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November 10, 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 San Jose Division

Dear Mr. Bruno:

The Safety and Enforcement Division (SED) of the CPUC conducted a General Order 112-E audit of PG&E’s San Jose Division from July 13 through July 17, 2015. On October 12, 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 Caguiran, CPUC
Dennis Lee, CPUC

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

2015 San Jose Division Audit Findings and Responses

Finding Type [Internal, NOV, AOC]	Finding #	Finding	Response	Associated Attachment (File Name)																														
PG&E Internal Audit Findings		<p>PG&E's Internal Audit Findings: Prior to the start of the inspection, PG&E provided SED its findings from the internal review it conducted of San Jose Division. 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 some of its findings prior to SED's inspection. Table 1 lists all of the violations from PG&E's internal review.</p> <p>Please provide SED an update on the items that were still pending corrective actions as of July 17, 2015.</p>	<p>At the start of the inspection, PG&E provided SED its findings from the internal review it conducted of the San Jose Division. PG&E corrected all of its findings prior to SED's inspection. However SED has indicated one pending item related to 10%er annual reads less than the 10% required in 2013 and 2014.</p> <p>The Asset Strategy group within the Compliance Department is now performing a monthly audit with a newly developed Isolated Steel Service Dashboard. This was previously not performed on a monthly basis and was only identified if the minimum 10% criteria was not reached.</p> <p>This dashboard reviews the total number of Isolated Steel Services in each division, calculates the minimum number of reads required for the year, identifies qualified reads taken Year to Date (does not count reads taken in sequential years or Non-Corroding Risers discovered), then identifies the remaining number of reads required for the year. In addition, the dashboard looks at the number of reads scheduled through the end of the year and incorporates those into a projected read ratio assuming all of those reads that are taken will be credible. If that projected read ratio is below the target, which we currently have set at 11.1% each year, we identify how many isolated steel service read points must be pulled forward from the next year in order to meet that target percentage.</p> <p>The Asset Strategist works with the Corrosion Supervisor in those instances and creates maintenance plans for that agreed upon number of isolated Steel Services so they will be scheduled in the current year. This is performed each month for each division as the number consistently changes each month as more and more NCR's or removed services are discovered.</p> <p>Attached, please find Attachment 1 - "Internal Inspection Findings" and Attachment 2 - "San Jose 2015 Internal Review", indicating the findings, corrective actions taken and the closure date.</p>	<p>Att 1_ Internal Inspection Findings.pdf Att 2_San Jose Division 2015 Internal Review_CONF.xlsx</p>																														
SED NOV	1	<p>Title 49 CFR §192.605(a) states in part: "Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response."</p> <p>PG&E's Gas Standard O-16, Section 6(A), Cathodic Protection Restoration for Distribution and Local Transmission, states in part: "If the CPA restoration work is (or is expected to be) over 30 days, the "CPA Follow-Up Action Plan" form must be used and developed within 30 calendar days from the date the CPA is found below adequate levels of protection..."</p> <p>SED reviewed the Division's corrosion records and found that the Division did not develop a "CPA Follow-up Action Plan" for the following five monitoring locations, listed in Table 2 below, within 30 calendar days from the date the CPA was found to have below an adequate level of protection. Therefore, the Division is in violation of 192.605(a).