

Aspen Environmental Group

PROJECT MEMORANDUM PG&E JEFFERSON-MARTIN 230 KV TRANSMISSION PROJECT

To: Billie Blanchard, CPUC

From: Vida Strong, Aspen Project Manager

Date: April 10, 2006

Subject: Monthly Report #8: March 1, 2006 – March 31, 2006

CPUC Environmental Monitor (EM): Jody Fessler

CPUC EM Jody Fessler was on site throughout the month of March along Segments 1, 2, 3, 4, and 5, and the Jefferson and Martin Substations.

SEGMENT 1

Table 1A presents the construction activities along Segment 1 during March. Along Cañada Road and Skyline Boulevard, the daytime shift worked Mondays through Saturdays throughout the month. Crews conducted manhole inspections, racking inside the manholes, cable pulling, cable splicing, fiber optic cable splicing, jacket testing of the cable, cable preparation for pot-head installation at the towers on either side of Crystal Springs Dam, pot-head installation at the towers, and as-built surveys (see Figure 1). PG&E EIs and Biological Monitors were on-site during all construction activities. Traffic controls were placed around the manholes including flaggers, signs, and cones.

B&V and ILB are using the Caltrans Staging Yard on Hwy 92/Hwy 35 and the Caltrans Staging Yard at the corner of Skyline Boulevard and Hayne Road/Golf Course Drive to store materials and equipment for cable installation and overhead activities. Crews are still using the Staging Yard at 50 Edwards Court in Burlingame to store equipment and materials.

Table 1A - Segment 1 Construction Activities during March 2006

Week	Manhole Installation	Conduit Installation	Stubout Installation	Proofing Conduit	Manhole Prep/Cable Pulling	Splicing Cable	Tower Work at Dam Crossing
March 1 – March 4	Complete	NA	Complete	Complete	At manholes on either side of the dam	Cable and fiber optic cable spliced at various locations throughout the segment	NA
March 5 – March 11	Complete	NA	Complete	Complete	Cable pulling at various locations along the segment	Cable and fiber optic cable spliced at various locations throughout the segment	NA
March 12 – March 18	Complete	NA	Complete	Complete	Manhole inspec- tions and cable pulling at various locations along the segment		Cable prepara- tion for pot-head installation on the towers
March 19 – March 25	Complete	NA	Complete	Complete	Cable pulling at various locations along the segment	optic cable spliced	Pot-head instal- lation at the towers
March 26 – March 31	Complete	NA	Complete	Complete	Manhole inspections at various manholes along the segment	Cable and fiber optic cable spliced at various locations throughout the segment	NA

NA – No Activity

Environmental Compliance Activities:

Bird surveys were conducted along Segment 1 throughout the month of March.

No concerns or non-compliances were issued by PG&E's Environmental Inspectors along Segment 1 during the month of March. The CPUC EM observed that Segment 1 construction activities were in compliance with mitigation measures adopted in the EIR and other permit requirements.

SEGMENT 2 - UNDERGROUND

Table 2A presents the underground construction activities along Segment 2 during March. Work took place along Segment 2 Underground Mondays through Saturdays throughout the month. Crews conducted manhole inspections, racking in the manholes, cable pulling, cable splicing, cable testing, fiber optic cable testing, and as-built surveys. A PG&E Environmental Inspector was on-site to monitor construction activities.

B&V is now using the northern Caltrans Staging Yard at the corner of Skyline Boulevard and Hayne Road/Golf Course Drive to store materials and equipment for cable installation activities. Crews are still using the Staging Yard at 60 Edwards Court in Burlingame to store equipment and materials.

Table 2A – Segment 2-Underground Construction Activities during March 2006

Week	Manhole Installation	Conduit Installation (Linear Feet)	Stubout Installation	Proofing Conduit	Manhole Prep/Cable Pulling	Splicing Cable	Final Punch-list Work
March 1 – March 4	Complete	Complete	Complete	Complete	Manhole #37 and Manhole #38	Manhole #37 and Manhole #38	Complete
March 5 – March 11	Complete	Complete	Complete	Complete	Various manholes along the segment	Various manholes along the segment	Complete
March 12 – March 18	Complete	Complete	Complete	Complete	Various manholes along the segment	NA	Complete
March 19 – March 25	Complete	Complete	Complete	Complete	Various manholes along the segment	Various manholes along the segment	Complete
March 26 – March 31	Complete	Complete	Complete	Complete	Various manholes along the segment	Various manholes along the segment	Complete

NA – No Activity

Environmental Compliance Activities:

The underground work area in the SFPUC Watershed will be surveyed after germination to ensure that star thistle was not introduced into the area.

