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November 6, 2013

Mr. Mike Robertson
Gas Safety and Reliability Branch
Safety and Enforcement Division
California Public Utilities Commission
320 West 4th Street, Suite 500
Los Angeles, CA. 90013

Re: State of California – Public Utilities Commission
General Order 112-E Audit – PG&E’s Tracy and McDonald Island Districts

Dear Mr. Robertson:

The Safety and Enforcement Division (SED), conducted a General Order 112-E audit of PG&E’s Tracy and McDonald Island Districts from June 3 through 7, 2013. On September 24, 2013, the SED submitted its audit report, identifying violations and findings. Attached is PG&E’s response to the CPUC audit report.

Please contact Larry Berg at (925) 328-5758 or LMB5@pge.com for any questions you may have regarding this response.

Sincerely,

/S/

Frances Yee

Attachments

cc: Terence Eng, CPUC
Dennis Lee, CPUC
Liza Malashenko, CPUC

Jane Yura, PG&E
Larry Deniston, PG&E
Larry Berg, PG&E

**General Order 112-E Findings
CPUC Inspection Report September 24, 2013
Tracy District**

INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
June 3-7, 2013	Internal Audit	Terence Eng	(415) 703-5326

PG&E INTERNAL AUDIT FINDINGS

A. PG&E's Internal Audit Findings

Prior to the start of the June 3-7, 2013 audit, PG&E provided SED its findings from the internal review it conducted of both Tracy and McDonald Island Districts. Some of PG&E's internal review findings are violations of PG&E's operations and maintenance standards, and are therefore violations of Title 49 Code of Federal Regulations (CFR), §192.13(c). Tables 1 and 2 list violations found within Tracy and McDonald Island Districts, respectively.

SED is aware that PG&E corrected some of its findings prior to SED's audit. Please provide SED an update on the items that were still pending corrective actions as of June 7, 2013.

Table 1 Findings from PG&E's Tracy District Internal Review dated June 2013

Topic	Code Violation	Finding	Instances	Completion Date
Emergency Valves	192.13(c)	Outdated valve cards were used	Not Specified	1/1/2013
	192.13(c)	Missing data in the description section on valve maintenance cards	Not Specified	12/12/2012
	192.13(c)	Actuator maintenance forms are not being utilized for all valve actuators	Not Specified	1/1/2013
	192.13(c)	V-1 L-114 MP 12.53 was identified as hard to operate. However, the valve card had comments indicating that the valve will not operate. In addition, work request 185307 also indicates that the valve will not operate.	1	5/20/2013
Station Maintenance	192.13(c)	On 3 occasions, responses to issues found by contactor were written in pencil on the Aerial Patrol reports.	3	5/21/2012
	192.13(c)	Incomplete data on the leak survey reports.	Not Specified	5/21/2012
	192.13(c)	Incomplete form for a leak repair. The check box for soap test was not checked off.	1	1/28/2012
Cathodic Protection	192.465(b)	In 2011, the district did not complete the annual rectifier site evaluations at 39 locations in accordance with PG&E Work Procedure O-11.1.	39	11/30/2012
Odorization	192.13(c)	Martin Severin odorization report was missing the employee LAN ID and didn't identify percent & gallons.	1	2/27/2013

Definitions: NOV – Notice of Violation
AOC – Area of Concern

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Patrols	192.13(c)	L-304, Span at MP 4.67 was identified to have corrosion, bad transitions, and sagging	1	Line shut in, scheduled to be retired
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PG&E RESPONSE

The one pending item listed in Table 1 is the aboveground span on L-304 at milepoint 4.67. This section of L-304 is shut in and operates at approximately 90 psig to serve 6 customers. The pipe is operating less than 20% SMYS. Pipeline and Corrosion Engineering have determined the conditions noted do not require immediate action. Therefore, discussions with the property owner will continue for the pipe to be relocated and the existing pipe span will be retired sometime in 2014.

ATTACHMENTS

Attachment #	Title or Subject
None	

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
Retire L-304 at MP 4.67	December 2014		Pipeline Engineering