</p> <p>Please provide a status update for the CP areas with inadequate protection listed below:</p> <table border="1" data-bbox="289 1280 1261 1653"> <thead> <tr> <th>CP Area</th> <th>Type</th> <th>Date of inadequate level of Cathodic Protection</th> <th>Date of Cathodic Protection restoration</th> <th>Action Plan Start</th> </tr> </thead> <tbody> <tr> <td>3353-13</td> <td>Bi-monthly</td> <td>11/2013</td> <td>01/2015</td> <td>Action plan created but no activity recorded between 03/2014 to 01/2015</td> </tr> <tr> <td>3541-15 (Transmission)</td> <td>Bi-monthly</td> <td>01/2013</td> <td>07/2014</td> <td>04/2014</td> </tr> <tr> <td>3414-29 (Transmission)</td> <td>Bi-monthly</td> <td>06/2014</td> <td>Still down as confirmed on SED field visit</td> <td>No Action Plan</td> </tr> <tr> <td>3475-12</td> <td>Bi-monthly</td> <td>02/2014</td> <td>05/2014</td> <td>No Action Plan</td> </tr> <tr> <td>3475-04</td> <td>Bi-monthly</td> <td>03/2013</td> <td>08/2014</td> <td>05/2013</td> </tr> </tbody> </table>	CP Area	Type	Date of inadequate level of Cathodic Protection	Date of Cathodic Protection restoration	Action Plan Start	3353-13	Bi-monthly	11/2013	01/2015	Action plan created but no activity recorded between 03/2014 to 01/2015	3541-15 (Transmission)	Bi-monthly	01/2013	07/2014	04/2014	3414-29 (Transmission)	Bi-monthly	06/2014	Still down as confirmed on SED field visit	No Action Plan	3475-12	Bi-monthly	02/2014	05/2014	No Action Plan	3475-04	Bi-monthly	03/2013	08/2014	05/2013	<p>As noted by SED, all CP areas were previously restored with the exception of 3414-29. This area is now currently under construction. A new pedestal mounted rectifier has been installed and commissioning is in progress. In addition, please find Attachment 3 - "3414-29.2014" and Attachment 4 - "3414-29.2015" for the CP maintenance reports showing that the action plan was created and updated as required.</p> <p>In addition, please find Attachment 5 - "3353-13.2014" and Attachment 6 - "3353-13.2015" for the CP area 3353-13 maintenance reports showing that the action plan was updated between 03/2014 and 01/2015.</p> <p>An action plan was also created for the Bi-monthly reads for CP area 3475-12. Please find Attachment 7 - "3475-12.2013" and Attachment 8 - "3475-12.2014" for the CP maintenance reports showing that the action plan was created and updated as required.</p> <p>CP area 3475-04 was read low on 3/30/13 and reviewed on 4/9/13. The action plan was created on 5/2/13. Please find Attachment 9 - "3475-04.2013" for the CP maintenance report showing that the action plan was created 33 days from the date of the low read.</p> <p>CP area 3541-15 is the same area as 3541-01/05. An action plan was created for this area using both CP areas 3541-15 and 3541-01/05. Please find Attachment 10 - "3541-01-05 Action Plan" and Attachment 11 and 12 - "3541-15.2013 and 2014" for the CP maintenance reports showing that the action plans were created and updated as required.</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>	<p>Att 3_3414-29.2014_CONF.xls Att 4_3414-29.2015_CONF.xls Att 5_3353-13.2014_CONF.xls Att 6_3353-13.2015_CONF.xls Att 7_3475-12.2013_CONF.xls Att 8_3475-12.2014_CONF.xls Att 9_3475-04.2013_CONF.xls Att 10_3541-01-05 Action Plan_CONF.pdf Att 11_3541-15.2013_CONF.xls Att 12_3541-15.2014_CONF.xls</p>
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2015 San Jose Division Audit Findings and Responses

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SED NOV	2	<p>PG&E’s GS&S A-93.1 Revision #07 states in part:</p> <p>“Inserting Plastic Pipe Into a Casing, Bore Hole, or Bridge Structure 5. The following general requirements apply when plastic pipe is installed in any casing... E.(3) The installation is mapped according to the provisions in UO Standard D-S0457, which require that both the casing size and casing material be identified...”</p> <p>PG&E’s Bulletin Number 05-01 dated 4/10/2013 also states in part: “Gas Map Correction documents: Any of the following documents may be used to report map corrections • Map Correction Form • “A” or “A1” Form</p> <p>Mapping Process 2.0 The assigned mapper will: A) Update the record(s) within 60 days of receipt of the map correction document(s)...”</p> <p>SED’s review of recent repair work (A-Forms) shows that the repair work of inserted plastic inside a steel casing was not reflected on the requested record printout from GD GIS as of 7/13/2015 for the following two addresses:</p> <ul style="list-style-type: none"> • 559 Bamboo Court San Jose – Repair work that inserted ¾-inch steel service with ½-inch PE completed on 10/4/2013 • 986 White Drive San Jose – Repair work that inserted ¾-inch steel service with ½-inch PE completed on 7/15/2014 <p>The Division is in violation of 49 CFR 192.605(a) for failing to update its records to reflect the repair work completed in the above addresses within the timeframe required by PG&E Bulletin Number 05-01.</p>	<p>PG&E has conducted a further investigation and has determined that these two jobs were in fact mapped timely, but to nearby addresses based on repair information. Because they were posted to different addresses than the initial leak reports, these two jobs appeared not to have been mapped during the CPUC inspection. The job reported at 559 Bamboo Ct. was originally posted to 557 Bamboo Ct. on 12/11/13. The job reported as 986 White Dr. was actually found to be on the service across the street at 2545 Rose Dr and was posted there on 8/28/14. Rather than having been delayed for 643 days and 362 days, these two jobs were in fact mapped within 68 days and 44 days, respectively. Please find Attachments 13-16 for the Gas Service Records and associated maps for the two locations.</p>	<p>Att 13_559 Bamboo_CONF.pdf Att 14_559 Bamboo Ct Plat Sheet_CONF.pdf Att 15_2545 Rose_CONF.pdf Att 16_Map 2545 Rose_CONF.pdf</p>
