



Redacted
Manager
Transmission Compliance

Redacted

July 12, 2013

Raymond Fugere, P.E.
Program and Project Supervisor
Electric Safety and Reliability Branch
Safety and Enforcement Division

SUBJECT: PG&E's Response to the June 3, 2013 ESRB Report Concerning
The April 15-19, 2013 Audit of PG&E's Daly City Area Electric Substation Facilities

Dear Mr. Fugere:

This letter is in response to your June 3, 2013 report of the Electric Safety and Reliability Branch (ESRB) April 8-11, 2013 audit of Pacific Gas & Electric Company's (PG&E) substation facilities in the Daly City Area. The audit included a review of PG&E's inspection program of PG&E's substation facilities.

During the audit, the CPUC identified one programmatic concern (General Order 165) and seven field conditions (General Order 174 (Rule 30.1 and Rule 33.1)). PG&E provides its responses to the audit report in Attachment A to this letter. PG&E would also wish to thank the ESRB and the audit team for taking the time to provide specific observations and recommendations in the audit report for our consideration. PG&E believes this type of feedback provided during an audit to be a very positive and important component, and we will be reviewing these suggestions for possible incorporation into our program improvement plans.

Please contact me at 415-973-7356 if you have any questions regarding this response.

Sincerely,

Redacted

Manager, Transmission Compliance

Cc: Raymond Fugere, Program and Project Supervisor, CPUC ESRB
Ben Brinkman, Senior Utilities Engineer, CPUC ESRB



Attachment A

Programmatic Concerns

GO 174, Rule 30.1, states in part:

“Each Operator shall establish, update as needed, and follow an Inspection Program.”

GO 174, Rule 33.1 states, in part,

“Electronic or hard copy records of completed Inspections shall include, at a minimum: ...

Scheduled date of corrective action (where applicable)”

PG&E DRAFT Document “PG&E Substation Inspection Program Summary” (TD3322S) states, in part,

“Section 2, General, a. iii. The Substation Inspection Program Activities Include:

Document and Report any abnormal condition found in the substation and any repairs or services or work performed.”

Substation L, March 7, 2013 Inspection, “Lighting” inspection sheet states, in part:

“building interior is dark, need repair or add more lighting”

PG&E stated that it may have added transformers or equipment in areas of the substation, necessitating a lighting evaluation and possibly a capital budget request. PG&E has not yet fully evaluated the lighting in this building.

PG&E’s Response:

PG&E has completed the implementation of its new computer-based condition based maintenance (CBM) system for substation inspections. The next phase of CBM will deploy all other maintenance tasks (such as circuit breaker maintenance and oil analysis). When the maintenance task deployment of CBM is complete, PG&E will update all affected Substation Inspection Program documents.

In the interim, PG&E will communicate the substation inspection program expectations via the following:

- Issue Bulletin TD-3322-024, Substation Inspections. This document provides updates to the Substation Inspection booklet to: 1) reflect PG&E’s current substation inspection practices in compliance with General Order 174; and 2) indicate specific sections of the



substation booklet that are superseded as a result of utilizing the of Condition Based Maintenance (CBM) system for Substation Inspections. Completed on 07/10/13, A copy of the Bulletin is attached.

- Update and Issue Bulletin, TD-3322-012, Condition Based Maintenance (CBM) Transition Process. This bulletin clarifies how substation inspection and maintenance data is recorded and used in conjunction with the CBM system. Specific items that this revised Bulletin will include are: 1) expectation for Crew Leads, Electricians, and Apprentice Electricians to record abnormal conditions; 2) reference to an Oil Leak job aid; 3) description of the CBM alarm flow; and 4) expectations for Supervisors (or Designees) to acknowledge and determine whether an abnormal condition is placed in monitoring, a work request is created, or the condition is closed/cancelled (with comments) within a specific time frame based on the CBM alarm. The expected completion date for the Bulletin is 07/31/13.

In addition, PG&E will:

- Create an Oil Leak job aid with example pictures that will assist Crew Leads, Electricians, and Apprentice Electricians with selecting the appropriate alarm level and oil leak repair options. The expected completion date is 07/31/13.
- Define and document PG&E's Substation Inspection Work Verification/Quality Control Process (as needed). Include the type of review and frequency to ensure consistency of the Substation Inspection Program expectations. The expected completion date is 12/02/13.
- Cover the audit field violations regarding housekeeping, fence/security, and safety issues with cabinet doors at the next Substation Maintenance First Line Supervisors meeting scheduled for 10/08/13.

Also, in regards specifically to Station L and the control room in question, no transformers or equipment have been added to the substation; rather, the equipment was moved outdoors. In regards to the building lighting, on 07/01/13 PG&E performed a field visit to verify there is adequate lighting in building. The building contains two rooms. The lighting in one room is adequate. For the other room, PG&E will add lighting by 12/31/13. Note, no notification is available, since this type of work is performed by PG&E's Facilities Management Office and requests are submitted via email. See the attached email.



