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July 08, 2015

Mr. Ken Bruno
Gas Safety and Reliability Branch
Safety and Enforcement Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Re: State of California – Public Utilities Commission
General Order 112-E Audit – PG&E’s Kettleman Transmission District

Dear Mr. Bruno:

The Safety and Enforcement Division (SED) of the CPUC conducted a General Order 112-E audit of PG&E’s Kettleman Transmission District from April 20 through April 24, 2015. On June 11, 2015, the SED submitted their audit report, identifying violations and findings. Attached is PG&E’s response to the CPUC audit report.

Please contact Glen Allen at (925) 244-3388 or gmad@pge.com for any questions you may have regarding this response.

Sincerely,

/S/
Larry Deniston

Attachments

cc: Aimee Cauguiran, CPUC
Dennis Lee, CPUC

Mike Falk, PG&E
Sumeet Singh, PG&E

2015 Kettleman District Audit Findings and Responses

Finding Type [Internal, NOV, AOC]	Finding #	Finding	Response	Associated Attachment (File Name)
NOV PG&E Internal Findings	1	At the start of the inspection, PG&E provided SED its findings from the internal review it conducted of the District. Some of PG&E's internal review findings are violations of PG&E's standards, and are therefore violations of Title 49 Code of Federal Regulations (CFR), §192.605(a). SED is aware that PG&E corrected all of its findings prior to SED's inspection. Table 1 lists all of the violations from PG&E's internal review.	Attached, please find Attachment 1 - Internal Inspection Findings and Attachment 2 - Kettleman District 2015 Internal Review Update, which indicate the findings, corrective actions taken, and the closure date. Updates have been highlighted in yellow.	Att 1_Internal Inspection Findings.pdf Att 2_Kettleman District 2015 Internal Review Update_CONF.pdf
SED NOV	1.1	<p>Title 49 CFR §192.465(d) states: "Each operator shall take prompt remedial action to correct any deficiencies indicated by the monitoring."</p> <p>SED noted that the District failed to take prompt remedial action to correct the following deficiencies indicated by the monitoring. Remedial action should have been taken within 15 months of discovery.</p> <ul style="list-style-type: none"> • L-306; MP 5.16 to 67.7: Discovered insufficient test points on 10/14/2011 and will begin conducting remedial actions in 2015; no remedial actions taken by the time of this CPUC inspection 	<p>The project to add additional test stations on Line 306 from MP 5.16 to 67.7 was created on April 19th, 2012. The local corrosion field technician noted that the line had an insufficient number of test stations. The field technician communicated this information to Corrosion Engineering, which created the project. According to the Project Status Report System (PSRS) record, PG&E encountered delays for the remainder of 2012 because of the environmentally sensitive location of the project and the resulting extensive reviews that the environmental and land rights departments were required to perform. In February of 2013, a vendor proposal was submitted for approval and a Contract Work Authorization (CWA) was granted in July, 2013. In November 2013, a land review, job estimate, and field visits were completed and construction was planned for 2014. The project to install 29 coupon test stations is now approved and funded. The majority of the coupon test stations will be installed this year and the remainder will be installed next year because of permitting and environmental issues. See attachment 3 - "L306 CTS Scope" for the proposed 29 installation sites (highlighted in green).</p> <p>To prevent reoccurrence, PG&E has initiated a 5 year program to install additional test stations on all existing transmission pipelines to ensure that a test station is installed approximately every mile, per procedure TD-4181S. Expected completion is in 2020. In addition, all new transmission pipelines will have test stations installed every 1/2 mile, alternating between electrolysis test stations (ETS) and coupon test stations (CTS). See attachment 4 - "TD-4181S".</p>	Att 3_L306 CTS Scope_CONF.pdf Att 4_TD-4181S_CONF.pdf