SED NOV	3	<p>Title 49 CFR §192.465(d) states in part:</p> <p>“Each operator shall take prompt remedial action to correct any deficiencies indicated by the [external corrosion control] monitoring.”</p> <p>The May 19, 1989, Federal Pipeline and Hazardous Materials Safety Administration’s (PHMSA) Inspection Guideline and Interpretation #PI-89-006 for 192.465(d) states that, as a rule of thumb, PHMSA interprets “prompt” as having the “correction completed by the time of the next scheduled monitoring”. For annual monitoring, the correction should be completed within 15 months.</p> <p>SED found that the Division exceeded 15 months to remediate conditions at the following three CP stations. SED recognizes that in some instances, factors outside of the operator’s control may be the cause of the delay for restoring deficient CP areas (e.g. permitting, environmental, etc.). However, SED observed the cause of the delays for these CP areas to be within the control of the Division. Therefore, the Division is in violation of 192.465(d).</p> <ul style="list-style-type: none"> • CP 3474-14: The area was down from August 2011 until the end of 2014 (except on 09/2013). The area was found down during SED’s field visit on 07/15/2015 • CP 3476-06: The area was down from June of 2011 to December 2013. Even though an action plan was created on time, it took more than two years to restore the CP area • CP 3541-01-05 A-B: The area was down from July 2013 to November 2014. 	<p>CP area 3474-14 was down waiting on the installation of a deep well anode. This job encountered numerous permitting delays with the City. Please find Attachment 17 - "3474-14 Action Plan" showing the delays encountered. When the new anode was installed in the first quarter of 2014, it was discovered that the drill stopped short of the desirable depth causing interference with other facilities. Subsequently, a new contractor was hired and drilled a new deep well anode and installed a new rectifier in the first quarter of 2015 in a different location within the CPA to bring the area back into acceptable CP levels. The area was read up on 10/1/2015 on the field visit follow up with a read of -906 mv. Please find Attachment 18 - "3474-14.2015" for the CP maintenance report showing the restored reads and action plan.</p> <p>CP area 3476-06 had a deep well anode installed in the fourth quarter of 2013 and experienced delays with permitting issues with the Water District due to the depth of the well impacting the water table and water rights. Please find Attachment 19 - "3476-06 Action Plan" for the CP maintenance report showing the delays encountered in the action plan.</p> <p>CP area 3541-01-05 A-B had a shallow bed anode installed in the second quarter of 2014. However the city informed us the power pole we were to utilize for installation of the new rectifier was to be removed. The job had to be redesigned to install the rectifier on a pole across the street which also required additional trenching and additional permitting due to the trench crossing between city and county jurisdiction. Please find Attachment 20 - "3541 01-05.2014" for the CP maintenance report showing the delays encountered in the action plan.</p> <p>To prevent reoccurrence, the corrosion department, since March of 2014, has a dedicated corrosion services group consisting of experienced corrosion specialists with extensive knowledge of challenging jobs and difficult troubleshooting procedures. Additionally, PG&E is in the process of implementing a compliance management process, Super Gas Operations (SGO), which will provide compliance dates to all preventative and corrective corrosion work and will also manage the schedule for all of these jobs. Full implementation is currently scheduled for late 2016. In addition, PG&E has implemented a weekly CPA Open Corrective report which highlights all on going corrective work. This report is reviewed weekly to determine prioritization and ensure implementation to meet all compliance deadlines. CPAs with extenuating circumstances are now required to be restored within 12 months from the date the CPA is found below adequate levels of protection, not to exceed 15 months to the date, per Gas Utility Standard TD-4181S, “External Corrosion Control of Gas Facilities,” Rev 0, published 3/26/14.</p>	<p>Att 17 - 3474-14 Action Plan_CONF.pdf Att 18 - 3474-14.2015_CONF.xls Att 19 - 3476-06 Action Plan_CONF.pdf Att 20 - 3541 01-05.2014_CONF.xls</p>