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INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
June 3-7, 2013	NOV-1	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	<p>1. <u>Title 49 CFR, §192.13(c) states:</u></p> <p style="text-align: center;"><i>“Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part.”</i></p> <p>1.1 PG&E’s Work Procedure WP4430-04, Gas Valve Maintenance Requirements and Procedures dated March 2009, p.18 states in part:</p> <p style="text-align: center;"><i>“Record valve maintenance on the appropriate “Valve Maintenance Record.”</i></p> <p>1.1.1 Tracy District documented its 6/29/10 and 10/31/11 operations of L-401 Bixler Cross Tie Valve 308.31 on its valve maintenance card, appearing to exceed the 15 month interval established by 49 CFR §192.745. According to PG&E’s Pipeline Management System (PLM), the District operated the valve on 5/2/11, but did not document the results on the valve maintenance card.</p> <p>1.1.2 Tracy District documented its 1/6/10 and 7/10/12 operations of Old River Pressure Limiting Station Valve No. 5R Reg/Trimmer on its valve maintenance card, appearing to exceed the 15 month interval established by 49 CFR §192.745. According to PG&E’s PLM, the District operated the valve on 7/12/10, 1/3/2011 and 7/15/11, but did not document the results on the valve maintenance card.</p> <p>1.2 PG&E’s Standard O-71, Copper-Copper Sulfate Reference Electrodes dated May 2006, Calibration for Crystal and Gel Electrodes tab states in part:</p> <p style="text-align: center;">P.2, item 7: <i>“Usually, the difference between the standard electrode and</i></p>
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	<p><i>tested electrode is less than 10 millivolts when both electrodes are at the same temperature. If this difference equals or exceeds 10 millivolts, discard the reference cell solutions, rinse out the tube with distilled water, and refill it with a fresh solution and new copper sulfate crystals. Clean the copper rod with a non-conductive abrasive until the surface is bright and shiny, as detailed in the "Maintenance" section, Item 5."</i></p> <p>P.3 item 8: <i>"If the cell will not calibrate correctly after performing the seven steps above, discard the cell and its contents. Consider all material used in this clean-up process as hazardous waste and dispose of it properly. Contact a local hazardous waste coordinator for information about disposal containers and disposal procedures."</i></p> <p>Tracy District recorded an electrode reading difference of 11.5mV on test electrode serial number #69, PG&E ID number 1-6-11, on 4/4/11. The District provided no indication of proper handling to address the unacceptable calibration result.</p> <p>1.3 PG&E's Standard O-16, Corrosion Control of Gas Facilities dated March 2009, Rectifier Monitoring and Maintenance tab, p.7 states in part:</p> <p><i>"A 'Rectifier Test and Site Evaluation' form (Attachment A of Numbered Document O-11.1, Form FO-11.1-A) shall be completed [emphasis added] to ensure that rectifiers are functioning correctly and that there are no safety violations."</i></p> <p style="margin-left: 40px;">1.3.1 On 1/25/11, the District performed rectifier testing of rectifier 122, L-131 at Dagnino MP 28 in the city of Livermore. The District did not include the required supervisor signature on the Rectifier Test and Site Evaluation Form.</p> <p style="margin-left: 40px;">1.3.2 In 2009, the District performed rectifier testing of Rectifier 26 SP at Armstrong Rd in the city of Byron. The District did not include the required supervisor signature, mechanic signature, or dates on the Rectifier Test and Site Evaluation Form.</p> <p>1.4 PG&E's Utility Procedure TD-4110P-09, Leak Grading and Response dated September 2010, Grade 2+ (Priority Grade 2) Gas Leaks tab on p.7 states in part:</p>
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Tracy District**

	<p style="text-align: center;"><i>“A Grade 2+ leak is non-hazardous to persons or property at the time of detection, but still requires a scheduled priority repair within 90 days or less.”</i></p> <p>The District discovered a Grade 2+ leak (Leak Number 98-09-05704-1) on 4/20/09. The District repaired the leak in December of 2010, outside of the required 90 day interval.</p>
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PG&E RESPONSE

1.1.1

PG&E agrees with this finding. Although PG&E performed valve maintenance on this valve within the required 15 months, it failed to properly document its May 2011 maintenance on the valve maintenance form per work procedure WP4430-04. To prevent recurrence, Tracy District has conducted a tailboard briefing on October 10, 2013 to review PG&E’s Utility Procedure TD-4430P-04, “Gas Valve Maintenance,” and emphasized the need to complete documentation thoroughly, and in a timely manner (Attachment A).

1.1.2

PG&E respectfully disagrees with this finding. The completed valve maintenance documentation for this regulating valve is attached. (Attachment B). PG&E apologizes for not having this documentation available at the time of the audit.

1.2

PG&E agrees with this finding. The electrode is now within the standard 10 mV difference (Attachment C). To prevent recurrence, PG&E conducted a tailboard briefing on October 10, 2013 to review PG&E’s Standard O-71 “Copper-Copper Sulfate Reference Electrodes” (Attachment A).

1.3.1, 1.3.2

PG&E agrees with this finding, and as part of the Internal Review Summary, informed the CPUC at the time of this audit that PG&E identified 39 locations with incomplete rectifier site evaluations. The annual rectifier site evaluations for the 39 locations were completed in October 2012 and November 2012. To prevent recurrence, Tracy District conducted a tailboard briefing with district personnel to review PG&E’s Standard O-16, which references O-11.1, and the completeness of Form FO-11.1-A, “Rectifier Test and Site Evaluation”

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Tracy District**

(Attachment A)

1.4

PG&E agrees with this finding. Tracy District now reviews all outstanding leaks as part of the monthly Gas Compliance Assurance Program (GasCAP) meetings. To prevent recurrence, PG&E conducted a tailboard briefing on October 10, 2013 with district personnel to review PG&E's Utility Procedure TD-4110P-09, "Leak Grading and Response"

(Attachment A)

ATTACHMENTS

Attachment #	Title or Subject
A	Tailboard for TD-4430P-04, O-71, and O-16
B	Maintenance Report for V5R
C	Electrode Calibration Check Form