No concerns or non-compliances were issued by PG&E's Environmental Inspectors along Segment 2 Underground during March.

The CPUC EM observed that Segment 2 Underground construction activities were in compliance with mitigation measures adopted in the EIR and other permit requirements.

SEGMENT 2 – OVERHEAD

Table 3A presents the overhead construction activities along Segment 2 Overhead in the SFPUC Watershed during March. Crews worked Mondays through Sundays throughout the month. Crews erected towers, removed old towers, installed insulators, flew sock-line and installed conductor on insulators, completed dead-end work, installed jumpers, installed switches and switch pads, installed grounds, installed arc arresters, installed ladders, tested fiber optic cable, installed bird diverters on fiber optic cable, installed tower bases and did

tower dressing, removed old lattice towers and concrete foundations, and conducted cable splicing and pot-head installation at Tower #70A (see Figure 2). Restoration activities occurred throughout the month of March at various locations in the watershed.

Table 3A – Segment 2 - Overhead Construction Activities during March 2006

Table 3A – Segment 2 - Over nead Construction								
Week	Snake Burrow Clearing	Tree Clearing and Trimming	Biological Exclusion Fence Installation	Erosion Controls and Road Maintenance	New Tower Erected and Compressed	Old Tower Removed	Line Work	Restoration Work
March 1 – March 4	NA	NA	NA	NA	NA	NA	Towers #82_#88, #90, #93, #97	Grass plugs planted near Towers #76, #77, #79, and #80
March 5 – March 11	NA	Near Towers #81 and #82	NA	Work pad expansion at Tower #78	Towers #79, #80, #81, and #81A	Old towers #81 and #81A	Towers #79, #80, #81, #81A	Grass plugs planted near Towers #77, #78, #79, #80, #85 and #86
March 12 – March 18	NA	NA	NA	NA	Tower #78	Old towers #77, #79, and #80	Towers #77, #78, #79, #80, #81, and #81A	Grass plugs planted near Towers #83, #84, and #85
March 19 – March 25	NA	NA	NA	NA	NA	Concrete foundation removal at Towers #82, #87, #91, #92, and #93	Towers #70A, #77, #78, #81A	Grass plugs planted near Towers #78, #81, #81A and #83
March 26 – March 31	NA	Brush clearing at Tower #75	NA	Near Towers #82, #83, #84, and #85	NA	Concrete foundation removal at Towers #81, #81A, #82, #83, #84, #85, and #86	Fiber optic splicing at Towers #70A and #78	Grass plugs planted near Towers #76, #77, #79, and #80

NA – No Activity

Environmental Compliance Activities:

Bird surveys were conducted along Segment 2 Overhead throughout the month of March.

On March 14th, an adult San Francisco garter snake was observed within the SFPUC watershed.

One concern was issued by PG&E's Environmental Inspectors along Segment 2 Overhead during March. On March 7th, a concern was issued for multiple project-related vehicles that drove off the paved access roads between Towers #84 and #85 and Towers #82 and #81A, causing rutting along the vegetated road shoulder. All ruts were smoothed out and no damage to sensitive resources was observed.

The CPUC EM observed that other construction activities were in compliance with mitigation measures adopted in the EIR and other permit requirements. Erosion controls were in place around the construction areas.

SEGMENT 3

Table 4A presents the underground construction activities along Segment 3 during March. Crews worked Monday through Sunday during the day throughout the month. Work included racking in the manholes, cable pulling and splicing, fiber optic cable splicing, saw-cutting, paving, sidewalk restoration, median restoration and landscaping, installation of ground wires at Tower #93A, scaffolding construction at Tower #93A, cable preparation for pot-head installation at Tower #93A, and completion of punch-list items. A PG&E EI was on-site during construction activities to inspect environmental compliance at the work sites. Traffic controls were in place at the construction sites including flaggers, signs, and cones.

ARB crews moved out of their staging yards under Highway 380 just east of Huntington Avenue and at the corner of Skyline Boulevard/Highway 35 and San Bruno Avenue at the end of March.