2015 San Jose Division Audit Findings and Responses

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SED NOV	4	<p>Title 49 CFR §192.481(a) states:</p> <p>“Each operator must inspect each pipeline or portion of pipeline that is exposed to the atmosphere for evidence of atmospheric corrosion, as follows:</p> <p>If the pipeline is located: Onshore Then the frequency of inspection is: At least once every 3 calendar years, but with intervals not exceeding 39 months”</p> <p>SED requested the Division to verify that the atmospheric corrosion inspections of selected plat maps were completed within the required frequency after they were surveyed in 2011. In response to SED’s request, the Division compiled and analyzed leak survey records and AC Inspection Program records for the entire Division. The results of the analysis found that the Division did not meet the required atmospheric corrosion inspection frequency for the following four plat maps, listed in Table 3 below. Therefore, the Division is in violation of 192.481(a).</p> <p>According to PG&E, these four plat maps are scheduled to be inspected no later than 9/9/2015. Please provide an update on the scheduled inspections.</p> <p>Table 3: Plat Maps not Meeting the Required Inspection Frequency</p> <table border="1"> <thead> <tr> <th>Plat Map</th> <th>Last Inspection Date</th> <th>Number of Inspected Meters in the Last Inspection</th> </tr> </thead> <tbody> <tr> <td>3411-C7</td> <td>5/31/2011</td> <td>1018</td> </tr> <tr> <td>3412-C8</td> <td>6/2/2011</td> <td>650</td> </tr> <tr> <td>3412-J8</td> <td>6/3/2011</td> <td>376</td> </tr> <tr> <td>3414-D6</td> <td>6/9/2011</td> <td>218</td> </tr> </tbody> </table>	Plat Map	Last Inspection Date	Number of Inspected Meters in the Last Inspection	3411-C7	5/31/2011	1018	3412-C8	6/2/2011	650	3412-J8	6/3/2011	376	3414-D6	6/9/2011	218	<p>During PG&E’s process of compiling and analyzing the AC Meter Inspection information requested by the CPUC for data request 33, PG&E also compiled and analyzed the AC meter data for the entire San Jose Division. The results of this analysis found 4 plat maps, totaling 2,262 meters, in the San Jose Division that did not meet the 3 year, not to exceed 39 months, inspection frequency. These meters were last surveyed between 5/27/11 and 6/9/11. As of 7/14/15, the meters on the 4 plat maps have been inspected. Please see below and attachment 21 - "San Jose-Late AC Meter Update" for completion dates of these inspections.</p> <table border="1"> <thead> <tr> <th>Plat Map</th> <th>Earliest Inspection Date on Plat Map</th> <th>Latest Inspection Date on Plat Map</th> </tr> </thead> <tbody> <tr> <td>3411-C7</td> <td>6/22/15</td> <td>7/1/15</td> </tr> <tr> <td>3412-C8</td> <td>6/25/15</td> <td>7/6/15</td> </tr> <tr> <td>3412-J8</td> <td>7/2/15</td> <td>7/13/15</td> </tr> <tr> <td>3414-D6</td> <td>7/13/15</td> <td>7/14/15</td> </tr> </tbody> </table> <p>To prevent reoccurrence, starting in 2014, PG&E has incorporated an electronic system to track each meter inspection by date and time, so that inspections are performed within the 3 year, not to exceed 39 month compliance requirement.</p>	Plat Map	Earliest Inspection Date on Plat Map	Latest Inspection Date on Plat Map	3411-C7	6/22/15	7/1/15	3412-C8	6/25/15	7/6/15	3412-J8	7/2/15	7/13/15	3414-D6	7/13/15	7/14/15	Att 21_San Jose-Late AC Meter Update_CONF.xlsx																																		
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AOC	1A	<p>Title 49 CFR §192.467(a) states:</p> <p>“Each buried or submerged pipeline must be electrically isolated from other underground metallic structures, unless the pipeline and the other structures are electrically interconnected and cathodically protected as a single unit.”</p> <p>In addition, page 8 of PG&E’s standard O-16, “Corrosion Control of Gas Facilities,” states in part:</p> <p>“G. Casing Monitoring and Maintenance</p> <p>...The casing is considered to be in electrical contact with the pipeline when the casing-to-soil potential is –800 mV or more negative and/or the difference between the P/S potential and the casing-to-soil potential is less than 100 mV. If one or both of these two conditions are found, further testing as described in Utility Standard D-S0354/S4126 is required.”</p> <p>SED reviewed the Division’s casing monitoring records and found the following five locations in 2013 and ten locations in 2014, shown in Table 4 below, with casing-to-soil potential readings that, according to PG&E’s standard, indicate the presence of pipe-to-casing electrical contacts.