

December 30, 2015

By Email

Mr. Ken Bruno
Gas Safety and Reliability Branch
Safety and Enforcement Division
California Public Utilities Commission

Re: Response to Safety and Enforcement Division Directive to Correct PG&E's Annual Reports in compliance with 49 CFR §191.17

Dear Mr. Bruno:

PG&E appreciates the new guidance provided by the Safety and Enforcement Division's (SED) November 5, 2015 letter directing PG&E to "correct its Annual Reports filed with the California Public Utilities Commission (CPUC or Commission) and the Department of Transportation (DOT)" related to PG&E's method for establishing the Maximum Allowable Operating Pressure (MAOP) of its transmission pipelines.

SED's letter states that "SED believes [it] is not possible, given PG&E's admissions that it lacks records for a significant portion of its natural gas transmission system," for PG&E to report that all of its pipeline transmission system has its MAOP established under Title 49, Code of Federal Regulations (49 CFR) § 192.619(a).

SED further explains that:

SED held a MAOP workshop with PHMSA in May 2015. Representatives from PHMSA, including a PHMSA attorney, clearly stated that if an operator does not have complete records to ascertain all elements of 49 CFR § 192.619(a) then the operator cannot calculate MAOP under 49 CFR § 192.619(a). ***However the operator can operate a pipeline segment installed before July 1, 1970 under 49 CFR § 192.619(c) at the highest actual operating pressure to which the segment was subjected between 1965 and 1970 if it can produce a complete operating pressure record showing that actual operating pressure during that time.***

(emphasis added).

Before outlining PG&E's new reporting methodology that seeks to comply with SED's new guidance, let me briefly explain the relevant events that led to –and reasoning behind– PG&E's prior approach for the reports it submitted in 2012, 2013 and 2014. SED is already aware of the facts and circumstances outlined below, but PG&E thought it would be useful to have a consolidated factual background in one place for ease of reference.

Background and Explanation for Prior Reporting Methodology

Timeline of Relevant Events

<u>No.</u>	<u>Date</u>	<u>Event</u>
1.	January 3, 2011	In a letter to PG&E the NTSB issued Safety Recommendations P-10-2 and P-10-3.
2.	January 13, 2011	CPUC issued Resolution L-410 adopting the NTSB Recommendations, and directed PG&E to submit a compliance report by March 15, 2011.
3.	February 24, 2011	The Commission initiated Rulemaking (R.)11-02-019, and directed PG&E to file and serve its compliance report in that proceeding.
4.	March 15, 2011	<i>R.11-02-019</i> : PG&E filed a status report related to its records retrieval and MAOP validation efforts, stating that Phase 1 of its efforts was focused on collecting and reviewing pipeline records to determine whether PG&E possesses records that demonstrate MAOP by either: (1) pressure tests; or (2) <i>for pipelines installed prior to 1970 where MAOP was set pursuant to 49 CFR § 619(c), the pipeline's highest operating pressure from July 1, 1965, through June 30, 1970.</i> (See http://docs.cpuc.ca.gov/PublishedDocs/EFILE/REPORT/132132.PDF (emphasis added)).
5.	March 16, 2011	Then-Executive Director Paul Clanon issued a letter to PG&E referencing that PG&E has no legitimate or good-faith basis to determine its MAOP based on the use of historical operating pressure under § 192.619(c). (See Attachment "3 16 2011 Clanon MAOP Validation response.pdf" (emphases in original)).
6.	March 21, 2011	<i>R.11-02-019</i> : PG&E filed a Supplemental Report further explaining its approach to MAOP validation, and seeking the Commission's approval of its methodology. (See

		http://docs.cpuc.ca.gov/PublishedDocs/EFILE/MOTION/132593.PDF
7.	March 24, 2011	<p><i>R.11-02-019:</i> The Commission issued an Order to Show Cause (OSC) against PG&E for apparently failing to comply with Resolution L-410.</p> <p>(See D.11.03.047)</p>
8.	March 24, 2011	<p><i>R.11-02-019:</i> PG&E and the Commission’s Consumer Protection and Safety Division (CPSD) (predecessor to SED) jointly submitted a Stipulation to resolve the OSC, including a compliance plan developed by Commission Staff and PG&E.</p> <p>(See http://docs.cpuc.ca.gov/PublishedDocs/EFILE/STP/132626.PDF)</p>
9.	March 28, 2011	<p><i>R.11-02-019:</i> A hearing on the OSC was convened, with assigned Commissioner Florio and Commissioner Sandoval present.</p> <p>PG&E again explained that for pipelines for which PG&E does not have records, it will make conservative assumptions based on the era during which the pipeline was constructed, the materials then available and procurement practices at the time.</p>
10.	Various Dates	<p><i>R.11-02-019:</i> PG&E submitted monthly progress reports pursuant to the Compliance Plan.</p>
11.	April 21, 2011	<p><i>R.11-02-019:</i> PG&E filed a motion for adoption of its MAOP validation methodology, again urging the Commission to approve it.</p> <p>(See http://docs.cpuc.ca.gov/PublishedDocs/EFILE/MOTION/133969.PDF)</p>
12.	June 16, 2011	<p><i>R. 11-02-019:</i> Commission issues Decision 11-06-017 ordering PG&E to complete its MAOP validation based on “pipeline features and <i>may use engineering-based assumptions for pipeline components where complete records are not available.</i>”</p> <p>The Commission further ordered California gas operators to file Implementation Plans to “comply with the requirement that all in-service natural gas pipelines in California has been pressure tested in accord with 49 CFR 192.619, <i>excluding subsection 49 CFR 192.619(c)</i>”</p> <p>(See D.11-06-017)</p>
13.	October 2011	<p>The California Legislature enacted Public Utilities Code § 958 codifying D.11-06-017, including the use of engineering-based assumptions “to determine maximum allowable operating pressure in</p>