SED NOV	1.2	<p>Title 49 CFR §192.465(d) states: "Each operator shall take prompt remedial action to correct any deficiencies indicated by the monitoring."</p> <p>SED noted that the District failed to take prompt remedial action to correct the following deficiencies indicated by the monitoring. Remedial action should have been taken within 15 months of discovery.</p> <ul style="list-style-type: none"> • L-300A; MP 230.32: ETS found low on 10/19/2013; action plan created on 4/15/2015 	<p>An ETS reading of -833 mV was recorded on 10/19/2013 on L-300A at MP 230.32. This is -17 mV less than the -850 mV criterion listed in PG&E's Standard O-16, which was in use at the time. This -850 mV requirement is now contained in TD-4181S, "External Corrosion Control of Gas Facilities". See attachment 4. On 10/31/2014, an ETS reading of -835 mV was recorded. A subsequent Action Plan was created on 4/15/2015. See attachment 5 - "NOV 1.2". On 6/25/2015, a corrosion mechanic adjusted the rectifier located at MP 214 and recorded a read of -870 mV at the MP 230.32 electrolysis test station (ETS). See attachment 5 - "2015 Read".</p> <p>To prevent reoccurrence, action plans are now managed in the work management system, SAP. Automatic notifications are generated and sent to appropriate parties, alerting them of the need to initiate action plans and to make in a timely manner any subsequent updates to the action plans, including scheduling of work requests.</p>	Att 4_TD-4181S_CONF.pdf Att 5_NOV 1.2_CONF.pdf Att 6_2015 Read_CONF.pdf
SED NOV	1.3	<p>Title 49 CFR §192.465(d) states: "Each operator shall take prompt remedial action to correct any deficiencies indicated by the monitoring."</p> <p>SED noted that the District failed to take prompt remedial action to correct the following deficiencies indicated by the monitoring. Remedial action should have been taken within 15 months of discovery.</p> <ul style="list-style-type: none"> • L-300A; MP 401.98: Span noted by the District requiring remediation on 7/15/2013 with no remediation planned until 5/3/2016 	<p>Span L-300A at MP 401.98 is currently scheduled for remediation starting on 5/3/16. The timeline for this span is as follows:</p> <p>5/8/13 - Atmospheric Corrosion Maintenance Inspection was performed for 2013 and the span was indicated as "Needs Repainting". 11/27/13 - Engineering Inspection performed by Corrosion Engineering indicated "corrosion at pipe support". 7/31/14 - Inspection results reviewed and prioritized by Corrosion Engineer. This project was categorized as a priority 2 project. 9/22/14 - Remediation project was created, ranked and scored. 5/3/16 - Construction scheduled to begin.</p> <p>To prevent reoccurrence, PG&E is currently updating the inspection and remediation process and procedure for atmospheric corrosion, including spans. PG&E estimates that a new procedure, TD-4188P-02, "Atmospheric corrosion Inspection of Exposed Assets," will be completed by the 4th quarter of 2015.</p> <p>In addition, PG&E currently has a program in place to remediate all existing atmospheric corrosion conditions for exposed spans. This program includes data gathering, field investigation, engineering prioritization, planning, design, construction, and recoating. The prioritization process is based on the severity of the coating condition found during the Engineering Inspection. The scheduling process is based on the risk and consequences associated with the project. Once these steps are completed, the assets that require remediation are assigned to the Corrosion PMO (Project Management Organization) for the planning and permitting phase of the project. Currently this program has initiated over 350 projects for PG&E's Transmission system, with the goal of completing 150 projects per year. PG&E estimates completion in 2018.</p>	