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
No further action required			

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Tracy District**

INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
June 3-7, 2013	NOV-2	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	<p>2. <u>Title 49 CFR, §192.745(a) states:</u></p> <p style="text-align: center;"><i>“Each transmission line valve that might be required during any emergency must be inspected and partially operated at intervals not exceeding 15 months, but at least once each calendar year.”</i></p> <p>2.1 Tracy District did not operate Vernalis Meter Station Valve No. 15 in 2009 or 2010.</p> <p>2.2 Tracy District did not operate Livermore Junction Station L-114 Valve No. 40 in 2010 or 2011.</p> <p>2.3 Tracy District did not operate Bethany Compressor Station valve V-203 in 2010.</p> <p>2.4 Tracy District did not operate Brentwood Terminal valve V-127 in 2012.</p> <p>2.5 Tracy District did not operate Brentwood Terminal valve V-126A in 2012.</p> <p>2.6 Tracy District operated Bethany Compressor Station valve V-203 on 1/21/11 and subsequently on 10/22/12, outside of the required 15 month interval.</p>
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PG&E RESPONSE

PG&E agrees with this finding for valves noted in 2.1 -2.3, and 2.6. To prevent recurrence, Tracy District has conducted a tailboard briefing with field personnel to review PG&E’s Utility Procedure TD-4430P-04, “Gas Valve Maintenance,” and reviewed

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valve maintenance frequency (Attachment A).

2.4

PG&E respectfully disagrees with this finding. V-127 was taken out of service prior to its annual maintenance. V-127 was last maintained on August 23, 2011, and taken out of service on August 2, 2012. V-127 was returned to service on job #30904340 on June 6, 2013(Attachment D).

2.5

PG&E respectfully disagrees with this finding. V-126A was taken out of service prior to its annual maintenance. V-126A was last maintained on August 23, 2011, and taken out of service on August 2, 2012. V-126A continues to be out of service(Attachment E).

ATTACHMENTS

Attachment #	Title or Subject
A	Tailboard for TD-4430P-04, 0-71, and 0-16
D	Maintenance Records for V-127A
E	Maintenance Records for V-126A

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
No further action required			

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INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
June 3-7, 2013	NOV-3	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	<p>3. <u>Title 49 CFR, §192.745(b) states:</u></p> <p><i>“Each operator must take prompt remedial action to correct any valve found inoperable, unless the operator designates an alternative valve.”</i></p> <p>Tracy District found valve V-1 on Line L-57A MP9.45 inoperable in May of 2010 and still inoperable in May of 2011, until finally installing a new replacement valve in 2012. Tracy District did not take prompt remedial action to correct the valve between May of 2010 and 2012, nor did they designate an alternative valve at first discovery of its inoperability.</p>
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PG&E RESPONSE

<p>PG&E agrees with this finding. Tracy District failed to make the valve operable within 15 months of its last operation, or create an Alternate Means of Control (AMC) when the valve was discovered to be inoperable. To prevent recurrence, Tracy District conducted a tailboard briefing with field personnel to review PG&E’s Utility Procedure TD-4430P-04, “Gas Valve Maintenance” and Gas Information Bulletin TD-4430B-001 “Establishing Alternate Means of Control (AMC) for Inoperable Valves” (Attachment A).</p>
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ATTACHMENTS

Attachment #	Title or Subject
A	Tailboard for TD-4430P-04, 0-71, and 0-16

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
No further action required			

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June 3-7, 2013	AOC-1	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	<p>C. Observations and Concerns (Tracy District)</p> <p>1. Tracy District did not lubricate Brentwood Terminal plug valves V-2, V-8, or V-10 in 2009. Tracy District confirmed that all plug valves require lubrication annually per WP 4430-04.</p> <p>PG&E’s WP 4430-04 Gas Valve Maintenance Requirements and Procedures dated March 2009, p.4 states in part:</p> <p>“Gas transmission valves classified as “emergency,” gas distribution “critical” main valves, and district regulator station valves, including upstream and downstream fire valves, must be inspected, serviced/lubricated (where required, see the paragraph above), and operated (see Paragraph 3.A., “New Valves”) at intervals not exceeding 15 months to the date, but at least once each calendar year. If a valve requiring lubrication (all plug valves and ball valves if a positive shutoff cannot otherwise be obtained [emphasis added]. Gate valves do not require lubrication.) is not lubricated regularly, it may become inoperable, not shut off adequately when necessary, or develop external valve stem leakage.”</p> <p>The sentence in bold can have two different interpretations: If a valve requiring lubrication ([all plug valves] and [ball valves if a positive shutoff cannot otherwise be obtained].</p> <p>or</p> <p>If a valve requiring lubrication ([all plug valves and ball valves] if a positive shutoff cannot otherwise be obtained.</p> <p>Sentence A means that all plug valves require lubrication and ball valves require lubrication only when shutoff cannot otherwise be obtained. Sentence B means that neither type of valve requires lubrication unless shutoff cannot otherwise be obtained. Though not to speculate, the language in the procedure may be responsible for the lack of lubrication of plug valves. Please confirm the intent of the procedure and ensure consistency throughout PG&E’s system.</p>
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PG&E RESPONSE

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The intent of the language in WP4430-04 noted above follows Sentence A. That is, all plug valves require lubrication. However, it should be pointed out in section B.3 on page 8 of WP4430-04 (Attachment F) that a caution statement is included in the work procedure to use the minimum amount of lubricant for plug valves in regulator and meter stations to maintain operability of the valve. This has been interpreted as no lubrication is required if the valve is found to operate smoothly. The upcoming revision to the valve maintenance work procedure will clarify plug valve lubrication requirements.