Redacted
Manager
Transmission Compliance

Redacted

Field Portion

1.	Structure ID / Location:	Taravel Substation, Breaker Bank 1, 3 Phase Transformer
	Previous PG&E Inspection:	March 13, 2013
	Date of CPUC Inspection:	April 17, 2013
Explanation of Violation(s):		
<p><u>Oil Leak</u></p> <p>GO 174, Rule 30.1, states in part: <i>Each Operator shall establish, update as needed, and follow an Inspection Program.</i></p> <p>PG&E DRAFT Document "PG&E Substation Inspection Program Summary" (TD3322S) states, in part,</p> <p style="padding-left: 40px;"><i>"Section 2, General, a. iii. The Substation Inspection Program Activities Include:</i></p> <p style="padding-left: 80px;"><i>Document and Report any abnormal condition found in the substation and any repairs or services or work performed."</i></p> <p>The inspection form does not list a weeping leak on the transformer bank. PG&E inspectors reported similar leaks on other transformers as priority 2 or 3. This leak appears to be at the oil sampling port. PG&E should attempt to standardize these readings, including whether residue or weeping from oil sampling should be included in inspections.</p>		

PG&E's Response:

PG&E is in the process of creating an Oil Leak job aid to provide guidance on selecting the appropriate alarm level and oil leak repair options based on the type of oil leak. The expected completion date is 07/31/13.

In regards to this bank, PG&E mitigated the oil leak by wiping the leaks and cleaning and tightening the bolts (Notification #106993167 completed on 06/23/13). Documentation of the completed work is attached.



2.	Structure ID / Location:	Noriega Substation
	Previous PG&E Inspection:	December 10, 2012
	Date of CPUC Inspection:	April 17, 2013
Explanation of Violation(s):		
<p><u>Substation Housekeeping</u></p> <p>GO 174, Rule 30.1, states in part:</p> <p><i>“Each Operator shall establish, update as needed, and follow an Inspection Program.”</i></p> <p>PG&E DRAFT Document “PG&E Substation Inspection Program Summary” (TD3322S) states, in part,</p> <p><i>“Section 2, General, a. iii. The Substation Inspection Program Activities Include:</i></p> <p><i>Document and Report any abnormal condition found in the substation and any repairs or services or work performed.”</i></p> <p>ESRB found broken bottles and wooden pallets at the site. This was not noted on the inspection sheet. This substation is located in an urban area, and ESRB is aware this garbage might not have been present at the time of the last inspection.</p>		

PG&E’s Response:

PG&E cleaned up the debris at the substation during the audit field visit on 04/17/13.

On 06/23/13 PG&E verified that the substation was still clean (a picture of the substation area is attached). Also, the Maintenance Supervisor spoke with business neighbors on both sides of the substation to communicate the need for a clean safe area, and asked them to keep their area clean and to notify PG&E if other debris is present.

Also, PG&E will cover substation housekeeping at the next Substation Maintenance First Line Supervisors meeting scheduled for 10/08/13.



Redacted
Manager
Transmission Compliance

Redacted

3.	Structure ID / Location:	East Grand Substation, General
	Previous PG&E Inspection:	March 7, 2013
	Date of CPUC Inspection:	April 18, 2013
Explanation of Violation(s):		
<p><u>Broken Barbed Wire</u></p> <p>GO 174, Rule 30.1, states in part:</p> <p><i>“Each Operator shall establish, update as needed, and follow an Inspection Program.”</i></p> <p>PG&E DRAFT Document “PG&E Substation Inspection Program Summary” (TD3322S) states, in part,</p> <p><i>“Section 2, General, a. iii. The Substation Inspection Program Activities Include:</i></p> <p><i>Document and Report any abnormal condition found in the substation and any repairs or services or work performed.”</i></p> <p>On the latest inspection sheet, PG&E failed to record cut barbed wire on fence top near substation entrance.</p>		

PG&E’s Response:

PG&E replaced three strands of barbed wire (Work Request #1436973 completed 05/20/13). Note, this type of work is addressed via PG&E’s Facilities Management Office, therefore no notification is needed. A 06/23/13 visit to the substation confirmed the work was completed. Documentation of the completed work is attached.

Also, PG&E will cover fence/security at the next Substation Maintenance First Line Supervisors meeting scheduled for 10/08/13.