</p> <p>Table 4: Casing Monitoring Records with contact indications</p> <table border="1"> <thead> <tr> <th>Casing BarID</th> <th>Pipe Potential (mV)/Contact Type</th> <th>Casing Potential (mV)</th> <th>Inspection Year</th> </tr> </thead> <tbody> <tr> <td>SJR307010; 3414-E3</td> <td>-567</td> <td>-608</td> <td>2014</td> </tr> <tr> <td>SJR307040; 3414-E3</td> <td>-578</td> <td>-530</td> <td>2014</td> </tr> <tr> <td>SJR307060; 3414-F3</td> <td>-554</td> <td>-230</td> <td>2014</td> </tr> <tr> <td>SJR307080; 3413-G8</td> <td>-454</td> <td>-421</td> <td>2014</td> </tr> <tr> <td>SJR307090; 3413-H6</td> <td>-587</td> <td>-273</td> <td>2014</td> </tr> <tr> <td>SJR307100; 3414-D6</td> <td>-643</td> <td>-534</td> <td>2014</td> </tr> <tr> <td>SJR157050; 3413-C3</td> <td>-789</td> <td>-502</td> <td>2014</td> </tr> <tr> <td>SJR157060; 3413-C3</td> <td>-625</td> <td>-518</td> <td>2014</td> </tr> <tr> <td>SJR077010; 3475-G8</td> <td>Electrolytic Contact</td> <td></td> <td>2014</td> </tr> <tr> <td>SJR127010; 3414-C6</td> <td>Electrolytic Contact</td> <td></td> <td>2014</td> </tr> <tr> <td>SJR307050; 3414-F3</td> <td>Metallic Contact</td> <td></td> <td>2013</td> </tr> <tr> <td>SJR267020; 3352-C1</td> <td>Metallic Contact</td> <td></td> <td>2013</td> </tr> <tr> <td>SJR137070; 3414-F3</td> <td>Electrolytic Contact</td> <td></td> <td>2013</td> </tr> <tr> <td>SJR137050; 3413-H6</td> <td>Electrolytic Contact</td> <td></td> <td>2013</td> </tr> <tr> <td>SJR237030; 3414-C2</td> <td>-566</td> <td>-661</td> <td>2013</td> </tr> </tbody> </table> <p>Please indicate the corrective actions taken to address these conditions, and any testing done to determine the pipeline condition after the discovery of the contacts.</p>	Casing BarID	Pipe Potential (mV)/Contact Type	Casing Potential (mV)	Inspection Year	SJR307010; 3414-E3	-567	-608	2014	SJR307040; 3414-E3	-578	-530	2014	SJR307060; 3414-F3	-554	-230	2014	SJR307080; 3413-G8	-454	-421	2014	SJR307090; 3413-H6	-587	-273	2014	SJR307100; 3414-D6	-643	-534	2014	SJR157050; 3413-C3	-789	-502	2014	SJR157060; 3413-C3	-625	-518	2014	SJR077010; 3475-G8	Electrolytic Contact		2014	SJR127010; 3414-C6	Electrolytic Contact		2014	SJR307050; 3414-F3	Metallic Contact		2013	SJR267020; 3352-C1	Metallic Contact		2013	SJR137070; 3414-F3	Electrolytic Contact		2013	SJR137050; 3413-H6	Electrolytic Contact		2013	SJR237030; 3414-C2	-566	-661	2013	<p>SJR307010, SJR307040, SJR307060, SJR307080, SJR307090 and SJR307100 were removed during the reconstruction of the Hwy 101 and Tully Rd clover leaf interchange in 2014 by the Valley Transportation Authority. The Request for Work (RW) to remove these from service was RW 110043286. These reads were taken in 2014 while Construction was under way. These casings were removed per order numbers 30775772 and 30639855. The RW to remove the Assets from the SAP asset registry was created on 2/10/2015 and have now been removed.</p> <p>SJR157050 and SJR157060 are located in CPA 3413-14. The CPA was down during November when the reads for the casings were taken. This CPA was restored in December of 2014. Please see Attachment 22 - "3413-14.2014" for restored CPA reads.</p> <p>SJR237030 is located in CPA 3352-12. After further review it has been determined that the 2013 read was incorrectly entered into SAP as -566 mv. The correct entry should have been -1566 mv. Please see Attachment 23 - "CPA 3352-12 Casing Workticket 2013" showing the hand written reads.</p> <p>SJR077010: Electrolytic Contact found in 2014. On master contact list and planned for remediation in 2017.</p> <p>SJR127010: Electrolytic Contact found in 2014. On master contact list and planned for remediation in 2017.</p> <p>SJR307050: Remediation project CC151 completed on 10/20/15 per Order #31140982. Up reads recorded as -627mV casing-to-soil and -946mV pipe-to-soil.</p> <p>SJR267020: Remediation project CD019A completed on 11/6/14 per Order# 42327261. Up reads recorded as -488mV casing-to-soil and -1155mV pipe-to-soil.</p> <p>SJR137070: Remediation project CC149 completed on 10/20/15 per Order #31113724. Up reads recorded as -620mV casing-to-soil and -853mV pipe-to-soil.</p> <p>SJR137050: Remediation project CC150 waiting on tree removal permit and is planned to mobilize in the fourth quarter of 2015 per Order #31113725.</p> <p>Testing and monitoring of contacted casings are performed per Utility Work Procedure WP4133-04. Please see Attachment 24 - "WP4133-04 Remediating Casing Contacts".</p>	Att 22_3413-14.2014_CONF.xls Att 23_CPA 3352-12 Casing Workticket 2013_CONF.pdf Att 24_WP4133-04 Remediating Casing Contacts.pdf