ATTACHMENTS

Attachment #	Title or Subject
A	Tailboard for TD-4430P-04, 0-71, and 0-16
F	WP4430-04

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
Issue revision to Valve Maintenance work procedure – TD-4430P-04	January 1, 2014		Standards & Procedures

**General Order 112-E Findings
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INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
June 3-7, 2013	AOC-2	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	<p>C. Observations and Concerns (Tracy District)</p> <p>1. The valve maintenance form for Tracy Station Valve V-111 indicates that it is an emergency valve, yet there is no documentation that the District maintained the valve after 3/7/11. The District discovered that PLM describes the valve as non-jurisdictional, therefore annual maintenance is not required. Please explain the discrepancy between PLM and the valve maintenance form.</p>
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PG&E RESPONSE

<p>PG&E agrees with this concern, V-111 is considered a reliability valve and not an emergency valve. Reliability valves do not require valve cards and their maintenance is documented in PLM. Tracy District inadvertently completed a valve maintenance form for V-111. Attachment G, is a PLM printout showing annual maintenance for Valve 111. To prevent recurrence, PG&E conducted a tailboard briefing on October 10, 2013 to ensure that all valve information is adequately documented (Attachment A).</p>

ATTACHMENTS

Attachment #	Title or Subject
Attachment A	Tailboard for TD-4430P-04, 0-71, and 0-16
Attachment G	PLM printout for V-111

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
No Further Action Required			

Definitions: NOV – Notice of Violation
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**General Order 112-E Findings
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McDonald Island District**

INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
June 3-7, 2013	Internal Audit	Terence Eng	(415) 703-5326

PG&E INTERNAL AUDIT FINDINGS

A. PG&E's Internal Audit Findings

Prior to the start of the June 3-7, 2013 audit, PG&E provided SED its findings from the internal review it conducted of both Tracy and McDonald Island Districts. Some of PG&E's internal review findings are violations of PG&E's operations and maintenance standards, and are therefore violations of Title 49 Code of Federal Regulations (CFR), §192.13(c). Tables 1 and 2 list violations found within Tracy and McDonald Island Districts, respectively.

SED is aware that PG&E corrected some of its findings prior to SED's audit. Please provide SED an update on the items that were still pending corrective actions as of June 7, 2013.

Table 2 Findings from PG&E's McDonald Island District Internal Review dated June 2013

Topic	Code Violation	Finding	Instances	Completion Date
Emergency Valves	192.13(c)	Incomplete data in the description section of the valve cards	Not Specified	Ongoing
Station Maintenance	192.13(c)	Outdated forms used for capacity reviews of relief valves.	Not Specified	2010
	192.13(c)	Outdated valves cards being used	Not Specified	1/1/2013
	192.13(c)	Actuator maintenance forms not being used for all actuators	Not Specified	1/1/2013
	192.13(c)	When PRV-53 was put in service it was not entered into the PLM program.	1	5/31/2013
	192.739(a)	PRV-1M12 and PRV-3M10 have no annual maintenance documented for 2011.	2	2/12/2012
	192.13(c)	OM&I Review Change Logs were not completed for the annual OM&I reviews	Not Specified	2/22/2013
	192.13(c)	V-40 2009 maintenance records and V-47 2009 and 2010 records were recorded in PLM, not the valve maintenance cards.	3	5/8/2013

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	192.13(c)	McDonald Island valve lot V-80 and V-81 2012 maintenance records were recorded in PLM, not the valve maintenance cards.	2	5/8/2013
	192.13(c)	Exterran owns, operates, and maintains several compressors at PG&E's McDonald Island storage facility. PG&E has conducted reviews of Exterran's records, revealing potentially missing or inaccurate Operator Qualification and maintenance data required under the terms of PG&E's contract with Exterran.	Not Specified	Investigation Ongoing
Odorization	192.13(c)	Odorization volumes were being calculated incorrectly and the current odorization form was not being used.	Not Specified	11/15/2012
Patrols	192.13(c)	L-57C to Palm Tract survey was completed in pencil	1	5/3/2012
Cathodic Protection	192.13(c)	For L-057 Rectifier for #9 Well the action plan was missing some 2012 review dates.	1	2/26/2013

PG&E RESPONSE

The one pending item from Table 2 above is the ongoing investigation of compressor operations of PG&E contractor, Exterran, at McDonald Island. The final report, with corrective actions, is expected to be complete and distributed by March 1, 2014.