Redacted
Manager
Transmission Compliance

Redacted

4.	Structure ID / Location:	East Grand Substation, Bank 5 3-phase transformer
	Previous PG&E Inspection:	March 7, 2013
	Date of CPUC Inspection:	April 18, 2013
Explanation of Violation(s):		
<p><u>Broken Cabinet Sliding Door Linkage</u></p> <p>GO 174, Rule 30.1, states in part:</p> <p>GO 174, Rule 30.1, states in part:</p> <p><i>“Each Operator shall establish, update as needed, and follow an Inspection Program.”</i></p> <p>PG&E DRAFT Document “PG&E Substation Inspection Program Summary” (TD3322S) states, in part,</p> <p><i>“Section 2, General, a. iii. The Substation Inspection Program Activities Include:</i></p> <p><i>Document and Report any abnormal condition found in the substation and any repairs or services or work performed.”</i></p> <p>Cabinet sliding door linkage is broken. PG&E did not record this on the inspection sheet.</p>		

PG&E’s Response:

PG&E repaired the hinges to the cabinet door. (Notification #106993163, completed 06/23/13). Documentation of the completed work is attached.

Also, PG&E will cover safety issues with cabinet doors at the next Substation Maintenance First Line Supervisors meeting scheduled for 10/08/13.



Redacted
Manager
Transmission Compliance

Redacted

5.	Structure ID / Location:	Noriega Substation, Battery Structure
	Previous PG&E Inspection:	December 10, 2012
	Date of CPUC Inspection:	April 17, 2013
Explanation of Violation(s):		
<p><u>Damaged Battery Housing</u></p> <p>GO 174, Rule 30.1, states in part:</p> <p><i>“Each Operator shall establish, update as needed, and follow an Inspection Program.”</i></p> <p>PG&E DRAFT Document “PG&E Substation Inspection Program Summary” (TD3322S) states, in part,</p> <p><i>“Section 2, General, a. iii. The Substation Inspection Program Activities Include:</i></p> <p><i>Document and Report any abnormal condition found in the substation and any repairs or services or work performed.”</i></p> <p>The battery cabinet structure is damaged, apparently due to vehicle impact. One door appears to be unable to open. PG&E failed to record on the inspection sheet. ESRB also believes a temporary or permanent barricade might be advisable in front of the structure.</p>		

PG&E’s Response:

PG&E placed temporary barriers in front of the cabinet door on the date of the audit field visit (04/17/13). See attached pictures.

PG&E will replace and install permanent barriers by 12/31/14. Note, no notification is available at this time, since PG&E is awaiting a quote from the supplier to replace the cabinet. Once the quote is received, a notification will be created.

Also, PG&E will cover safety issues with cabinet doors at the next Substation Maintenance First Line Supervisors meeting scheduled for 10/08/13.



Redacted
Manager
Transmission Compliance

Redacted

6.	Structure ID / Location:	East Grand Substation, Oil Circuit Breakers 401 and 402
	Previous PG&E Inspection:	March 7, 2013
	Date of CPUC Inspection:	April 18, 2013
Explanation of Violation(s):		
<p><u>Oil Leaks</u></p> <p>GO 174, Rule 30.1, states in part:</p> <p><i>“Each Operator shall establish, update as needed, and follow an Inspection Program.”</i></p> <p>PG&E DRAFT Document “PG&E Substation Inspection Program Summary” (TD3322S) states, in part,</p> <p><i>“Section 2, General, a. iii. The Substation Inspection Program Activities Include:</i></p> <p><i>Document and Report any abnormal condition found in the substation and any repairs or services or work performed.”</i></p> <p>PG&E failed to report all Oil Leaks on inspection sheet. PG&E should develop consensus policy for evaluating oil leaks (see recommendations).</p>		

PG&E’s Response:

PG&E is in the process of creating an Oil Leak job aid to provide guidance on selecting the appropriate alarm level and oil leak repair options based on the type of oil leak. The expected completion date is 07/31/13.

In regards to these circuit breakers, PG&E mitigated the oil leak by wiping the leaks and verified that the oil is contained. Since the time to wipe the oil was minimal, the work was completed within the Substation Inspection (Notification #106876743 completed on 06/27/13). and a separate notification work order was not needed. Documentation of the completed work is attached.



Redacted
Manager
Transmission Compliance

Redacted

7.	Structure ID / Location:	East Grand Substation, 1111 Distribution Oil Breaker
	Previous PG&E Inspection:	March 7, 2013
	Date of CPUC Inspection:	April 18, 2013
Explanation of Violation(s):		
<p><u>Oil Level Missing – Possible Wrong Equipment on Checklist</u></p> <p>GO 174, Rule 30.1, states in part:</p> <p><i>“Each Operator shall establish, update as needed, and follow an Inspection Program.”</i></p> <p>PG&E DRAFT Document “PG&E Substation Inspection Program Summary” (TD3322S) states, in part,</p> <p><i>“Section 2, General, a. iii. The Substation Inspection Program Activities Include:</i></p> <p><i>Document and Report any abnormal condition found in the substation and any repairs or services or work performed.”</i></p> <p>The inspection sheet does not contain an entry for the oil level for the March 2013 inspection. It is possible that this breaker has been replaced with a vacuum breaker and the inspection sheet requires updating.</p>		

PG&E's Response:

PG&E confirms that the new breakers are vacuum breakers and verified that both SAP and the CBM have been updated with the correct information removing CB1111 from the records. Screen shots of SAP and CBM are attached showing that CB1111 record is removed.

