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General Jack Hagan, Director
Consumer Protection and Safety Division
California Public Utilities Commission
505 Van Ness Avenue, Room 2205
San Francisco, CA 94102-3298

Re: CPUC Resolution ALJ-274 Self-Identified Non-Compliance Notification
Incorrect Calculation of Maximum Allowable Operating Pressure for Line 111A

Dear General Hagan:

PG&E is providing notification that a maximum allowable operating pressure (MAOP) calculation error was identified on Line 111A as part of PG&E's ongoing MAOP Validation Project. Line 111A is located in Fresno County and is an integral part of the Fresno local transmission system.

In 2011, as part of the MAOP validation analysis, a field verification dig was performed on Line 111A at Mile Point (MP) 20.317 to acquire unknown pipe specifications. The pipe seam characterization test performed by PG&E concluded the seam type to be Electric Resistance Weld (ERW). PG&E applied the corresponding ERW long seam factor of 1.0 in the MAOP validation calculation (using PG&E's Gas Standard & Specification A-11, "Identification of Steel Pipe"), and validated the 650 psig MAOP of record.

In 2012, the MAOP validation process entered into a final phase, which includes analyzing longer sections of pipeline in addition to re-evaluating some previously analyzed short sections of pipeline. For Line 111A, this final validation phase included the analysis of additional documentation which identified the pipe manufacturer as A.O. Smith. As a result of this further analysis, which was completed in August 2012, PG&E determined that the 2011 ERW seam weld identification was incorrect, and the seam is actually electric flash weld (EFW).

PG&E Standard A-11 requires the use of a long seam factor of 0.8 for A.O. Smith pipe manufactured up to 1930. The standard does not give additional guidance for A.O. Smith pipe manufactured after 1930. Line 111A was installed in 1942.

PG&E reviewed 49 CFR §192.113 for the longitudinal joint factor for steel pipe. This code section states that for pipe manufactured in accordance with API-5L with an ERW

or EFW seam, a long seam factor of 1.0 can be used. However, since the EFW process was not recognized in API-5L until 1944 (though A.O. Smith was manufacturing pipe using a flash weld seam pre-1930), PG&E's standard is to continue applying a conservative assumption and long seam factor of 0.8 for A.O. Smith pipe. By applying a new long seam factor of 0.8 in the MAOP validation calculation for Line 111A, the result is a calculated MAOP of 534 psig.

PG&E is replacing three sections of Line 111A that are in a Class 2 and/or Class 3 location, which will allow the entire line to operate at an MAOP of 650 psig. Construction work to replace these three sections will start in early October 2012 and is scheduled to be completed in early December 2012.

In the interim, PG&E has confirmed that the pipe can continue to safely operate at 650 psig if needed until the three sections of the pipe are replaced later this year by (a) researching leakage history of Line 111A dating back to the original installation for the segments in question and finding no history of leaks, (b) conducting radiography of the long seam weld on portions of the pipe, (c) conducting scheduled maintenance, and (d) performing two destructive tests by a third party on a portion of the long seam. The results of the destructive tests validate the strength of the pipe to continue to operate with an established MAOP of 650 psig. However, due to the need to lower pressure on a different line that interties with Line 111A, the line is now operating at 590 psig and will continue to operate at this pressure until the replacement work is completed.

PG&E's MAOP validation project is expected to be completed in the spring of 2013. If PG&E identifies any further MAOP calculation errors similar to Line 111A, PG&E will notify the Commission of these findings.

PG&E will notify the local authorities for the City and County of Fresno of this issue and will provide confirmation of notification as a supplement to this letter.

Please feel free to contact me at (925) 974-4316 or FSC2@pge.com for any additional questions you may have regarding this notification.

Sincerely,

Frances Yee
Acting Director, Regulatory Compliance and Support

cc: Julie Halligan, CPUC
Dennis Lee, CPUC
Mike Robertson, CPUC
Sunil Shori, CPUC
Redacted
Shilpa Ramaiya, PG&E