ATTACHMENTS

Attachment #	Title or Subject
None	

ACTION REQUIRED

Action to be Taken	Due Date	Completion Date	Responsible Dept.
Complete & distribute Exterran report	March 1, 2014		Gas Transmission Station Operations

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INSPECTION INFORMATION

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June 3-7, 2013	NOV-1	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	<p>1. <u>Title 49 CFR, §192.13(c)</u> states:</p> <p><i>“Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part.”</i></p> <p>1.1 PG&E’s Work Procedure WP4430-04, Gas Valve Maintenance Requirements and Procedures dated March 2009, p.18 states in part:</p> <p><i>“Record valve maintenance on the appropriate “Valve Maintenance Record.”</i></p> <p>According to PG&E’s Pipeline Management System (PLM), the District operated M-3 Valve Lot valves V-80 and V-81 in 2009, but did not document the results on the valve maintenance record.</p> <p>1.2 PG&E’s Utility Procedure TD-4412P-07, Patrolling Pipelines and Mains dated August 2012, section 4.2.1.b on p.11 states in part:</p> <p><i>“Follow-up actions to aerial observations may require additional documentation. See Section 4.2.4.b. for details.”</i></p> <p>4.2.4.b states in part:</p> <p><i>“Investigations of Aerial Observations</i></p> <p><i>When an aerial observation is reported to the M&C supervisor, the M&C supervisor must respond in one of two ways:</i></p> <p><i>EITHER</i></p> <ul style="list-style-type: none"> • <i>The M&C supervisor provides a copy of documentation illustrating that the aerial observation does not require additional follow-up, attaches this documentation to the completed “Aerial Patrol Report,” and provides this documentation to the PPPO as soon as practicable,</i> <p><i>OR</i></p> <ul style="list-style-type: none"> • <i>The M&C supervisor dispatches a targeted ground patrol as soon as practicable (given the urgency of the response required) to investigate the area observed by the aerial patrol pilot.</i>
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	<ul style="list-style-type: none"> • <i>When targeted ground patrols are conducted, they should be sufficient enough in scope to account for the aerial approximation of the observation's location on the ground.</i> • <i>Follow the standard procedure for routine ground patrol within the area determined necessary for patrol."</i> <p>The District performed an aerial patrol of lines L-57, L-57B, and L-57C on Sept 24, 2010. The pilot recorded two observations of heavy mechanical equipment on the pipeline right-of-way and indicated that further ground review was necessary. The District did not provide a copy of documentation illustrating that the aerial observation did not require additional follow-up, nor did the District dispatch a targeted ground patrol as soon as practicable to investigate the area observed by the aerial patrol pilot.</p>
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PG&E RESPONSE

1.1	PG&E agrees with this violation. McDonald Island District personnel are now fully aware of the need to complete the Valve Maintenance Record (Form F4430-04-1) at the time of maintenance. To help prevent recurrence, McDonald Island District conducted a tailboard briefing on PG&E's Work Procedure TD-4430P-04, "Gas Valve Maintenance," to review valve maintenance frequency and record keeping (Attachment H).
1.2	PG&E agrees with the findings and has reviewed current aerial patrol records over L-57, L-57B, and L-57C. The aerial patrols showed that the Right-of-Way has since been cleared. To prevent future recurrence, PG&E conducted a tailboard briefing with McDonald Island District personnel on PG&E's Work Procedure TD-4412P-07, "Patrolling Pipelines and Mains," to review roles and responsibilities for adequately addressing issues and concerns (Attachment H).

ATTACHMENTS

Attachment #	Title or Subject
H	McDonald Island Tailboard

ACTION REQUIRED

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Action to be Taken	Due Date	Completion Date	Responsible Dept.
No further action required			

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June 3-7, 2013	NOV-2	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	<p>2. <u>Title 49 CFR, §192.739(a) states:</u></p> <p><i>“Each pressure limiting station, relief device (except rupture discs), and pressure regulating station and its equipment must be subjected at intervals not exceeding 15 months, but at least once each calendar year, to inspections and tests to determine that it is–</i></p> <p><i>(1) In good mechanical condition;</i></p> <p><i>(2) Adequate from the standpoint of capacity and reliability of operation for the service in which it is employed;</i></p> <p><i>(3) Except as provided in paragraph (b) of this section, set to control or relieve at the correct pressure consistent with the pressure limits of §192.201(a); and</i></p> <p><i>(4) Properly installed and protected from dirt, liquids, or other conditions that might prevent proper operation.”</i></p> <p>2.1 The District did not operate Turner Cut valve PRV-11 in 2011.</p> <p>2.2 The District operated Turner Cut valve PRV-G16 on 4/16/09 and subsequently on 8/14/10, outside of the required 15 month interval.</p> <p>2.3 The District operated Turner Cut valve PRV-G17 on 4/16/09 and subsequently on 8/13/10, outside of the required 15 month interval.</p> <p>2.4 The District operated Turner Cut valve PRV-G21 on 8/18/10 and subsequently on 2/16/12, outside of the required 15 month interval.</p>
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PG&E RESPONSE

<p>2.1-2.4 PG&E agrees with these findings and has implemented an electronic tracking measure for all outstanding maintenance work orders. Gas Compliance Assurance Program (GasCAP) meetings are conducted monthly to review open work orders with district personnel. To prevent recurrence, PG&E conducted a tailboard meeting to review PG&E’s Work Procedure TD-4430P-02, “Gas Transmission Stations Inspection, Testing, and Maintenance Procedures ” with an emphasis placed on the importance of complete</p>

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and timely follow-up on reported problems (Attachment H).