**CPUC Audit of PG&E's Daly City Area
Substation Facilities (SA2013-002)
Supporting Documentation for Field Condition #1 – Taravel Substation, Bank 1**

Completed Notification:

Service notification Edit Goto Extras Environment System Help

Display Service Notification: ElecTrans Corr

In process again Status Organization...

Notification 106893167 LC TXFR - Bk 1 Oil Leaks - Taraval

Notific. Status NOCO ORAS RELW

Serv. order 41917786

Reference Info. Location data Completion Dates Repair Report

Reference object

Functional loc. ETS_12_13094_TXFR TARAVAL SUB, POWER TRANSFORMERS

Equipment 41014903 BK 1 3 PHASE TRANSFORMER WITH LTC

Subject

Work Type ZN-LCS 587 GCJ-Dist Sub: Corrective (T80)

Description TXFR - Bk 1 Oil Leaks - Taraval

06/24/2013 08:47:46 Redacted
Bk 1 Oil Leak Mitigation and Clean-up.

Execution

Priority B - Urgt Compliance Effect Breakdown 0.00

Req. start 06/23/2013 00:00:00 Required End 07/20/2013 00:00:00

Malfunct. start 06/25/2013 15:36:08 Malfunct.end 00:00:00

Main WorkCtr MARTIN / ECES Martin

Planner group DS1 / ECES Distribution







PGE Specific

Anticipated Material Costs 0

Crew Class	SUB_ELE2	Duration Needed	6.0	H
Crew Class		Duration Needed	0.0	
Crew Class		Duration Needed	0.0	

**CPUC Audit of PG&E's Daly City Area
Substation Facilities (SA2013-002)
Supporting Documentation for Field Condition #1 – Taravel Substation, Bank 1**

Completed Notification, Cont.

Notification	106993167	LC	TXFR - Bk 1 Oil Leaks - Taraval	
Notific. Status	NOCO ORAS			RELW
Serv. order	41917786			
 Reference Info.	 Location data	 Completion Dates	 Repair Report	
Reported by				
Reported by	Redacted	Notif date	06/23/2013 00:00:00	
Start/End Dates				
Malfunc. start	06/25/2013 15:36:08	Required Start	06/23/2013 00:00:00	
Malfunction end	00:00:00	Required End	07/20/2013 00:00:00	
Completion Dates				
Completn date	06/25/2013 15:36:15	TechInspectn by		
Reference date	06/23/2013 15:36:08	TechInspect on		

CPUC Audit of PG&E's Daly City Area
Substation Facilities (SA2013-002)
Supporting Documentation for Field Condition #1 – Taravel Substation, Bank 1

Picture of the Bank as of 06/23/13:



**CPUC Audit of PG&E's Daly City Area
Substation Facilities (SA2013-002)
Supporting Documentation for Field Condition #2 – Noriega Substation**

Picture of the area within the Substation as of 06/23/13:



**CPUC Audit of PG&E's Daly City Area
Substation Facilities (SA2013-002)
Supporting Documentation for Field Condition #3 – East Grand Substation, General**

Excerpt of Email:

From: [Redacted]
Date: June 24, 2013 11:46:55 AM PDT
To: [Redacted]
Subject: FW: FMO Completion Notice & Satisfaction Survey Invitation

[Redacted]

This looks like it was completed on May 20, 2013.

[Redacted]

-----Original Message-----

From: FacilitiesManagementOffice
Sent: Wednesday, June 05, 2013 8:38 AM
To: [Redacted]
Subject: FMO Completion Notice & Satisfaction Survey Invitation

Your work request number was: 1436973

Your request was received on: 05/6/2013 11:59 am Your request was completed on: 05/20/2013 05:00 pm Your request was: "BROKEN BARB WIRE FENCE BY THE GATE OF EAST GRAND SUB Contact is: [Redacted]"

Property: East Grand Substation-50702
Building: EAST GRAND SUB-71704

Floor:

Room:

Requestor: [Redacted]

Phone: [Redacted]

Contact: [Redacted]

Phone: [Redacted]

Work Type: FENCE

Problem Type: REPAIR

Priority: Urgent - 24 hours

Repair Description:

If there are any outstanding issues with this work, please contact the FMO so we can address them immediately.

Phone: 415-973-9000, Option 2, or 8-223-9000, Option 2.

**CPUC Audit of PG&E's Daly City Area
Substation Facilities (SA2013-002)
Supporting Documentation for Field Condition #3 – East Grand Substation, General**

Picture of the Fence as of 06/23/13:



**CPUC Audit of PG&E's Daly City Area
Substation Facilities (SA2013-002)
Supporting Documentation for Field Condition #4 – East Grand Substation, Bank 5**

Completed Notification:

Service notification Edit Goto Extras Environment System Help

Display Service Notification: ElecTrans Corr

In process again Status Organization..

