

Attachment 1
Corrosion Control Self-Reports
February 11, 2014

#	Code/Std Topic	Code/Std	City/County	Date Submitted	Initial Violation Date	Date Remediated	Divisions / Region	Description	Corrective Actions Completed	Contributing Causes
6	Cathodic protection	192.465	Burlingame, San Carlos, San Mateo Co	2/22/2012	12/19/2011	1/17/2012	Peninsula Division	Missed bi-monthly cathodic protection measurements on an 8-in gas DFM in 2 locations. Inadvertently placed on incorrect maintenance schedule. Required maintenance performed on January 27, 2012. SAP schedule to be reviewed.	Required P/S reads taken 1/27/2012; Restored CPA 6/6/2012; Reviewed and validated conversion to CP maintenance schedules to SAP system-wide.	Inadequate change management; Inadequate management oversight. Causes and corrective actions are similar to CAP causal evaluation for #150154 and additional evaluation is underway.
11	Cathodic protection	PG&E WP4133-02 192.13(c)	Santa Cruz Co	4/4/2012	Varies	Varies	Central Coast Division	24 CPAs in Santa Cruz County had not been resurveyed within 6-yr period as specified by PG&E's procedure. Discovered during SAP review.	Completed required resurveys of 24 CPAs; Troubleshooted and restored 3 CPAs that were "down."	Inadequate change management; Inadequate management oversight. Causes and corrective actions are similar to CAP causal evaluation for #150154 and additional evaluation is underway.
16	Corrosion control	192.465; PG&E O-16	San Francisco Co, San Mateo Co, Sacramento Co, Humboldt Co, Solano Co, El Dorado Co, Placer Co, Merced Co, Butte Co, Amado Co, San Luis Obispo Co, Marin Co, Sonoma Co, Santa Clara Co, Madera Co, Kings Co, San Bernardino Co, Kern Co, Alameda Co, Contra Costa Co, Monterey Co, San Benito Co, Santa Cruz Co	6/5/2012	Varies	Varies	Various Divisions	180 P/S measurements outside criteria without remedial action plan. Action plans created and CP records reviewed.	Created action plans to address each low cathodic protection read; Completed leak surveys of all affected facilities; Remediated all locations, and provided update to CPUC; Reviewed cathodic protection records to identify similar instances.	Procedure Use and Adherence; Oper/Maint History Issue (SAP #7000651)
28	Rectifier installation	PG&E O-11.1 192.13(c)	Oakland; Alameda Co	9/13/2012	5/9/2011	7/11/2012	East Bay Division	Rectifier 70 did not receive site evaluation test prior to placing in service. Completed July 11, 2012.	Completed site evaluation test 7/11/2012, verified rectifier was in good condition and functioning normally; Incorporated rectifier workload compliance review as part of SAP; Updated bi-monthly review protocol; Distributed system-wide communication outlining CP Rectifier Installation Requirements.	Procedure Use and Adherence; Too Much/Too Little Supervision; Oper/Maint History Issue (SAP #7000652)

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31	Cathodic protection	192.465	Oakland, Alameda Co	12/13/2012	2008 (2); 2011 (3)	11/15/2012	East Bay Division	Five 10%er locations in Oakland were discovered to have been last tested over 10 years ago.	Tested 5 locations 11/15/2012; 2 locations exhibited adequate protection; Installed anodes to restore other 3 locations; Entered and scheduled 10%ers in SAP system-wide.	Inadequate change management; Inadequate management oversight. Causes and corrective actions are similar to CAP causal evaluation for #150154 and additional evaluation is underway.
34	Corrosion control	192.467	Livermore, Alameda Co	12/19/2012	12/6/2012	1/29/2013	Mission Division	Failed to protect against damage from potential fault currents or lightning for a natural gas transmission line located in close proximity to an electrical transmission tower.	Inspected sections of transmission pipeline near electrical transmission towers in Livermore; Evaluated two indications in laboratory; Published TD-4182P-01 for site-specific evaluations of close proximity to electrical transmission towers; Initiated system-wide effort to identify and remediate locations of gas transmission pipeline in close proximity to electrical transmission towers without adequate protection.	Indications on transmission line in Livermore were determined to be due to weld spatter (not arc-flash from electrical transmission).
49	Cathodic protection	192.465	Mountain View, Santa Clara Co	4/9/2013	9/22/2012	2/22/2013	De Anza Division	Annual cathodic protection test required by 49 CFR 192.465 was not performed in 2012 (due in September). Corrosion mechanic discovered the missed measurements on February 22, 2013 and performed the measurement on the same day.	Completed P/S read - adequate protection; Confirmed SAP maintenance plan.	Inaccurate transfer of records from FM to SAP; Incomplete verification of records prior to the implementation of SAP; Human error made by the local clerk while performing the monthly cross check of records between FM and SAP (CAP #160345)
55	Corrosion control	192.481	Berkeley, Alameda Co	6/18/2013	1998	6/14/2013	East Bay Division	Exposed piping in two vaults in Berkeley had no record of atmospheric corrosion inspections. Upon discovery, atmospheric corrosion inspection of these facilities was performed on June 14, 2013. Furthermore, the assets will be placed into SAP.	Completed atmospheric corrosion inspections of facilities in the two vaults; Placed assets into SAP for ongoing inspections.	Inadequate change management; Inadequate management oversight. Causes and corrective actions are similar to CAP causal evaluation for #150154 and additional evaluation is underway.
57	Corrosion control	192.465; PG&E O-16	Edwards Air Force Base, Kern Co	7/12/2013	7/2/2013	7/8/2013	Kern Division	On June 18, 2013, a corrosion mechanic attempting to perform the required bi-monthly measurement was denied access to the grounds of EAFB, where the measurement was to be taken. Kern Division personnel immediately reapplied for EAFB clearance. On July 8, 2013, a corrosion mechanic gained access and completed the required bi-monthly measurement.	Completed bi-monthly read 7/8/2013.	Inaccess Equip Loc; Latent Errors; Planning/Preparation Issue (SAP #7000561)