ATTACHMENTS

Attachment #	Title or Subject
H	McDonald Island Tailboard

ACTION REQUIRED

Action to be Taken	Due Date	Completion Date	Responsible Dept.
No further action required			

Definitions: NOV – Notice of Violation
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INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
June 3-7, 2013	AOC-1	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	1. On the Capacity Review of Relief Devices at Pressure Limiting Stations Form GS&S H-70 for Line "Gas Supply – Well Roberts #1", the listed regulator, TESCOM #44-2323-2081 was incorrectly crossed out and replaced with the model number of relief valve 83CM68-8.
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PG&E RESPONSE

PG&E agrees with the concern, and acknowledges that this was a transcription error by the supervisor. This has been corrected, and the regulator model has been updated in the current maintenance binder (Attachment I). To prevent recurrence, the supervisor has been reminded to review all records for accuracy, and update these documents as necessary.
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ATTACHMENTS

Attachment #	Title or Subject
I	Capacity Review of Gas Supply-Well Roberts 1

ACTION REQUIRED

Action to be Taken	Due Date	Completion Date	Responsible Dept.
No further action required			

Definitions: NOV – Notice of Violation
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AOC - Area of Concern

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Inspection Dates	Finding	CPUC Contact	CPUC Phone #
June 3-7, 2013	AOC-2	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	2. Documentation of the capacity review for valves PRV-6R2, PRV-4 Z3, and PRV-6Z3 listed values for the regulator wide open capacity (e.g. 25.2 MSCFH). The source of the values is referenced under the "Indicate Catalog Reference or Gas Standard for Capacity" field, which claims "See Calculation Sheet". No Calculation Sheet was included for these 3 valves.
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PG&E RESPONSE

PG&E agrees with the concern, and has included the calculations sheets for these three valves (Attachment J). To prevent future recurrence, PG&E conducted a tailboard briefing to review the importance of reviewing the relief valve calculations (Attachment H).

ATTACHMENTS

Attachment #	Title or Subject
H	McDonald Island Tailboard
J	Pressure Relief Valve Calculations for 6R2, 4Z3, and 6Z3.

ACTION REQUIRED

Action to be Taken	Due Date	Completion Date	Responsible Dept.
No Further Action Required			

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INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
June 3-7, 2013	AOC-3	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	3. The capacity review sheets for PRV-4Z3 do not show a comparison of the wide open capacity of the regulator with the capacity of the relief device to demonstrate sufficient capacity.
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PG&E RESPONSE

PG&E agrees with this concern but would like to clarify that this particular relief valve is a Thermal Relief Valve designed to protect a pressure vessel from thermal expansion of the gas. PG&E is revising Gas Design Standard H-70 and including a new relief valve capacity calculation form to document capacity for thermal expansion relief valves. Facility Engineering has committed to reviewing these thermal relief valves and transfer the data to the relief valve capacity calculation form by the end of the first quarter of 2014.

ATTACHMENTS

Attachment #	Title or Subject
None	

ACTION REQUIRED

Action to be Taken	Due Date	Completion Date	Responsible Dept.
Complete revised relief valve forms for thermal relief valves	March 31, 2014		Facility Engineering

Definitions: NOV – Notice of Violation
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INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
June 3-7, 2013	AOC-4	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	4. The capacity review sheets for PRV-4T1 are missing page 2 of Part II of the Capacity Review of Relief Devices form GS&S H-70. The missing page includes vital information such as relief capacity required and adequacy of relief capacity.
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PG&E RESPONSE

<p>PG&E agrees with this concern but would like to clarify that this particular relief valve is a Thermal Relief Valve designed to protect a pressure vessel from thermal expansion of the gas. PG&E is revising Gas Design Standard H-70 and including a new relief valve capacity calculation form, to document capacity for thermal expansion relief valves. Facility Engineering has committed to reviewing these thermal relief valves and transfer the data to the relief valve capacity calculation form by the end of the first quarter of 2014.</p>
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ATTACHMENTS

Attachment #	Title or Subject
None	

ACTION REQUIRED

Action to be Taken	Due Date	Completion Date	Responsible Dept.
Complete revised relief valve forms for thermal relief valves	March 31, 2014		Facility Engineering

Definitions: NOV – Notice of Violation
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AOC - Area of Concern

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INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
June 3-7, 2013	AOC-5	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	5. The capacity review sheets for PRV-3Z3 do not list the regulator model number, calling into the question the correct relief capacity required. In addition, the regulator wide open capacity calculation is missing.
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PG&E RESPONSE

PG&E agrees with the concern, and has corrected the capacity review sheets to include the regulator model (Attachment K). To prevent future recurrence, PG&E conducted a tailboard briefing to review adequately documenting maintenance records (Attachment H).
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ATTACHMENTS

Attachment #	Title or Subject
K	Capacity Review Sheets for PRV-3Z3
H	McDonald Island Tailboard

ACTION REQUIRED

Action to be Taken	Due Date	Completion Date	Responsible
No further action required			

Definitions: NOV – Notice of Violation
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INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
June 3-7, 2013	AOC-6	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	6. The District replaced relief valve 7LM1 in kind (i.e. with one of the same specifications) in March of 2011, yet did not provide a replacement relief valve calculation or documentation that the valve was replaced in kind.
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PG&E RESPONSE

PG&E respectfully disagrees with this concern, and feels that there are no changes made that would warrant a new relief valve calculation. The new relief valve has been verified as being identical as the old relief valve with identical capacity. This has now been documented in the record book. (Attachment L).