Notification LC TXFR-Bk 5 Repair Door Linkage-East Grand

Notific. Status RELW

Serv. order

Reference Info Location data Completion Dates Repair Report

Reference object

Functional loc. EAST GRAND SUB, POWER TRANSFORMER..

Equipment BK 5 3 PHASE TRANSFORMER WITH LTC

Subject

Work Type GCJ-Dist Sub: Corrective (T80)

Description

06/24/2013 08:31:47 Make repairs to Bk 5 linkage on door.

Execution

Priority Effect Breakdown

Req. start Required End

Malfunc. start Malfunc. end

Main WorkCtr / Martin

Planner group / Distribution

PGE Specific

Anticipated Material Costs

Crew Class	<input type="text" value="SUB_ELE2"/>	Duration Needed	<input type="text" value="6.0"/>	<input type="text" value="H"/>
Crew Class	<input type="text"/>	Duration Needed	<input type="text" value="0.0"/>	<input type="text"/>
Crew Class	<input type="text"/>	Duration Needed	<input type="text" value="0.0"/>	<input type="text"/>

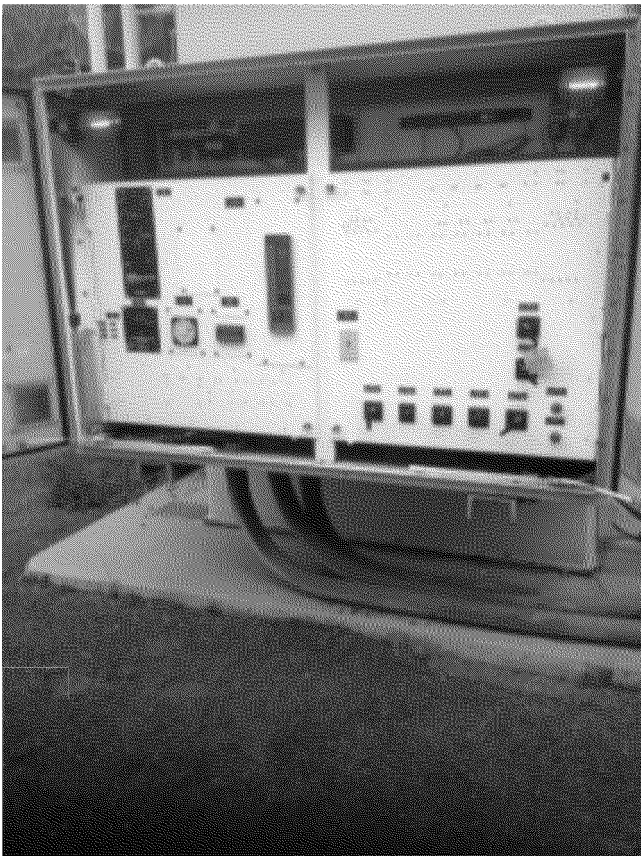
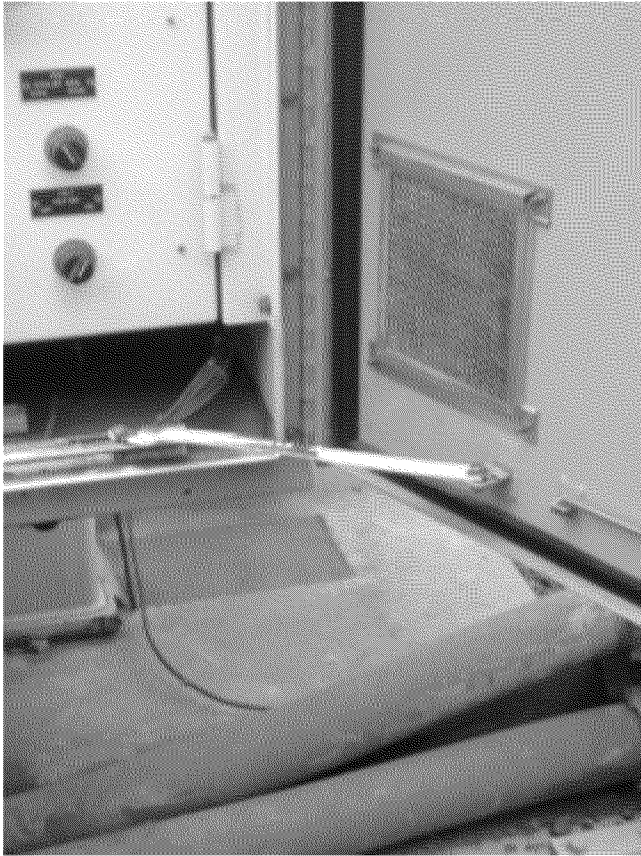
**CPUC Audit of PG&E's Daly City Area
 Substation Facilities (SA2013-002)
 Supporting Documentation for Field Condition #4 – East Grand Substation, Bank 5**

Completed Notification, Cont.

