255 to Imperial Valley Substation.
#22	07/08/11	Under Review	Link 1	Fromm Construction Yard. Additional information submitted 08/04.
BLM VR #1	07/19/11	Under Review	Link 1	Minor modifications to portions of the Project on Bureau of Land Management lands.

TABLE 3
TEMPORARY EXTRA WORKSPACE (TEWS) REQUESTS
(Updated 08/04/2011)

TEWS Request	Date Requested	Date Approved	Segment #	Description
TEWS #1	11/01/10	11/01/10	White Star	Asphalt paved area for vehicle parking and staging
TEWS #2	03/17/11	03/18/11	Link 4	Parking on Puetz Valley and Alpine Blvd
TEWS #3	03/17/11	03/18/11	Link 4	Parking on Harbison Canyon and Alpine Blvd
TEWS #4	03/22/11	03/23/11	Link 5	Storage on One Father Junipero Sierra Trail
TEWS #5	03/24/11	03/24/11	Link 4	Parking at 3900 Willows Rd. West
TEWS #6	03/24/11	03/24/11	Link 4	Parking at 5840 Willows Rd. East
TEWS #7	04/06/11	04/07/11	Link 2	Northern access road to EP 79
TEWS #8	04/14/11	04/14/11	Link 2	Northeast spur of access road to EP 84
TEWS #9	05/17/11	05/24/11	Link 1	Use of SWPL tower sites for parking (EP331-341)
TEWS #10	05/24/11	05/24/11	Link 5	Parking and pullsite adjacent to Alliant University
TEWS #11	06/16/11	06/16/11	Link 1	Use of alternative access to EP 240, per the request of the landowner at JVR
TEWS #12	06/20/11	06/20/11	Link 1	Use of SWPL tower sites for parking (EP295-299)
TEWS #13	06/30/11	07/01/11	Link 1	Use of SWPL tower site for parking (EP324)
TEWS #14	07/01/11	07/01/11	Link 1	Use of SWPL tower sites for parking (EP300, EP302, EP306, EP307, EP312)
TEWS #15	07/06/11	07/06/11	Link 1	Use of SWPL tower sites for parking (EP294, EP303, EP304, EP305)
TEWS #16	07/11/11	07/12/11	Link 5	Parking near CP20
TEWS #17	07/11/11	07/12/11	Link 5	Parking near CP24
TEWS #18	07/11/11	07/12/11	Link 5	Parking near CP29
TEWS #19	07/18/11	07/19/11	Link 1	Parking near EP314
TEWS #20	07/22/11	07/25/11	Link 1	Parking near EP315

NON-COMPLIANCES & INCIDENTS

CPUC Project Memorandum (PM) and Non-Compliance Reports (NCR), and Corps Non-Compliances (NC) that have been issued to date are presented in Table 4.

TABLE 4
NON-COMPLIANCES (NC) AND PROJECT MEMORANDA (PM)
(Updated 08/04/2011)

Type	Date	Location	Description
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Type	Date	Location	Description
PM #1	12/07/10	Thomas Yard	Failure to report unanticipated biological resources within 48 hours.
PM #2	02/11/11	EP 242, Link 1	Unauthorized ground disturbance at EP 242
NC #1	03/08/11	Suncrest Substation	Army Corp of Engineers issued NC for not complying with Special Conditions 19, 21 and 23 of DA Permit SPL-2007-00704-SAS.
PM #3	03/15/11	CP 67-3, Link 5	Staking crews operating and delivered by helicopters within Golden Eagle Buffer area.
PM #4	04/06/11	SWAT Yard	Unauthorized Nest Removal from a water truck at SWAT Construction yard.
PM #5	05/16/11	EP 340, Link 1	Operation of water trucks outside of approved disturbance areas at EP 340.

Other compliance incidents identified by SDG&E monitoring staff and/or crews are presented in Table 5.

TABLE 5
PROJECT INCIDENTS
(Updated 08/02/2011)

Type	Date	Location	Description
Incident	11/01/10	White Star	Delivery of a rebar cage outside of the approved disturbance area.
Incident	02/17/11	EP 244, Link 1	Nest incorrectly marked at entrance to EP 244.
Incident	02/18/11	Alpine HQ	Emergency weather landing and storage of 3 helicopters at Alpine HQ.
Incident	03/12/11	EP 252, Link 1	Bulldozer was delivered at site prior to CPUC clearance being given.
Incident	03/15/11	EP 214, Link 1	Dewatering approximately 1 gal of groundwater from an excavation hole without having submitted a dewatering plan to the CPUC.
Incident	04/06/11	JVR 12 kV, Link 1	Confusion on approved work areas due to varying maps having been distributed to workers and monitors.
Incident	04/07/11	JVR 12 kV, Link 1	A site was worked on prior to CPUC EM construction release having been received for the area, no resources were damaged.
Incident	05/05/11	Link 4	Three small fires were reported on Link 4 Underground. Fire tools were used by the on-site fire patrol to immediately respond per the Sunrise Fire Plan. Notification to Alpine Fire was made.
Incident	05/17/11	Link 1	BMP crew drove off the road between EP345 and EP346 and park within the ESA boundary.
Incident	06/07/11	Link 1	During the aerial delivery of a structure body to EP339, approximately 200 ft outside of Plaster City Yard, the piece fell from the Aircrane. No injuries have been reported.

Type	Date	Location	Description
Incident	06/10/11	Link 1	During the aerial delivery of a structure layback to EP 339, at the EP 339 construction site, 3 of the 4 hooks released and caused an emergency placement of the steel at the site. While in the process of placing on the ground, the 4 th hook released and the tower fell to the ground. No injuries have been reported.
Incident	07/07/11	Link 1	A project water tanker was stuck on the side of Evan Hughes Highway and released approximately 1,000 gallons of potable water into Coyote Wash, after pulling over to evaluate a bridge crossing. All necessary notifications were made.
Incident	07/07/11	Link 5	Construction vehicles, including project fire truck, were noted to be outside of approved disturbance areas at CP40 and CP41. Link leads were notified and immediate corrective action was taken.
Incident	07/11/11	Link 1	A skid fell off the KMax Helicopter while en route to a tower site. The skid was within the Project ROW and no injuries were reported. The item was retrieved on foot.

PROJECT PHOTOGRAPHS



Figure 1: Grading occurring at the Slay property. (Link 4)



Figure 2: Potholing on the Loritz property. (Link 4)



Figure 3: Drilling at CP95-1. (Link 5)



Figure 4: Helicopter delivery of grout at CP 42-1; unrelated mining operations in the foreground. (Link 5)



Figure 5: BMPs at EP309. (Link 1)



Figure 6: BMPs at Bauer Bridge. (Link 4)



Figure 7: Underground utility vault along Bell Bluff Truck Trail, Suncrest Substation. (Link 3)



Figure 8: Foundation pouring at Suncrest Substation. (Link 3)



Figure 9: Drilling for a tower foundation
at Sycamore Substation. (Link 5)



Figure 10: BMPs for spoil piles at Sycamore Substation. (Link 5)



Figure 11: Dust from delivery truck at Hartung Construction Yard. (Link 5)



Figure 12: Delivery of rebar at Sycamore Construction Yard. (Link 5)



Figure 13: Wash station installation at Sycamore Construction Yard. (Link 5)