2016 Welding and Joining Audit Response

Finding Type [Internal, NOV, AOC]	Finding #	Finding	Response
NOV	I- 1	1. Title 49 Code of Federal Regulations §192.287 Plastic pipe: Inspection of joints states that: "No person may carry out the inspection of joints in plastic pipes required by §§192.273(c) and 192.285(b) unless that person has been qualified by appropriate training or experience in evaluating the acceptability of plastic pipe joints made under the applicable joining procedure." SED found that PG&E procedure D-34 does not address this section of the federal Code. Hence, PG&E needs to: (a) incorporate it in relevant standards and procedures (b) let SED know the required knowledge and experience that PG&E uses to designate the person(s) to inspect plastic pipe joints	In 2018 PG&E will update D-34 to better clarify how an individual responsible for inspection of joints in plastic pipes are qualified by appropriate training or experience. Currently, an individual's ability to inspect joints is assessed with verbal questions during the pipe joining qualification test process. Correctly self-identifying the joint as acceptable or not is the component of the assessment that qualifies the individual to self-inspect the acceptability of plastic pipe joints as referenced in 192.287.
NOV	I- 2	2. Title 49 Code of Federal Regulations §192.605(a) states: "General. Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response…" PG&E procedure PG&E Procedure TD-4160P-51_Rev0, Section 1.1 (4) states: "In special cases of Branch Welds, Wide Gap Welds, Sleeve Welds, Multiple Repair Welds, and Back Weld, the designator of "6" will be used for all conditions of the grouping designator. If an all conditions WPS is available, individual procedures for each descriptor may not be available (i.e., 166Sc-Br is available but the 122Sc-Br is not), thereby grouping and simplifying the WPS choices" And section 2.3. states: "Determine pipe diameter being joined and select appropriate pipe diameter grouping. See Table 2, "Pipe Diameter Grouping Designator." SED observed that for the following weld, wrong Welding Procedure Specification (WPS) was used. Project Order Number: 41914988 Project ID: T-377-14 Line: L-134A Location: Firebaugh, CA Date: 10/29/2014 Weld Number: TW-179 Components: 4" Pipeline & 1" Save-A-Valve WPS Used: 122Sc-BR In this case, procedure 122Sc-BR has been mentioned. However, since a 1" and 4" pipe is used in this weld, a WPS with a '6' Pipe Diameter Grouping Designator (based on Table 2 above) should have been used to select the appropriate WPS. In addition, the procedure 122Sc-BR was an interim procedure which expired on 6/30/2013.	PG&E respectfully disagrees with this finding: The project records for 41914988 show that weld TW-179 was a temporary weld of a 1" Save-a-valve (part number F-9) and a new 4" header pipe (part number P-22F) used as a vent/purge point for a temporary test head installed on the 4" pipe segment P-22F. This weld was only made for construction and then removed after the hydro-test was complete. This weld was never exposed to the transportation of natural gas, and thus is not a regulated weld. TD-4160P-51 pertains to the WPS selection of regulated welds that are designed to operate in our 49 CFR 192 compliant natural gas system. Revision 0 of 122Sc-BR was superseded on 6/19/2013 by WPS 166Sc-BR. WPS 166Sc-BR is supported by PGE 122Sc-BR Revision 1, as well as PGE 161Sc-BR which was qualified on 6-19-13.
AOC	II- 1	1. The "General Requirements", section 10 (B) of PG&E document D-34 talks about requalification. It says communicate if there is a pressure test failure. It does not: (a) Specify the "timeframe" in which the joiners have to communicate? (b) Outline the 'next step(s)' for the joiner who made the failed joint such as whether continue to work or stop etc. SED also recommends keeping the records as outlined in PG&E document D-34, Section 10 B.	PG&E agrees with this recommendation. D-34 has a planned revision in 2017 and will incorporate this comment at that time.
AOC	II- 2	2. Since, PG&E does not consider D-34 as an Operation and Maintenance (O&M) document, therefore in addition to D-34, the instructions regarding the communication of pressure test failure (as outlined above in 1) should appear in all relevant plastic joining related O&M documents for the knowledge of plastic joiners.	PG&E will review the language in D-34 and our joining procedures to address any gaps in the communication of pressure test failure for knowledge of plastic joiners

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AOC	II- 3	3. PG&E procedure, TD-4170P-34 has instructions to make a Butt joint. It outlines steps leading to Sections 4 and 5 which are about “visual inspection' and “remove unacceptable connections” respectively. However, there are no instructions for ‘pressure/leak test’. This information needs to be included in this and other documents where necessary. Please make the change in appropriate documents and provide an update to SED.	PG&E is currently in the process of requalifying the joining procedures. PG&E has a contract in place with Exponent to perform the testing. PG&E has acquired the materials needed and plans to begin making the test fusions this month. PG&E plans to have the testing completed before the end of 2017.
AOC	II- 4	4. Title 49 Code of Federal Regulations §192.283 Plastic pipe: Qualifying joining procedures, section (a) and (b) outlines that the procedures must be qualified by subjecting specimen joints to certain tests, please refer to these code sections. SED requested PG&E to provide documents showing that procedures used by PG&E have been qualified as per the above referred code provision. PG&E provided a report produced by the consultants, Northeast Gas Association (NGA). This report recommended re-qualifying the procedures every five years citing the examples that there may be changes in material, techniques, equipment etc. that may require different temperatures or other parameters. In addition, Title 49 Code of Federal Regulations §192.3 outlines the various standards incorporated by reference, such as American Society of Testing Material, ASTM D-2513. Since, these standards change, these may require updating of PG&E’s qualifying procedures. SED noted that PG&E’s procedures for heat fusion and electro-fusion were qualified in 1987. Hence, SED recommends that PG&E should make sure that the qualified procedures address all material and equipment used by PG&E currently. During the audit, PG&E mentioned that all plastic joining procedures are being re-qualified. Please provide an update.	PG&E is currently in the process of requalifying the joining procedures. PG&E has a contract in place with Exponent to perform the testing. PG&E has acquired the materials needed and plan to begin making the test fusions this month. PG&E plans to have the testing completed before the end of the year.