Notification	106993163	LC	TXFR-Bk 5 Repair Door Linkage-East Grand				
Notific. Status	NOCO NOPT ORAS			RELW			
Serv. order	41917782						
	Reference Info.		Location data		Completion Dates		Repair Report
Reported by							
Reported by	Redact		Notif date	06/22/2013 00:00:00			
Start/End Dates							
Malfunc. start	06/25/2013	15:35:33	Required Start	06/23/2013	00:00:00		
Malfunction end		00:00:00	Required End	07/20/2013	00:00:00		
Completion Dates							
Completn date	06/25/2013	15:35:40	Techinspectn by				
Reference date	06/23/2013	15:35:33	Techinspec on				

**CPUC Audit of PG&E's Daly City Area
Substation Facilities (SA2013-002)
Supporting Documentation for Field Condition #4 – East Grand Substation, Bank 5**

Pictures of the Cabinet Door as of 06/23/13:



CPUC Audit of PG&E's Daly City Area
Substation Facilities (SA2013-002)
Supporting Documentation for Field Condition #5 – Noriega Substation, Battery Structure

Pictures of the Cabinet as of 06/23/13:



**CPUC Audit of PG&E's Daly City Area
Substation Facilities (SA2013-002)**

Supporting Documentation for Field Condition #6 – East Grand Substation, Circuit Breakers 401 & 402

Completed Substation Inspection:

Notification	106876743	PR	EAST GRAND Sub, Station INSP GR 4	
Notific. Status	NOCO ORAS			
Order	41882769			
<div style="display: flex; justify-content: space-between;"> Reference Info Location data Completion Dates Maintenance Plan </div>				
Reference object				
Functional loc.	ETS.12.12315	EAST GRAND SUB, MARTIN HQ		
Equipment				
Subject				
Work Type	ZPR	945		
Description	EAST GRAND Sub, Station INSP GR 4			
Responsibilities				
Planner group	DS1 / ECES	Distribution		
Main WorkCtr	MARTIN / ECES	Martin		
Reported by	IP1020010220	Notif date	04/14/2013	21:06:56
Start/End Dates				
Required Start	06/28/2013	00:00:00	Priority	E - Schd Compl Yr 0
Required End	06/28/2013	00:00:00	<input type="checkbox"/> Breakdown	

**CPUC Audit of PG&E's Daly City Area
Substation Facilities (SA2013-002)**

Supporting Documentation for Field Condition #6 – East Grand Substation, Circuit Breakers 401 & 402

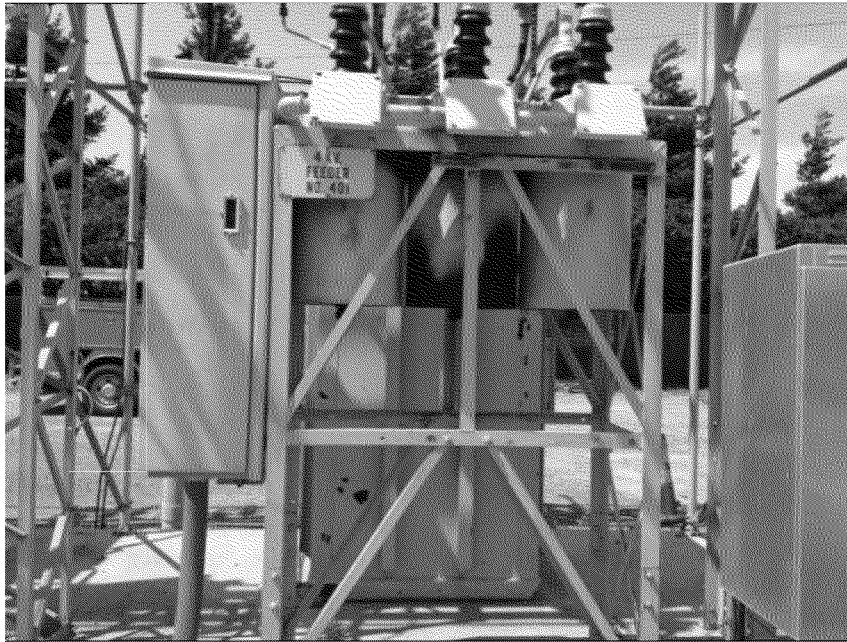
Completed Substation Inspection, Cont:

Notification	106876743	PR	EAST GRAND Sub, Station INSP GR 4	
Notific. Status	NOCO ORAS			
Order	41882769			
Reference Info		Location data		Completion Dates
Maintenance Plan				
Reported by				
Reported by	IP1020010220	Notif. date	04/14/2013	21:06:56
Start/End Dates				
Malfunct. start	06/28/2013	09:06:40	Required Start	06/28/2013 00:00:00
Malfunction end		00:00:00	Required End	06/28/2013 00:00:00
Completion Dates				
Completn date	06/28/2013	09:06:46	TechInspectn by	
Reference date	06/27/2013	09:06:40	TechInspect on	