Table 4A – Segment 3 Construction Activities during March 2006

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Week	Manhole Installation	Conduit Installation (Linear Feet)	Stubout Installation	Proofing Conduit	Manhole Prep/ Cable Pulling	Splicing Cable
March 1 – March 4	Complete	Complete	NA	NA	Manholes #41-#42	Manholes #39 and #40
March 5 – March 11	Complete	Complete	NA	NA	Manhole #39 to Tower #93A, Manholes #42–#43	Manholes #40, #41, #42, and #44
March 12 – March 18	Complete	Complete	NA	NA	NA	Manholes #42, #43, #46, and #47
March 19 – March 25	Complete	Complete	NA	NA	Replacement of some cable took place along the segment	Manholes #39, #42, #43, #45, and #47
March 26 – March 28	Complete	Complete	NA	NA	NA	Manholes #42 and #43

NA – No Activity

Environmental Compliance Activities:

The following concerns were issued by PG&E's Environmental Inspector during the month of March:

- On March 10th, a concern was issued for a portable restroom that was left in a parking lot outside of the right-of-way. The restroom was relocated by the end of the day.
- On March 13th through March 16th a concern was issued daily for the staging of project-related vehicles outside of the approved project right-of-way. In each case, vehicles were parked in paved areas, so no resources were affected.
- On March 13th, a concern was issued for mud that was tracked onto the roadway and not cleaned up on Glenview Drive and Skyline Boulevard near Tower #93A. A street sweeper cleaned up the tracked out area on March 14th.
- On March 21st, a concern was issued for the staging of a portable restroom outside of the project right-of-way on a vegetated shoulder near Manhole #42. The crews were reminded that all project-related vehicles and portable restrooms need to stay within the approved right-of-way. The portable restroom was promptly relocated within the right-of-way. No resources were observed to be affected.

The CPUC EM observed that other construction activities were in compliance with mitigation measures adopted in the EIR and other permit requirements. Erosion controls were in place around the construction areas.

SEGMENT 4

Work on Segment 4 during the month of March included cable splicing on March 3rd, dewatering of a manhole on March 10th, dewatering of manholes and final inspection on March 15th, cable replacement and cable splicing March 23rd through March 25th, and cable splicing at Manholes #62 and #63 March 27th through March 30th. A PG&E EI was on-site during construction activities to inspect environmental compliance at the work sites. Traffic controls were in place at the construction sites including flaggers, signs, and cones.

Environmental Compliance Activities:

No concerns or non-compliances were issued by PG&E's Environmental Inspectors during the month of March.

The CPUC EM observed that construction activities were in compliance with mitigation measures adopted in the EIR and other permit requirements. Erosion controls were in place around the construction areas.

SEGMENT 5

Table 6A presents the underground construction activities along Segment 5 during March. Crews worked Mondays through Saturdays, during the day, conducting cable pulling, cable splicing, fiber optic cable splicing, dewatering of manholes and communication boxes, installation of a ground box, raising of a communication box cover, manhole inspection, median restoration along Bayshore Boulevard and Guadalupe Canyon Parkway, and k-rail removal. A PG&E EI was on-site during construction activities to inspect environmental compliance at the work sites. Traffic controls were in place at the construction sites including flaggers, signs, cones, and k-rail.

Table 6A – Segment 5 Construction Activities during March 2006

Week	Manhole Installation	Conduit Installation (Linear Feet)	Stubout Installation	Proofing Conduit	Manhole Prep/ Cable Pulling	Splicing Cable
March 1 – March 4	Complete	Complete	NA	NA	NA	Manholes at the very northern end of the segment
March 5 – March 11	Complete	Complete	NA	NA	NA	Manholes at the very northern end of the segment
March 12 – March 18	Complete	Complete	NA	NA	Manhole inspection, Cable pulling from Manhole #78 to #79	NA
March 19 – March 25	Complete	Complete	NA	NA	Cable pulling from Manhole #78 to #79	NA
March 26 – March 31	Complete	Complete	NA	NA	NA	NA

NA – No Activity

Environmental Compliance Activities:

One concern was issued by PG&E's Environmental Inspectors during the month of March along Segment 5. On March 22^{nd} , a concern was issued for the washing of a concrete truck on Guadalupe Canyon Parkway. The rinse water did not reach a storm drain and no resources were affected. The crews were reminded to wash project-related vehicles off site or in approved wash areas.

The CPUC EM observed that other construction activities were in compliance with mitigation measures adopted in the EIR and other permit requirements. Erosion controls were in place around the construction areas.

JEFFERSON SUBSTATION

During the month of March, crews continued to work at the Jefferson Substation Mondays through Saturdays. Work included wire pulling and hanging, insulator installation, jumper installation, electrical system work, transformer work, shunt reactor work and testing, fiber optic splicing, ground wire grid installation, road construction, and erosion control construction and maintenance. A full-time Biological Monitor was present during all work. A PG&E EI also visited the site periodically to ensure environmental compliance with project requirements.