ATTACHMENTS

Attachment #	Title or Subject
L	PRV-7LM1

ACTION REQUIRED

Action to be Taken	Due Date	Completion Date	Responsible
No further action required			

Definitions: NOV – Notice of Violation
 FO – Field Observation
 AOC - Area of Concern

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INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
June 3-7, 2013	AOC-7	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	7. The District recorded cathodic protection readings at Coupon test location ETS MD57C0060 on 10/25/11. The District recorded an on-value of -1015 mV and an instant-off value of -1071 mV. In most circumstances, the instant-off value is less negative than the on-value. Please explain why the District did not conduct further investigation at the time of the discovery.
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PG&E RESPONSE

PG&E agrees with this area of concern, and did not adequately document the corrective actions taken. PG&E reviewed the data discrepancy on October 25, 2011 and identified the on and off potentials were entered incorrectly. PG&E corrected the readings. Readings in subsequent years show that all the readings were within acceptable limits (Attachment M). To prevent future recurrence, PG&E reviewed the data entry mistakes with the employee at the time that the error was corrected.

ATTACHMENTS

Attachment #	Title or Subject
M	MDI ETS MD57C0040-60

ACTION REQUIRED

Action to be Taken	Due Date	Completion Date	Responsible Dept.
No further action required.			

Definitions: NOV – Notice of Violation
FO – Field Observation
AOC - Area of Concern

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INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
June 3-7, 2013	AOC-8	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	8. The District recorded cathodic protection readings at Coupon test location ETS MD570040 on 10/25/11. The District recorded an on value of -1519 mV and an instant off value of -3506 mV. In most circumstances, the instant-off value is less negative than the on-value. Please explain why the District did not conduct further investigation at the time of the discovery.
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PG&E RESPONSE

PG&E agrees with this area of concern, and did not adequately document the corrective actions taken. PG&E reviewed the data discrepancy on October 25, 2011 and identified the on and off potentials were entered incorrectly, and flipped. PG&E corrected the readings. Readings in subsequent years show that all the readings were within acceptable limits (Attachment M). To prevent future reoccurrence, PG&E reviewed the data entry mistakes with the employee at the time that the error was corrected.

ATTACHMENTS

Attachment #	Title or Subject
M	MDI ETS MD57C0040-60

ACTION REQUIRED

Action to be Taken	Due Date	Completion Date	Responsible
No further action required.			

Definitions: NOV – Notice of Violation
FO – Field Observation
AOC - Area of Concern

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INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
June 3-7, 2013	AOC-9	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	9. The District found relief valves PRV-3 M10 and PRV-1 M12 “bad” and was unable to verify the relief set pressures of the valves in June of 2011. Please explain why the District did not replace the valves until February of 2012, approximately 8 months later.
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PG&E RESPONSE

PG&E agrees with these findings and has implemented an electronic tracking measure for all outstanding corrective work orders. GasCAP (Gas Compliance Assurance Program) meetings are conducted monthly to review open work orders with district personnel. To prevent recurrence, PG&E conducted a tailboard meeting to review PG&E’s Work Procedure TD-4430P-02, “Gas Transmission Stations Inspection, Testing, and Maintenance Procedures ” with an emphasis placed on the importance of complete and timely follow-up on reported problems (Attachment H).

ATTACHMENTS

Attachment #	Title or Subject
H	McDonald Island Tailboard

ACTION REQUIRED

Action to be Taken	Due Date	Completion Date	Responsible
No further action required.			

Definitions: NOV – Notice of Violation
FO – Field Observation
AOC - Area of Concern

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INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
June 3-7, 2013	AOC-10	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	10. The District performs atmospheric corrosion checks at well process pipes 9N, 1N, 2N, 4N at Turner Cut Station. For the past 4 years, the District indicated that the condition of the paint was "not OK" for both the casing and the tubing at these locations. SED witnessed in the field that Well Pad McDonald 9, McDonald 14/15, and process pipes at Roberts 1 and 2 show signs of lack of paint. Please explain why the District has not addressed the conditions of poor/lack of paint at these locations.
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PG&E RESPONSE

PG&E's Corrosion Engineering Department has reviewed the condition of the aboveground gas facilities and has no evidence of pitting, blistering, or metal loss as the result of atmospheric corrosion. The condition of the coating has been noted and placed on a system-wide list for recoating. PG&E acknowledges that feedback to division personnel on the prioritization of aboveground coating projects has been limited to imminent projects. Starting in 2014, Corrosion Engineering will be providing feedback to district supervisors on the status district facilities on the system-wide list of coating issues.