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Finding Type [Internal, NOV, AOC]	Finding #	Finding	Response	Associated Attachment (File Name)																
AOC	1B	<p>In addition to the above, maintenance records for the casing at L-100 MP 144 showed an indication of electrical contact since 1999. In response to SED’s request regarding the remediation plan, PG&E responded, “Currently there is no plan to remove this casing, we have established a non-corrosive environment in the annular space through the project to gel fill this casing in 1999. This was not previously identified as a contacted casing, and has now been added to the contacted casing list on July 15th, 2015 and will continue to monitor with increased frequency due to the short and the casing being gelled.”</p> <p>Please provide PG&E’s procedure which addresses the increased monitoring frequency of such a casing.</p>	<p>Testing and monitoring of contacted casings are performed per Utility Work Procedure WP4133-04. Please see Attachment 24 - "WP4133-04 Remediating Casing Contacts".</p>	<p>Att 24_WP4133-04 Remediating Casing Contacts.pdf</p>																
AOC	2	<p>The 2014 annual rectifier evaluation maintenance record for the rectifiers listed in Table 5 showed the DC voltage output exceeded the manufacturer DC voltage rating of the equipment.</p> <p>Universal CP rectifiers’ manual states in part: “Do not exceed AC or DC ratings of the rectifiers. Operating the rectifier at higher than the nameplate rating will result in eventual failure of the rectifier.”</p> <p>Table 5: Rectifier DC Volts readings and ratings</p> <table border="1" data-bbox="289 762 885 868"> <thead> <tr> <th>Rectifier</th> <th>Inspection Date</th> <th>DC Volts rating (V)</th> <th>DC Volts recorded (V)</th> </tr> </thead> <tbody> <tr> <td>372</td> <td>12/11/2014</td> <td>20</td> <td>24.5</td> </tr> <tr> <td>669</td> <td>11/13/2014</td> <td>20</td> <td>23.4</td> </tr> <tr> <td>667</td> <td>11/14/2014</td> <td>40</td> <td>46.5</td> </tr> </tbody> </table> <p>Please provide an update on corrective measures to address this concern.</p>	Rectifier	Inspection Date	DC Volts rating (V)	DC Volts recorded (V)	372	12/11/2014	20	24.5	669	11/13/2014	20	23.4	667	11/14/2014	40	46.5	<p>Rectifier 372 - This rectifier is a Universal Model ES 5A-20V rectifier installed on 12/8/14. Please see Attachment 25 - "New Rectifier 372 Station Report". It was originally set at 24.5V while the system polarized but is now set at 16.5V (See Attachment 26 - "Rectifier 372 Maintenance Report").</p> <p>Rectifier 667 – The original 5A-40V rectifier was installed on 6/25/92. It operated over 40V between 10/18/12 and 11/24/14. During this time period there were no operating issues with this unit. On 11/24/14 a new groundbed and 5A-40V Universal Model ES rectifier were installed with the initial reading set at 2.4A and 5V. Please see Attachment 27 - "2014 Rectifier 667 Station Report".</p> <p>Rectifier 669 – The maximum voltage output of rectifier 669 was not exceeded. The existing 5A-40V Goodall rectifier has been in operation since 1993. Please see Attachment 28 - "2014 Rectifier 669 Station Report". Between 2012 -2015 the highest voltage output of the rectifier was 23.4V on 11/13/14. Please see Attachment 29 - "669 Neal and Clover CPA 3412".</p> <p>In addition, per Universal Rectifiers Inc., exceeding the DC voltage rating of Universal type ES Series rectifiers will not cause any damage to the rectifier. Please see Attachment 30 - "PGE Over Voltage Letter 10-14-15".</p>	<p>Att 25_New Rectifier 372 Station Report_CONF.pdf Att 26_Rectifier 372 Maintenance Report_CONF.xls Att 27_2014 Rectifier 667 Station Report_CONF.pdf Att 28_2014 Rectifier 669 Station Report_CONF.pdf Att 29_669 Neal and Clover CPA 3412_CONF.pdf Att 30_PGE Over Voltage Letter 10-14-15_CONF.pdf</p>
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AOC	3	<p>The 2013 atmospheric corrosion monitoring record for the following three exposed spans noted some defects as shown in Table 6 below. SED’s field visit on 07/16/2015 also confirmed the listed defects.</p> <p>Table 6: Atmospheric Corrosion Inspections of Exposed Spans</p> <table border="1" data-bbox="289 1120 1087 1227"> <thead> <tr> <th>Span Location</th> <th>ID No</th> <th>Inspection Date</th> <th>PG&E’s Inspection Notes</th> </tr> </thead> <tbody> <tr> <td>Sylvia Ave & Penetincia Creek</td> <td>8</td> <td>07/26/2013</td> <td>Needs Re-Painting</td> </tr> <tr> <td>Berryessa Rd & Coyote Creek</td> <td>13</td> <td>07/29/2013</td> <td>Wrap on pipe unravelling</td> </tr> <tr> <td>Benton St & Saratoga Creek</td> <td>28</td> <td>07/26/2013</td> <td>Pipe Wrap Peeling, Re-Wrap Needed</td> </tr> </tbody> </table> <p>Please provide an update on corrective measures to address these defects.