CPUC Audit of PG&E's Daly City Area
Substation Facilities (SA2013-002)

Supporting Documentation for Field Condition #6 – East Grand Substation, Circuit Breakers 401 & 402

Pictures of Circuit Breakers 401 and 402 respectively, as of 07/01/13:



**CPUC Audit of PG&E's Daly City Area
Substation Facilities (SA2013-002)**

Supporting Documentation for Field Condition #7 – East Grand Substation, Circuit Breaker 1111

SAP and CBM Screen Shots respectively:

Equipment: 40995864 Category: 2 Transmission Substation
 Description: 1111 DIST. OIL BREAKER 1 TANK - REMOV
 Status: AVLB DLFL REMV
 Valid From: 02/12/2013 Valid To: 12/31/9999

General data
 Class: ETS - BRKR ETS-Circuit Breaker
 Object type: ETS. BRKR Circuit Breaker
 AuthorizGroup: ETS Elec. Substation
 Start-up date:
 Responsibilities
 Planning plant: ECES Work Management Planning Plant
 Planner group:
 Main WorkCtr: /
 Catalog profile: S. BRKR ETS - Circuit Breaker

Callout: Status CB 1111 Equipment in SAP is "Removed"

Pacific Gas & Electric (PROD)
 ETS - Assets

By Function Group | Images | Life-to-Date Values
 SAP Hierarchy | SAP Hierarchy Listing | SAP Hierarchy Details | Asset Listing - Characteristics* | Characteristics Listings - As

ETS.12.12315.BRKR : EAST GRAND SUB, CIRCUIT BREAKERS : A - ISO critical : RPO - records purpose only

- 42725627 : 1100 DISTRIBUTION VACUUM BREAKER : H - High Impact : INSV - in service
- 40995855 : 1101 DIST. OIL BREAKER 1 TANK : H - High Impact : INSV - in service
- 40992320 : 1102 DISTRIBUTION VACUUM BREAKER : M - Medium Impact : INSV - in service
- 40992319 : 1103 DISTRIBUTION VACUUM BREAKER : M - Medium Impact : INSV - in service
- 40995854 : 1104 DIST. OIL BREAKER 3 TANK : H - High Impact : INSV - in service
- 42567982 : 1105 DISTRIBUTION VACUUM BREAKER : L - Low Impact : INSV - in service
- 42610394 : 1106 DISTRIBUTION VACUUM BREAKER : H - High Impact : INSV - in service
- 42714910 : 1107 DISTRIBUTION VACUUM BREAKER : H - High Impact : INSV - in service
- 40995860 : 1108 DIST. OIL BREAKER 3 TANK : M - Medium Impact : INSV - in service
- 40995853 : 1109 DIST. OIL BREAKER 3 TANK : H - High Impact : INSV - in service
- 40995859 : 1110 DIST. OIL BREAKER 1 TANK : H - High Impact : INSV - in service
- 40992316 : 1112 DISTRIBUTION VACUUM BREAKER : M - Medium Impact : INSV - in service
- 40990610 : 1113 DISTRIBUTION VACUUM BREAKER : M - Medium Impact : INSV - in service
- 41199076 : 1114 DISTRIBUTION VACUUM BREAKER : M - Medium Impact : INSV - in service
- 41120246 : 1115 DISTRIBUTION VACUUM BREAKER : H - High Impact : INSV - in service
- 42597526 : 1400 DISTRIBUTION VACUUM BREAKER : H - High Impact : INSV - in service
- 40990609 : 1500 DISTRIBUTION VACUUM BREAKER : H - High Impact : INSV - in service
- 42730996 : 1600 DISTRIBUTION VACUUM BREAKER : H - High Impact : INSV - in service
- 40990724 : 122 TRANS. SF6 SINGLE PRES. BRKR : A - ISO critical : RPO - records purpose only

Callout: CB 1111 Equipment is no longer reflected in CBM

**CPUC Audit of PG&E's Daly City Area
Substation Facilities (SA2013-002)
Supporting Documentation for Station L - Lighting**

Excerpt of Email to Request Lighting:

From: FacilitiesManagementOffice [mailto:website@bigcenter.com]
Sent: Wednesday, July 10, 2013 10:40 AM
To: **Redacted**
Subject: Your request has been submitted. Work request number: 1460235 "LIGHTING-INTERIOR/NEW REQUEST"

Your request was received on: 07/10/2013 10:40 am Your request was: "Need to add additional lighting to control room at substation L."
It has been assigned to request number: 1460235

Your request will be addressed as soon as possible between today and 07/24/2013 10:40 am

Please feel free to contact the Facilities Management Office (FMO) with any question on this or any additional issues. Our normal business hours are 7 a.m. to 5 p.m., Monday through Friday. We handle emergencies 7 days a week, 24 hours a day. Our phone: 415-973-9000, Option 2 or 8-223-9000, Option 2.