ATTACHMENTS

Attachment #	Title or Subject
None	

ACTION REQUIRED

Action to be Taken	Due Date	Completion Date	Responsible Dept.
Share prioritized coating project list with district supervision		June 30, 2014	Corrosion Engineering

Definitions: NOV – Notice of Violation
FO – Field Observation
AOC - Area of Concern

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INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
June 3-7, 2013	AOC-11	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	11. The District keeps track of §192.745-required ESD valve maintenance on valve maintenance forms. The District cannot always operate these valves when scheduled by PLM due to interference from clearances and withdrawals; The District then documents on the forms that operation did not take place as required. Furthermore, the District successfully operates each ESD valve annually as part of their annual ESD emergency exercise. SED recommends the District consider consolidating the annual emergency exercise valve maintenance with the §192.745 required maintenance, and keep records in one central location.
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PG&E RESPONSE

PG&E recognizes that this concern has the potential to improve efficiencies. McDonald Island District will consider revising the way these emergency valves are scheduled.
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ATTACHMENTS

Attachment #	Title or Subject
None	

ACTION REQUIRED

Action to be Taken	Due Date	Completion Date	Responsible

Definitions: NOV – Notice of Violation
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AOC - Area of Concern

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INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
June 3-7, 2013	AOC-12	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	12. The District recorded Normal Reset Pressure on some Relief Valve Records but not others. Please describe PG&E's procedure for recording this information.
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PG&E RESPONSE

Work Procedure TD-4430P-02 (Attachment N) does not require that the reset pressure of relief valves be recorded, but used as a diagnostic tool. A differential between the reset pressure and the relief valve setpoint pressure is required for the overpressure protection device to function properly and reset completely. PG&E personnel are trained to check the reset pressures of the relief valves as part of the inspection diagnostics. Reset pressure is not an issue in overpressure protection as nothing impedes the device from continuing to relieve in an overpressure condition.

The relief valve maintenance forms, TD-4430P-02-F06 and TD-4430P-02-F07 (Attachment O) require both an As-Found and As-Left setpoint pressures to be recorded since relief valve setpoint pressure determines adequate overpressure protection.

ATTACHMENTS

Attachment #	Title or Subject
N	TD-4430P-02
O	Relief Valve Forms TD-4430P-02-F06, F07

Definitions: NOV – Notice of Violation
FO – Field Observation
AOC - Area of Concern

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ACTION REQUIRED

Action to be Taken	Due Date	Completion Date	Responsible
No action required			

Definitions: NOV – Notice of Violation
FO – Field Observation
AOC - Area of Concern

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INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
June 3-7, 2013	AOC-13	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	<p>13. The Pressure Relief Valve Record for Pressure relief valve PRV-4M14 indicates a Normal Reset Pressure of 1875. On 4/21/11, the District recorded an as left Normal Reset Pressure of 1650, yet no follow up action was documented.</p> <p>In addition, the Pressure Relief Valve Record for Pressure relief valve PRV-1R1 indicates a Normal Reset Pressure of 99. On 5/3/12, the District recorded an as left Normal Reset Pressure of 88, yet no follow up action was documented.</p> <p>Please explain PG&E's procedure for addressing reset pressures found lower than the documented normal reset pressure.</p>
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PG&E RESPONSE

<p>Work Procedure TD-4430P-02 (Attachment N) does not require that the reset pressure of relief valves be recorded, but used as a diagnostic tool. A differential between the reset pressure and the relief valve setpoint pressure is required for the overpressure protection device to function properly and reset completely. PG&E personnel are trained to check the reset pressures of the relief valves as part of the inspection diagnostics. Reset pressure is not an issue in overpressure protection as nothing impedes the device from continuing to relieve in an overpressure condition.</p> <p>The relief valve maintenance forms, TD-4430P-02-F06 and TD-4430P-02-F07 (Attachment O) require both an As-Found and As-Left setpoint pressures to be recorded since relief valve setpoint pressure determines adequate overpressure protection.</p>

ATTACHMENTS

Attachment #	Title or Subject
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Definitions: NOV – Notice of Violation
FO – Field Observation
AOC - Area of Concern

**General Order 112-E Findings
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N	TD-4430P-02
O	Relief Valve Forms TD-4430P-02-F06, F07

ACTION REQUIRED

Action to be Taken	Due Date	Completion Date	Responsible
No action required			

Definitions: NOV – Notice of Violation
 FO – Field Observation
 AOC - Area of Concern

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INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
June 3-7, 2013	AOC-14	Terence Eng	(415) 703-5326

INSPECTION FINDING

CPUC Finding	14. Although the McDonald Island Compressor station has an adequate amount of ESD switches, the District may consider placing ESD switches by the 2 exit doors inside the compressor station.
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PG&E RESPONSE

PG&E acknowledges the benefits to this suggestion. Facility Engineering Department will consider this as a future project.
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ATTACHMENTS

Attachment #	Title or Subject
None	

ACTION REQUIRED

Action to be Taken	Due Date	Completion Date	Responsible
Consider generating a project to install additional ESD switches at compressor station exits	June 30, 2014		Facility Engineering

Definitions: NOV – Notice of Violation
 FO – Field Observation
 AOC - Area of Concern