		the absence of complete records, but only as an interim measure until such time as all the lines have been tested or replaced, in order to allow the gas system to continue to operate.” (See Pub. Util. Code § 958(b))
14.	April 20, 2012	<i>R.11-02-019</i> : Commission issued a decision resolving the OSC. (See D.12-04-047)
15.	Various Dates	At various times, PG&E filed (and otherwise shared with SED) various MAOP Validation Summary Reports that accompany each PFL, and which explicitly reference PG&E’s methodology for using § 192.619. (See, e.g., Attachment “Ex A-64 pp 10-11.pdf”)
16.	July 2013	PG&E completed the MAOP Validation for all of its transmission pipelines.

Additional Background

As noted in the timeline above, following the NTSB’s Recommendations and Resolution L-410, on March 15, 2011 PG&E filed a report related to its records retrieval and MAOP validation efforts at that time, including PG&E’s strength test records and validation of records supporting the 1965-1970 highest operating pressure for pipelines with MAOPs established under § 192.619(c), just as suggested by the PHMSA’s attorney at the May 2015 workshop. (See Timeline Items 1-4). But on March 16, 2011 then Executive Director Paul Clanon responded to PG&E that:

PG&E’s March 15 [2011] response contends that ‘PG&E understands the intent to be to identify reliable records confirming the performance of a pressure test *or the determination of MAOP based on the historical high operating pressure*’ ...

PG&E has no legitimate or good-faith basis for the conclusion quoted above in italics. As you well know, the whole purpose of the NTSB’s urgent safety recommendations, and for the Commission’s directive to PG&E, was to find, to the extent possible, a basis for setting [MAOP] by means *other than* the grandfathering method [*i.e.*, § 192.619(c)] described in PG&E’s response.

(See Timeline Item 5 (emphases in original)).

On March 21, 2011 PG&E filed a Supplemental Report, explaining that, while PG&E had compiled and submitted the records supporting the grandfathered MAOP for pre-1970 pipelines, it intended to use records to calculate MAOP based on engineering specifications and then set the MAOP *at the lower of* the calculated or historical MAOPs. PG&E further stated that: “for many [grandfathered] pipelines, we do not believe we will find ‘traceable, verifiable and complete’ [TVC] records of every component. Instead, we are making assumptions about certain components, such as fittings and elbows, based on the material specifications at the time those materials were procured, sound engineering judgment, and conducting excavation and field testing of pipeline systems as appropriate.” (See Timeline Item 6).

On March 24, 2011, the Commission issued Decision 11-03-047 finding that PG&E appeared to have failed to comply with Resolution L-410 and ordering PG&E to appear at a hearing and show cause why it should not be held in contempt and fined for its failure to comply. The decision further stated: “PG&E appears to have attempted to merely justify the practice of setting MAOP for pre-1970 pipelines based entirely on historical high operating pressure...it appears that PG&E’s interpretation is contrary to the NTSB Safety Recommendations and the Commission’s order because ***PG&E relies on historical highest operating pressure as a substitute for actual pipeline component analysis.***” (See Timeline Item 7, D.11.03.047, pp. 3, 10) (emphasis added)).

That same day, PG&E and CPSD jointly submitted a Stipulation to resolve the OSC issued against PG&E in D.11-03-047. Pursuant to the Stipulation PG&E was required to: (1) carry out a compliance plan that was ***developed by PG&E and Commission Staff*** (the Compliance Plan); and (2) pay a \$6M penalty, \$3M of which would be suspended pending PG&E’s completion of the Compliance Plan. In the Compliance Plan, PG&E again acknowledged that “[f]or many of our older pipelines, we do not believe we will find ‘[TVC]’ records of every component. Therefore, we are making assumptions about certain components, such as fittings and elbows, based on the material specifications at the time those materials were procured, sound engineering judgment, and conducting excavation and field testing of pipeline systems as appropriate.” The Compliance Plan further explained: “The information in PG&E’s [TVC] documents is combined with engineering analysis and any necessary assumptions and field-testing to create a Pipeline Features List (PFL). The PFL is a comprehensive reference for all necessary characteristics and appurtenances. ***The PFL will specify: (1) the weakest element of the segment of the pipeline as defined by the 49 CFR § 192.619(a)(1); (2) the criteria by which PG&E made this determination; and (3) whether this determination is based on TVC documents relating to the specific pipeline segment, or based on PG&E’s assumptions...The PFL information is then used in the MAOP calculation.***” (See Timeline Item 8 Compliance Plan, p.2) (emphasis added)). Moreover, at various times during R.11-02-019, PG&E shared with SED (and the parties) numerous completed PFLs, which included a Summary Report that detailed PG&E’s specific use of § 192.619, including subsection (a)(1), and detailed in the Compliance Plan. (See e.g., Attachment ”Ex A-64 pp 10-11.pdf”).

