

**2016 Fresno Division Audit Findings and Responses**

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Finding Type [Internal, NOV, AOC]	Finding #	Finding	Response	Associated Attachment (File Name)
PG&E's Internal Review Findings	1	Prior to the start of the audit, PG&E provided SED its findings from the internal review it conducted of Fresno Division (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), §192.13(c) or §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. Please provide details on the item still pending.	Per the attached summary of PG&E's Fresno Internal Review, only 1 finding, which has been highlighted in yellow, was awaiting remediation. Attached, please find attachment 1 – "Fresno Division Internal Review". The project to install an inlet fire valve at Regulator Station J-36, Sanger Station, was completed per PM 31088417 in 2016. The valve was commissioned the week of 6/27/2016. Attached, please find attachment 2 – "CAP 7021806 – PM 31088417 Complete".	Atch 1_ Fresno Division Internal Review.docx Atch 2_ CAP 7021806 – PM 31088417 Complete.pdf
NOV	1	Title 49 CFR §192.225(a) states in part: "Welding must be performed by a qualified welder or welding operator in accordance with welding procedures qualified under section 5, section 12 or Appendix A of API Std 1104...." During field inspections, SED observed a Sulfur filter attached to a bracket which had been welded to the exterior of a pipeline at the Tarpey Regulator station. SED observed that the other sulfur filters at the Tarpey Regulator were attached via clamp on brackets. The Division was unable to produce a procedure for the welded bracket which is a violation of 49 CFR §192.225(a). According to Division personnel, the filter was scheduled for removal and replacement with a clamp assembly. Please provide status on the removal and replacement of this equipment.	The welded bracket and pipe section located at the Tarpey Regulator station were removed and installed correctly per PM 42676998 during scheduled work on I-115A per PM 31164898. Work was completed in the 3rd quarter of 2016. Attached, please find attachment 3 – "Tarpey Reg Station Filter and Bracket - 1" and attachment 4 - "Tarpey Reg Station Filter and Bracket - 2".	Atch 3_Tarpey Reg Station Filter and Bracket - 1.jpg Atch 4_Tarpey Reg Station Filter and Bracket - 2.jpg
NOV	2	Title 49 CFR 192.745(a) states: "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." SED reviewed the Division's valve maintenance records and found that Valve B-15 and Valve B-20 were not operated in the 2015 calendar year.	PG&E respectfully disagrees with this finding. Valve B-15 and Valve B-20 are MAOP separation valves and are not emergency valves. These valves were not operated in 2015 due to the fact that doing so may have caused an over-pressure event. PG&E Utility bulletin TD-4430B-007 was published on May 31, 2017 to address the operation of MAOP separation valves. The bulletin states that "Normally closed transmission and distribution valves (manual, power-actuated), such as those listed below, do NOT require valve operation (full or partial) when doing so would pose risks of over-pressure or unplanned mixing of BTU zones." This includes MAOP separation valves, bypass valves, cross-tie valves, etc. Attached, please find attachment 5 – "TD-4430B-007 Updates to Valve Maintenance Frequency Requirements."	Atch 5_TD-4430B-007 Updates to Valve Maintenance Frequency Requirements.pdf
NOV	3	Title 49 CFR 192.187 states in part: "Each underground vault or a closed top pit containing either a pressure regulating or reducing station must, or a pressure limiting or relieving station, must be sealed, vented or ventilated as follows: (a) When internal volume exceeds 200 cubic feet...: (1) The vault or pit must be ventilated with two ducts, each having at least the ventilating effect of a pipe 4 inches in diameter." During field inspections, SED observed the sensing lines at district regulating station D-40 were inserted through the outlet vent pipe thus reducing its capacity	The sensing lines at district regulating station D-40 were moved under PM 42781029. Work was completed on 11/22/16. Attached, please find attachment 6 – "Order 42781029".	Atch 6_Order 42781029.pdf