</p>	Span Location	ID No	Inspection Date	PG&E’s Inspection Notes	Sylvia Ave & Penetincia Creek	8	07/26/2013	Needs Re-Painting	Berryessa Rd & Coyote Creek	13	07/29/2013	Wrap on pipe unravelling	Benton St & Saratoga Creek	28	07/26/2013	Pipe Wrap Peeling, Re-Wrap Needed	<p>Corrosion Engineering is currently investigating roughly 360+ local transmission and distribution spans for further evaluation and data. This field investigation will be concluded by 12/31/2015. Corrosion Engineering will then prioritize these spans for remediation. This includes the following 3 spans:</p> <p>Sylvia Ave & Penetincia Creek Corrosion Engineering ID: Span 827 Berryessa Rd & Coyote Creek Corrosion Engineering ID: Span 838 Benton St & Saratoga Creek Corrosion Engineering ID: Span 832</p>	
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AOC	4	<p>During SED’s field visit, the Division recorded the following low pipe-to-soil readings, as listed below in Table 7.</p> <p>Table 7: Low pipe-to-soil reads</p> <table border="1"> <thead> <tr> <th>Inspection Cycle</th> <th>CPA</th> <th>Address</th> <th>City/Area</th> <th>Reading (mV)</th> </tr> </thead> <tbody> <tr> <td>Bi-Monthly</td> <td>3414-29</td> <td>Tully Rd & Montrey St</td> <td>San Jose</td> <td>-448</td> </tr> <tr> <td>Bi-Monthly</td> <td>3476-04/18</td> <td>201 Bendorf Dr</td> <td>San Jose</td> <td>-604</td> </tr> <tr> <td>Bi Monthly</td> <td>3476-05</td> <td>5703 Snell Rd</td> <td>San Jose</td> <td>-741</td> </tr> <tr> <td>Bi Monthly</td> <td>3475-15</td> <td>4700 Sherbourne Dr</td> <td>San Jose</td> <td>-839</td> </tr> <tr> <td>Bi Monthly</td> <td>3474-13</td> <td>1832 Andrews Ave</td> <td>San Jose</td> <td>-781</td> </tr> <tr> <td>Bi Monthly</td> <td>3474-14</td> <td>115 Anne Way</td> <td>Los Gatos</td> <td>-733</td> </tr> <tr> <td>Bi Monthly</td> <td>3475-03</td> <td>6698 Mt. Forest Dr</td> <td>San Jose</td> <td>-632</td> </tr> <tr> <td>Bi Monthly</td> <td>3475-04</td> <td>6090 Guadalupe Mines Dr</td> <td>San Jose</td> <td>-583</td> </tr> <tr> <td>10%er</td> <td>3350-16-10</td> <td>2941 Corvin Dr</td> <td>Santa Clara</td> <td>-785</td> </tr> <tr> <td>10%er</td> <td>3351-06-10</td> <td>2601 Cortez Dr, Bldg 5</td> <td>Santa Clara</td> <td>-675</td> </tr> </tbody> </table> <p>Please provide an update on corrective measure to address the out of compliance pipe-to-soil reads.</p>	Inspection Cycle	CPA	Address	City/Area	Reading (mV)	Bi-Monthly	3414-29	Tully Rd & Montrey St	San Jose	-448	Bi-Monthly	3476-04/18	201 Bendorf Dr	San Jose	-604	Bi Monthly	3476-05	5703 Snell Rd	San Jose	-741	Bi Monthly	3475-15	4700 Sherbourne Dr	San Jose	-839	Bi Monthly	3474-13	1832 Andrews Ave	San Jose	-781	Bi Monthly	3474-14	115 Anne Way	Los Gatos	-733	Bi Monthly	3475-03	6698 Mt. Forest Dr	San Jose	-632	Bi Monthly	3475-04	6090 Guadalupe Mines Dr	San Jose	-583	10%er	3350-16-10	2941 Corvin Dr	Santa Clara	-785	10%er	3351-06-10	2601 Cortez Dr, Bldg 5	Santa Clara	-675	<p>Below is an update to the low pipe-to-soil readings found during SED’s field visit. All low reads have been corrected with the exception of 3 locations. These locations are estimated to have repairs completed by the first quarter of 2016.</p> <ol style="list-style-type: none"> 14-29 "Old Tully and Monterey" read was -448. The Division has worked with electric to run power to a newly installed rectifier. However, after trouble shooting, it was determined that there is a broken anode wire. The Division is currently working with SGO process for permitting and scheduling to make repairs. 3476-04/18 "01 Bendorf Drive" read was -604. This is a CGI. The cause of the low read is due to a unisulated meter. The repair was made, however, only one side of the CPA was restored. A Corrosion Mechanic is currently trouble-shooting the CPA. 3475-04 "6090 Guadalupe Mines Dr" was -583. It was determined that the deepwell has collapsed. The Division is currently working with SGO process for permitting and scheduling to make repairs. <p>All other areas have been restored. Below are the restored reads:</p> <p>3351-03 "2975 Scott Blvd 10%er" read was -919 mv. Installed anode on 7/18/15. As left read -1556 mv. 3350-16 2941 Corvin Dr 10%er read was -785 mv. Installed anode on 9/11/15. As left read -973 mv. 3351-10 2601 Cortez Dr Bldg 5 read was -675 mv. Installed Anode on 7/21/15. As left read -1492 mv. 3476-05 5703 Snell Rd read was -741 mv. Trouble shot on 8/5/15. As left read -989 mv. 3475-15 4700 Sherebourne read was -839 mv. Trouble shot on 9/28/15. As left read -957 mv. 3474-14 115 Anne Way read was -733 mv. Trouble shot on 10/1/15. As left read -906 mv. 3475-03 6698 Mt. Forrest Dr read was -632 mv. Trouble shot on 10/8/15. As left read -934 mv.</p>																				