Environmental Compliance Activities:

The following four concerns were issued by PG&E's Environmental Inspectors for the Jefferson Substation during March.

- On March 3rd, a concern was issued for an insufficient stockpile of erosion control materials at the substation. Erosion control materials were restocked by March 6th.
- On March 7th, a concern was issued at the substation for insufficient sediment control measures. On March 8th and 9th, an erosion control sediment basin and three U-shaped silt fences were constructed in order to filter the storm water runoff prior to discharge in the wetland adjacent to the substation (Figure 3).
- On March 29th, a concern was issued for insufficient quantities of erosion and sediment control materials stockpiled at the substation, and inadequate temporary soil stabilization measures and sediment barriers. In order to control the water and sediment flow, plastic lining was installed in the existing hay bale structure and filter fabric and rock were installed in a gap beneath the exclusion fencing. The newly installed measures were observed to be fully functional and effectively operating on March 30th. Additionally, tanker trucks were on site on March 31st to pump ponded water from the substation in order to avoid an overflow of storm water from occurring again.
- On March 30th, a concern was issued for inadequate erosion and sediment control materials stockpiled at the substation.

On March 3rd, the CPUC EM issued a Project Memorandum for the lack of functional erosion controls at the Jefferson Substation. The CPUC EM observed that other Jefferson Substation construction activities were in compliance with mitigation measures adopted in the EIR and other permit requirements.

MARTIN SUBSTATION

During the month of March, crews continued to work at the Martin Substation, Monday through Friday. Work at the Martin Substation included cable tray installation, conduit installation, ground wire installation, cable installation, trenching, cable pulling, fiber optic cable splicing, switch pad construction, rebar footer form building, insulator installation, wire pulling, conductor installation, scaffolding construction, securing overhead wires, and pot-head installation. A PG&E EI inspected the site everyday for environmental compliance.

Environmental Compliance Activities:

No concerns were issued by PG&E's Environmental Inspectors for Martin Substation during March.

The CPUC EM observed that all Martin Substation construction activities were in compliance with mitigation measures adopted in the EIR and other permit requirements. Erosion controls were in place around the construction areas.

NOTICES TO PROCEED (NTP):

Table 6 presents the NTPs issued by the CPUC for the Jefferson-Martin Project as of the end of March. With the exception of an NTP for the permanent Crystal Springs Dam crossing, no additional NTPs are anticipated.

TABLE 6 NOTICES TO PROCEED

(Updated 04-10-06)

NTP#	Date Issued	Description
#1	1-10-05	Segment 1, underground only Segment 5, unincorporated San Mateo County only
#2	3-08-05	Segment 2, underground only, not including SFPUC lands
#3	3-11-05	Segment 5, incorporated
#4	3-11-05	Segment 3
#5	3-30-05	Segment 4
#6	8-03-05	Segment 2 Underground in the SFPUC Watershed
#7	8-10-05	Martin Substation
#8	8-26-05	Segment 2 Overhead
#8 Amendment	12-21-05	Segment 2 Overhead; remove additional trees between Towers #70A and #71 for line clearance purposes.
#9	9-01-05	Jefferson Substation expansion area and construction of the temporary Lower Crystal Springs Overhead Dam Crossing

ENVIRONMENTAL COMPLIANCE:

Three Non-Compliance Reports (NCR) and ten Project Memorandums (PMs) have been issued by the CPUC EMs for the project as of the end of March (see Table 7).

TABLE 7
ENVIRONMENTAL COMPLIANCE STATUS

(Updated 04-010-06)