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NOV	4	<p>Title 49 CFR 192.739(a) states in part: "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... (2) Adequate from the standpoint of capacity and reliability of operation for the service in which it is employed."</p> <p>On 11/24/2014, PG&amp;E determined that district regulating station K-17 had inadequate relief capacity; however, additional relief capacity was not added until November of 2015 through the installation of a third relief valve. Prior to 2014, PG&amp;E's calculations for required relief capacity relied on a dynamic inlet pressure value established on full flow conditions. However, actual conditions could be static during certain parts of the year due to the customer's operations being inactive. During SED's field visit on 3/2/2016, the inlet pressure at the regulator station was found at 339.4 psi which reflects a no-flow or static condition. The observed pressure value further reinforced the incorrect use of dynamic or full flow condition to calculate required relief capacity.</p> <p>Thus, district Regulator Station K-17 had inadequate relief capacity prior to PG&amp;E's November 2015 installation of a third relief valve. Please inform us of actions taken by the Division to verify that the relief capacity calculations had been correctly performed to other similar regulator stations.</p>	<p>PG&amp;E respectfully disagrees that there was inadequate relief capacity at District Regulator Station K-17 prior to PG&amp;E's November 2015 installation of a third relief valve. The attached transient analysis provides evidence that the nearly 3 miles of pipe will govern the flow on a steady state basis. The model shows that the maximum flow is 62 Mscfh which is below the relief capacity of two Fisher H202s. Attached, please find attachment 7 – "K-17 Transient Analysis". As an additional safety measure, a third relief valve was added to the DR K-17 on Nov 19, 2015. On Mar 3, 2016 the CPUC auditors visited the station. On May 3, 2016 the Reliance HPR 20 was replaced with a Fisher 627 regulator. This new regulator with the two Fisher H202s provide the capacity needed to meet the customer's loads and the relief capacity to protect the downstream piping from exceeding MAOP. On May 4, 2016 a new relief valve capacity calculation was completed and placed into the regulator station folder. Attached, please find attachment 8 – "K-17 (Fisher 627 reg with 2-Fisher H202) Relief Valve Calculation".</p> <p>The district engineers have reviewed all stations with relief valves and continue to do so on an annual basis to ensure that there is adequate capacity. Any required changes to equipment due to failure or capacity are communicated to engineering so that relief valve calculations can be performed prior to installation.</p>	<p>Atch 7_K-17 Transient Analysis.pdf Atch 8_K-17 (Fisher 627 reg with 2-Fisher H202) Relief Valve Calculation.pdf</p>
AOC	1	<p>SED's review of valve records found that Valve K.02-V-A, designated as a transmission emergency valve, has no valve stops. Currently, Division field personnel verify the valve's position using the bleed valve on the blow off stack. PG&amp;E has stated that they are planning to initiate corrective repair. Please provide status on the corrective action.</p>	<p>The project to replace valve K.02-V-A is currently in the planning stages. Estimated project completion is 1st quarter 2018.</p>	
AOC	2	<p>During the SED's examination of daily field weld summary report for Casing Leak L-142 North, two mistakes were discovered. Weld TW-2 referenced the use of welding procedure 222Sc-G (Rev. 2 Date 2/22/2013) which is qualified to be used on pipe material with a yield strength greater than x42; however, weld TW-2 should have used a procedure for a weld between X42 and Grade B pipe. Similarly, weld W-9 referenced the use of welding procedure 122Sc-G (Rev. 2 Date 8/22/2013) which is only qualified for pipe with a yield strength of x42 and less, when weld W-9 should have used a weld procedure for X52 and Grade B. Both weld procedures are functionally similar, but API Standard 1104 requires that pipe material be broken into three categories: (1) less than 42000 psi SMYS, (2) 42000 psi to 65000 psi SMYS and (3) greater than 65000 psi SMYS.</p> <p>SED's review of the as-built, show a secondary quality control (QC) check by PG&amp;E on 3/3/2014. However, the QC process failed to identify that the referenced welding procedures for welds TW-2 and W9 were incorrect for the specified materials. SED is concerned that despite the reviews conducted by the PG&amp;E welding inspector and PG&amp;E's secondary QC, these errors were not identified. PG&amp;E should ensure that the welding inspector and/or its QC process adequately review welding documentation to ensure that proper procedures are used and followed. PG&amp;E should also review other projects reviewed by the original welding inspector to ensure adherence to the correct procedures.</p>	<p>PG&amp;E recognizes this concern and has taken the following actions:</p> <ul style="list-style-type: none"> <li>- Developed specific web-based training on selection of Welding Procedure Specification (WPS) targeting welders and QC personnel.</li> <li>- Implemented familiarization efforts to ensure field personnel have hardcopies of the Welding Control Manual</li> <li>- Created tailboard promoting awareness of the importance of WPS selection</li> <li>- Implemented a Welding Manual workshop, conducted by welding specialists, at 35 locations throughout PG&amp;E's service territory, which emphasized the WPS selection and inspection documentation</li> </ul> <p>In addition, PG&amp;E reviewed all other projects which were reviewed by the original welding inspector and no significant issues were identified.</p>	<p>Atch X_5MM WPS Compliance.pdf</p>