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AOC	5	<p>SED requested the Division to provide a remediation update for meter sets from 2014 AC meter inspections that were categorized as Grades 5 & 6. In a discussion during the audit, PG&E explained that Grades 5 & 6 categories are expected to be remediated at a higher priority. In response to SED’s request, PG&E provided a list of meter sets, listed in Table 8 below, which noted “PG&E plans to remediate via construction crew before next inspection cycle”.</p> <p>Please provide PG&E’s procedure, which addresses the categorization criteria and the corresponding remediation action time frame.</p> <p>Table 8: AC inspections for Meter Sets categorized Grades 5 & 6</p> <table border="1"> <thead> <tr> <th>SP_ID</th> <th>ADDRESS</th> <th>CITY</th> <th>COMMENT FOR ALL ADDRESSES</th> </tr> </thead> <tbody> <tr> <td>8644110810</td> <td>3121 CHILLUM CT</td> <td>SAN JOSE</td> <td rowspan="2">PG&E plans to remediate via construction crew before next inspection cycle</td> </tr> <tr> <td>8644099310</td> <td>3162 CHILLUM CT</td> <td>SAN JOSE</td> </tr> <tr> <td>8535271010</td> <td>1498 DOUGLAS ST</td> <td>SAN JOSE</td> <td rowspan="2">inspection cycle</td> </tr> <tr> <td>8633941310</td> <td>3125 PERIVALE CT</td> <td>SAN JOSE</td> </tr> <tr> <td>8611271810</td> <td>1198 QUAIL CREEK CIR</td> <td>SAN JOSE</td> <td rowspan="2"></td> </tr> <tr> <td>8682517010</td> <td>751 S 2ND ST APT 8</td> <td>SAN JOSE</td> </tr> <tr> <td>8221189310</td> <td>3557 SAN FELIPE RD APT 1</td> <td>SAN JOSE</td> <td rowspan="2"></td> </tr> <tr> <td>7875496710</td> <td>5696 SAN LORENZO DR</td> <td>SAN JOSE</td> </tr> <tr> <td>8539587310</td> <td>3209 TERRA COTTA DR</td> <td>SAN JOSE</td> <td rowspan="2"></td> </tr> <tr> <td>8539592510</td> <td>3249 TERRA COTTA DR</td> <td>SAN JOSE</td> </tr> <tr> <td>8529328110</td> <td>3211 URZI DR</td> <td>SAN JOSE</td> <td rowspan="2"></td> </tr> <tr> <td>8644216110</td> <td>3111 WHITBY CT</td> <td>SAN JOSE</td> </tr> <tr> <td>8897374310</td> <td>652 HUDSON DR</td> <td>SANTA CLARA</td> <td rowspan="2"></td> </tr> <tr> <td>8240900110</td> <td>2867 KEARNEY AVE</td> <td>SANTA CLARA</td> </tr> <tr> <td>8004465510</td> <td>2147 PASETTA DR</td> <td>SANTA CLARA</td> <td rowspan="2"></td> </tr> <tr> <td>7994089510</td> <td>2237 PASETTA DR APT 3</td> <td>SANTA CLARA</td> </tr> <tr> <td>7988734110</td> <td>4701 PATRICK HENRY DR STE 2101</td> <td>SANTA CLARA</td> <td rowspan="2"></td> </tr> <tr> <td>8306100210</td> <td>1400 RICHARD AVE</td> <td>SANTA CLARA</td> </tr> <tr> <td>8910598610</td> <td>3765 TAMARACK LN APT 75</td> <td>SANTA CLARA</td> <td rowspan="2"></td> </tr> <tr> <td>8879610410</td> <td>996 HELEN AVE</td> <td>SUNNYVALE</td> </tr> </tbody> </table>	SP_ID	ADDRESS	CITY	COMMENT FOR ALL ADDRESSES	8644110810	3121 CHILLUM CT	SAN JOSE	PG&E plans to remediate via construction crew before next inspection cycle	8644099310	3162 CHILLUM CT	SAN JOSE	8535271010	1498 DOUGLAS ST	SAN JOSE	inspection cycle	8633941310	3125 PERIVALE CT	SAN JOSE	8611271810	1198 QUAIL CREEK CIR	SAN JOSE		8682517010	751 S 2ND ST APT 8	SAN JOSE	8221189310	3557 SAN FELIPE RD APT 1	SAN JOSE		7875496710	5696 SAN LORENZO DR	SAN JOSE	8539587310	3209 TERRA COTTA DR	SAN JOSE		8539592510	3249 TERRA COTTA DR	SAN JOSE	8529328110	3211 URZI DR	SAN JOSE		8644216110	3111 WHITBY CT	SAN JOSE	8897374310	652 HUDSON DR	SANTA CLARA		8240900110	2867 KEARNEY AVE	SANTA CLARA	8004465510	2147 PASETTA DR	SANTA CLARA		7994089510	2237 PASETTA DR APT 3	SANTA CLARA	7988734110	4701 PATRICK HENRY DR STE 2101	SANTA CLARA		8306100210	1400 RICHARD AVE	SANTA CLARA	8910598610	3765 TAMARACK LN APT 75	SANTA CLARA		8879610410	996 HELEN AVE	SUNNYVALE	<p>PG&E’s procedure for grading customers’ gas meters underwent a revision during the 2014 atmospheric corrosion inspection. The pilot procedure TD-4188P-001 initially provided for seven grades: 0 through 6, with 0 representing no corrosion and 6 representing active, advanced corrosion. Please see Attachment 31 - "TD-4188P-001". On April 1, 2014 PG&E simplified the pilot procedure by eliminating grades 1, 2, 4, and 5. Please see Attachment 32 - "TD-4188P-001 Updated Version". Three grades remained in the updated procedure: 0, 3, and 6, representing no corrosion, moderate corrosion, and severe corrosion respectively. Descriptions of these categorizations can be found in section 2.1 of both the pilot and updated procedures.</p> <p>The locations in Table 8 were identified as having Grade 5 or Grade 6 corrosion on risers. PG&E will visit these locations and make all necessary repairs by the end of the 1st quarter 2016.</p>	<p>Att 31_TD-4188P-001_CONF.pdf Att 32_TD-4188P-001 updated version_CONF.pdf</p>
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