Project Memo or NCR	Date Issued	Description	Follow-Up Activities
NCR (Level 3)	2-01-05	Segment 2 Overhead – Dismantling and removal of woodrat nests along the overhead route without consulting with CDFG.	PG&E consulting with CDFG on how to proceed.
PM	2-09-05	Segment 1 – Breach of trenching activities into vegetated drainage on east side of Cañada Road between MH #7 and MH #8.	PG&E consulting with CDFG and USFWS on how to proceed.
PM	2-16-05	Segment 5 – Dewatering of Manhole #67 vault pit without consulting with RWQCB on handling of water	PG&E consulting with RWQCB on how to proceed with storm water and groundwater.
PM	3-04-05	Segment 1 – Hummingbird nest found near Manhole #5 on Monday, Feb. 28 th , and not reported to CPUC or CDFG until Thursday, March 3 rd .	PG&E discussing better communication between PG&E and sub-contractors.
PM	5-27-05	Segment 2 Underground – Construction went past the City of Burlingame's Encroachment Permit on May 25 th , and May 26 th .	PG&E response submitted 6-14-05.
PM	5-27-05	Segment 2 Underground – Several traffic control violations were observed. A traffic control flagger left his post several times which endangered the public.	PG&E response submitted 6-14-05.
PM	6-01-05	Segment 1 – End dump parked on vegetation in the Caltrans right-of-way disturbing vegetation	PG&E response submitted 6-15-05.
PM	6-20-05	Segment 1- Construction vehicle parked on vegetation near the Caltrans yard	PG&E response received 6-22-05
NCR	7-13-05	Segment 1 – Construction vehicle parked on vegetation at Station #287+00 on the night of July 11 th .	PG&E response received
NCR	7-22-05	Segment 1 – Cable Pulling truck and trailer rolled off the road onto vegetation at Manhole #3 on July 18 th .	PG&E response received
PM	10-27-05	Segment 4 - Inadequate clean-up on the roadway in several locations on Hillside Avenue.	PG&E response received
PM	2-16-06	Segment 5 – Two construction vehicles parked off the road on the vegetation on February 14 th .	PG&E response received
PM	3-03-06	Jefferson Substation – Lack of functional erosion controls	Awaiting PG&E's formal response

VARIANCE REQUESTS:

Table 8 represents the Variance Requests submitted and approved to date for the project. Variance Request #18 was submitted on March 24th for the installation of a fault satellite (FaulSat), global positioning system (see Table 8).

TABLE 8 VARIANCE REQUEST STATUS

(Updated 04-10-06)

		` 1		
Variance Request #	Date Submitted	Description	Status	CPUC Approval Date
1	1-14-05	40 Edwards Court, Burlingame – Paved parking lot that is fenced to be used as a staging yard.	Approved	1-18-05
2	2-04-05	Staging yard, Airport Boulevard & North Access Road, South San Francisco.	Approved	2-09-05
3	2-22-05	Change compliance timing for Mitigation Measure U-1c, corrosion, from pre-construction to during construction.	Approved	3-04-05
4	4-28-05	Staging yard, Herman Street and Forest Lane, City of San Bruno	Approved	5-03-05
5	5-12-05	Jefferson Substation Expansion Area – Cap well, empty water out of tank into truck, and remove tank from property	Approved	5-20-05
6	5-24-05	Staging yard for Segment 4 construction, intersection of Antoinette Lane and Mission Road, City of South San Francisco.	Approved	5-26-05
6 Modification	6-22-05	Additional staging yard for Segment 4, next to yard approved in Variance #6.	Approved	6-28-05
7	06-06-05	Intrusion into vegetated areas at several locations along Segment 1.	Approved	6-13-05
8	7-14-05	Modification of the trench depth along a 400-foot section of trench north of S. Spruce Avenue (Segment 4).	Approved	7-19-05
9	7-15-05	Staging Yard for Segment 4 off of Hillside Drive in the City of Colma.	Approved	8-17-05
10	7-22-05	Expansion of Jefferson Substation	Approved	8-31-05
11	8-04-05	Intrusion into vegetated shoulder at 7 locations along Segment 1.	Approved	8-18-05
12	8-18-05	Additional workspace along road in Segment 2 underground in the SFPUC Watershed.	Approved	8-22-05
13	10-06-05	Staging Yard for Segment 3 at northeast corner of Skyline Boulevard and San Bruno Avenue in the City of San Bruno.	Approved	10-06-05
14	1-05-06	Retention basin and associated drainages at Jefferson Substation	Approved	1-09-06
15	1-10-06	Work in SFPUC watershed on a holiday (MLK Jr. Holiday) and close public trails	Approved	1-11-06
16	3-24-06	Install FaulSat system onto the JM 230 kV transmission circuit. Four GPS stations will be installed on existing poles. A bore from Tower #70A to a 12 kV line for power will also be needed.	Waiting for further information from PG&E. What type of equipment will be needed for bore at Tower #70A to 12 kV line?	

UPCOMING ITEMS:

PG&E holds the following weekly meetings to review issues and upcoming events:

- Cable pulling and splicing activities on Tuesday (8:00 a.m., Hayward B&V office);
- Segment 2 Overhead on Tuesday (10:00 a.m., Hayward B&V office);

Photographs



Figure 1 – Cable being pulled up tower on the south side of Crystal Springs Dam, Segment 1, March 22, 2006.



Figure 2 – Crews working at Tower #78, Segment 2 Overhead in the SFPUC watershed, March 16, 2006.



Figure 3 – Crews building a temporary retention basin in the right-of-way at the northwest corner of the substation to catch storm water run-off,

Jefferson Substation, March 9, 2006.