2015 Kettleman District Audit Findings and Responses

Finding Type [Internal, NOV, AOC]	Finding #	Finding	Response	Associated Attachment (File Name)
SED NOV	2	<p>Title 49 CFR §192.469 states:</p> <p>“Each pipeline under cathodic protection required by this subpart must have sufficient test stations or other contact points for electrical measurement to determine the adequacy of cathodic protection.”</p> <p>The District determined an insufficient number of test stations in 2011 during routine maintenance. At the time of this SED inspection, no new test stations have been installed. The insufficient number of test stations is located at L-306 MP 5.16 to 67.7.</p>	<p>Please see PG&E's response to SED NOV Finding 1.1 above which relates to the project to add additional test stations on Line 306 from MP 5.16 to 67.7.</p>	<p>Att 3_L306 CTS Scope_CONF.pdf Att 4_TD-4181S_CONF.pdf</p>
SED NOV	3	<p>3. Title 49 CFR §192.475(b) states: “Whenever any pipe is removed from a pipeline for any reason, the internal surface must be inspected for evidence of corrosion.”</p> <p>The District removed portions of its steel pipeline, but did not conduct an inspection on the internal surface during the following projects:</p> <ul style="list-style-type: none"> • L-164-1; Colinga Tap (from L300B); 6/5/2012; SAP 30846923 • L-300B; 2380’ WO L300A MP 371.85; 5/8/2012; SAP 30846923 • L-300A; 2500’ NW/O Hubert Way & Cyril Pl MP 345.04532; 4/23/2013; SAP 30846926 • L-300B; HWY 119 MP 272.06; Date not documented; SAP 30863003 • L-306; 1620 Geneseo Rd MP 43.2962; 5/5/2014; SAP 30959338 • L-X6526; 2 mi. S/O & 0.2 mi. W/O HWY 41 & 25th Ave; 9/19/2013; SAP 41710903 	<p>Whenever any pipe is removed from a pipeline for any reason, or whenever the interior surface of the pipeline is exposed, the internal surface must be inspected for evidence of corrosion. This inspection was not documented on the A-Forms for the referenced projects. See attachment 7 - "A-Forms".</p> <p>To prevent reoccurrence, PG&E published a new internal corrosion control standard and five new internal corrosion control procedures in July 2014, with an effective date of January 1, 2016. Please see attachment 8 - “TD-4186S_CONF.zip” for a copy of PG&E’s internal corrosion standard (“TD-4186S_CONF.pdf”) and the five associated procedures (“TD-4186P-100_CONF.pdf” through “TD-4186P-500_CONF.pdf”).</p> <p>In addition, PG&E is currently revising the existing internal corrosion inspection instructions (Job Aids). The revision will be completed by September 2015 and implemented by December 2015, and will enhance the internal processes used to review internal corrosion inspection data and to make future improvements. PG&E is currently evaluating potential changes to the A-Form to improve work processes.</p> <p>A Corrective Action Program (CAP) Notification (7012817) has also been generated to develop a 5 Minute Meeting to inform personnel in all Divisions of the need to fill out the Internal Inspection portion of the A-form whenever the inside surface of the steel pipe is visible, and also to reinforce that all employees qualified for 03-05, ("Pipe Inspection"), are qualified to perform this inspection. Planned completion and implementation is estimated for 3rd quarter 2015.</p>	<p>Att 7_A-Forms_CONF.pdf Att 8_TD-4186S_CONF.zip</p>
SED NOV	4	<p>4. Title 49 CFR §192.163(e) states:</p> <p>“Electrical equipment and wiring installed in compressor stations must conform to the NFPA-70, so far as that code is applicable.”</p> <p>During SED’s field inspection of the Kettleman Compressor station, the District was unable to demonstrate conformance to the NFPA-70.</p>	<p>PG&E is committed to safety in the design and construction of its facilities. PG&E’s current and past practice ensures designs and construction adhere to NFPA 70, National Electric Code (NEC). Before entering into any design of its facilities, PG&E creates a Design Basis Memorandum (DBM). This document is the foundation of engineering design for all projects. If the project has any electrical design there is currently a section under “General Engineering Objectives” entitled “Electrical Design”, which states:</p> <p>“Electrical equipment and wiring installed in compressor stations shall conform to the National Electrical Code, ANSI/NFPA 70, so far as that code is applicable.”</p> <p>During the design, all electrical drawings and calculations are reviewed by a Professional Electrical Engineer (PE) registered in the State of California. The PE is required to ensure that the designs meet the codes, laws, ordinances, rules, and regulations applicable to the project, which include NFPA 70, National Electric Code (NEC).</p> <p>During construction any changes to or deviations from the designs are reviewed and approved by the PE that stamped the original design. After construction is complete, all as-built drawings showing any changes are again reviewed by the PE to ensure adherence to the applicable codes and standards.</p> <p>PG&E uses AGA XL1001 for Area Classification guidelines to define the extent to which areas are classified. The practices of the NEC are applied to all designs to ensure adherence to these codes.</p> <p>Please see attachment 9 - “Kettleman Design Basis” confirming conformance with 49 CFR Part 192 and the National Electrical Code (NEC). This can be found under Section 4, “General Design Criteria”.</p>	<p>Att 9_Kettleman Design Basis_CONF.pdf</p>

2015 Kettleman District Audit Findings and Responses

Finding Type [Internal, NOV, AOC]	Finding #	Finding	Response	Associated Attachment (File Name)								
AOC	1	<p>During SED’s field verification of pipe-to-soil readings, the District recorded pipe-to-soil readings that did not meet the -850 mV to -1600 mV criteria listed in PG&E’s Standard O-16. Table 2 lists all of the noncompliant readings.</p> <table border="1" data-bbox="292 379 574 485"> <thead> <tr> <th>Location</th> <th>P/S reading</th> </tr> </thead> <tbody> <tr> <td>L-300B, MP 280.39</td> <td>-806 mV</td> </tr> <tr> <td>L-401, MP 411.15</td> <td>-1898 mV</td> </tr> <tr> <td>L-401, MP 401.85</td> <td>-1711 mV</td> </tr> </tbody> </table> <p>Please provide SED a status report on the cathodic protection at these locations.</p>	Location	P/S reading	L-300B, MP 280.39	-806 mV	L-401, MP 411.15	-1898 mV	L-401, MP 401.85	-1711 mV	<p>Initial corrective work tickets, including notification numbers and PM order numbers, have been generated to troubleshoot the three locations listed below. PG&E estimates that troubleshooting will be completed in the 3rd quarter of 2015. Please see attachment 10 - "Corrective Orders" .</p> <p>L-300B, MP 280.39: PM Order 42410126 has been generated.</p> <p>L-401, MP 411.15: PM Order 42410127 has been generated.</p> <p>L-401, MP 401.85: PM Order 42410128 has been generated.</p>	Att 10_Corrective Orders_CONF.pdf
Location	P/S reading											
L-300B, MP 280.39	-806 mV											
L-401, MP 411.15	-1898 mV											
L-401, MP 401.85	-1711 mV											