--
This communication, including any attachments, is intended solely for the confidential use of the person(s) named above. If you have received this communication in error, please notify the sender immediately and delete/destroy the original. Any reader, including any named person(s) above, who are other than the intended recipient/s is/are hereby notified that any review, dissemination, distribution or copying of this message is strictly prohibited. If this communication contains a proposed agreement, the content of that proposal is strictly confidential, and this delivery shall not constitute an offer.



Substation Inspections

Summary

This document provides updates to the Substation Inspection booklet to 1) reflect PG&E's current substation inspection practices in compliance with General Order 174 and 2) indicate specific sections of the substation booklet that are superseded as a result of utilizing the Condition Based Maintenance (CBM) system for Substation Inspections.

This Bulletin information will be incorporated in the next revision of the Substation Inspection booklet. In the interim, please print a copy of this Bulletin and place it with the Substation Inspection booklet (Revision 10).

Affected Document

Substation Maintenance and Construction Manual (TD-3322M), Substation Inspection Booklet

Target Audience

Utility employees maintaining substation equipment – specifically those employees responsible for 1) performing substation inspections or 2) reviewing and acknowledging substation inspection generated alarms.

What you need to know

1. Below is a listing of the specific section or item in the Substation Inspections booklet (Revision 10) which is being updated. The content below replaces the indicated section or item in its entirety.

Subsection II.B, Purpose of Inspections – Item B.1 (page 2)

1. A substation inspection is a planned basic evaluation, performed using visual and auditory senses (if applicable) to identify abnormal conditions.
 - a. The Substation Inspection Program activities include: visually inspecting the substation and equipment for damage or abnormal conditions; visually inspecting all other items appropriate to the substation and its equipment; and documenting and reporting abnormal conditions found in the substation and any repairs or service work performed.
 - b. Note: while not specifically part of the Substation Inspections Program, PG&E may perform work activities (such as station reads, environmental activities and NERC physical security checks) at the time when the substation inspection is performed.



Substation Inspections

- c. Note: the Substation Inspection Program does not include maintenance work such as unplanned or corrective maintenance, on-line condition monitoring, infrared and corona inspections, or testing.

Subsection II.D, Inspection Responsibilities – Item D.7 (page 4)

- 7. The substation maintenance supervisor (or designee) must review all of the CBM alarms to properly acknowledge CBM alarms with appropriate actions in the specified time as indicated in TD-3322B-012, CBM Transition Process.

Subsection II.E, Condition Codes for Abnormal Conditions Section (Page 4) *(Note: this new section title replaces “Priority Codes for Abnormal Conditions”).*

Using the CBM remote device, station inspectors indicate the condition and a brief description of the identified discrepancy (as needed). The condition codes are as follows:

- 1- No Problem Found
- 2 - Abnormal Condition Found
- 3 - Adjustment Repairs or Replace. Required
- 4 - Safety/Reliability Factor
- 5 - Immediate Action Required

Subsection V.A.6, Stored Equipment – Item 6.a (page 22)

- a. Perform all of the inspection tasks covered here that apply the equipment. Enter the results of these inspections in the CBM remote device.

Subsection V.A.24, Bird Protection – Item 24.b (page 26)

- b. Using CBM, document and describe active nests that could be disturbed by maintenance activities in the “Comments”. An active nest contains viable eggs or live young. More information about active nests and the actions to take when discovering active nests are found in Utility Standard S2321, “Avian Protection Plan” and “WP2321-01, “Avian Protection Pan Implementation”.



Substation Inspections

Subsection V.J.11, General Condition of the Mechanism – Item 11.c (page 58)

c. When service work is necessary, record the condition in the CBM remote device. The conditions codes are as follows:

- 1- No Problem Found
- 2 - Abnormal Condition Found
- 3 - Adjustment Repairs or Replace. Required
- 4 - Safety/Reliability Factor
- 5 - Immediate Action Required

2. Substation inspectors shall enter substation inspection data into the CBM remote device. As a result, documentation of substation inspection is no longer documented using the following paper forms:

- Substation Reading Report (TD-3322M-F01)
- Substation Condition Assessment Checklist (TD-3322M-F02)
- Circuit-Breaker Operations Report (TD-3322M-04)
- Counter Change Form (no form number)
- Transformer Load and Temperature Data Report (no form number)

Approved By

Redacted Manager

Document Contact

Redacted Senior Specialist

Inclusion Plan

This Bulletin is published and available in the Technical Information Library, and will be incorporated into the next revision of the Substation Maintenance and Construction Manual's Substation Inspections booklet.