On April 21, 2011 PG&E filed a motion requesting adoption of its MAOP validation methodology described in the Compliance Plan, and again urging the Commission for guidance on its MAOP validation methodology: “PG&E has embarked on the MAOP validation of

PG&E's HCA Pipelines without pressure tests and needs guidance as to whether the methodology PG&E is using for the MAOP validation is acceptable to the Commission. Without such guidance, PG&E may complete a time-consuming and difficult MAOP validation process that does not satisfy the Commission's directive." (See Timeline Item 11 at p.1) PG&E further reiterated that for "many of its older pipelines that have not previously been pressure tested, PG&E does not believe it will find specific records for every component" and noted that Sempra reported to the Commission that 100% documentation is a "very difficult, if not infeasible, threshold to achieve." (*Id.* at p. 4).

On June 16, 2011 the Commission issued Decision 11-06-017, which required all "grandfathered" natural gas transmission pipelines (under § 192.619(c)) in California to have their MAOPs verified by a pressure test, or replaced. That decision "orders all California natural gas transmission operators to develop and file for Commission consideration [an Implementation Plan] to achieve the goal of orderly and cost effectively replacing or testing all natural gas transmission pipeline that have not been pressure tested." The Commission went on to explain:

Notwithstanding the utilities' recordkeeping challenges, these missing records are particularly needed because the older pipelines were exempted from pressure testing requirements and many have not been pressure tested... [W]e require California natural gas transmission pipeline operators to prepare and file a comprehensive Implementation Plan to replace or pressure test all natural gas transmission pipeline in California that has not been tested or for which reliable records are not available.

Further, as an interim measure and to help prioritize the testing and replacement schedule, the Commission ordered PG&E to complete its MAOP Validation process, and allowing its use of engineering-based conservative assumptions for pipeline components where complete strength test records were not available. The Commission stated: "PG&E explained that it intends to use the lower of the calculated MAOP or historical operating pressure. We approve using the calculated MAOP to lower operating pressure as an interim measure pending replacement or testing."

Following D.11-06-017, PG&E has shared and reviewed with SED its methodology for calculating MAOP. For example, as you are aware, on April 25, 2014, SED issued a report confirming that PG&E's MAOP Validation process is generally consistent the Commission's requirements under D.11-06-017, D.12-12-030, and Res L-410. SED's review was extensive and comprehensive.. And, most recently at the May 2015 workshop referenced in SED's letter, PG&E again detailed its use of § 192.619(a) and the fact that PG&E no longer relies on § 192.619(c). (See <http://www.cpuc.ca.gov/NR/rdonlyres/35B8F5D0-CC38-4235-B02F-0FFEF2C43B2C/0/PGER1102019MAOPWorkshopMay11122015.pdf>).

Explanation for Prior Reporting Methodology

Accordingly, to comply with Commission orders and directives (including those enumerated above, which expressly precluded PG&E's sole reliance on § 192.619(c)), and consistent with the Compliance Plan formulated by PG&E and CPSD and D.11-06-017 ordering that PG&E "must complete its [MAOP] determination based on pipeline features and may use engineering-based assumptions for pipeline components where complete records are not available," PG&E reported that the MAOP of its transmission pipelines were established under § 192.619(a). Consistent with that code section, PG&E limits the MAOP of its pipelines to the *lowest* of the calculated component design pressure, test pressure, and historical operating pressure, even where the line has been hydro tested to a level that validates a historic operating pressure greater than the design pressure, including those lines built before 1970.

Additionally, the instructions in Part Q of Form PHMSA F 7100.2-1 states that "for miles of transmission pipeline for which the operator *has not completed a records review*, include these miles in the "Incomplete Records" column." (See [http://www.phmsa.dot.gov/pv_obj_cache/pv_obj_id_2A89BC3F0E290B0B39B5CE8E6BAD0B8C08CC0200/filename/GT_GG_Annual_Instructions_PHMSA_F_7100.2_1_\(rev10_2014\).pdf](http://www.phmsa.dot.gov/pv_obj_cache/pv_obj_id_2A89BC3F0E290B0B39B5CE8E6BAD0B8C08CC0200/filename/GT_GG_Annual_Instructions_PHMSA_F_7100.2_1_(rev10_2014).pdf))

Thus, to comply with: (1) the various Commission directives that PG&E could not rely solely on § 192.619(c); (2) the PG&E/CPSD Compliance Plan that explicitly referenced § 192.619(a)(1) for PG&E's calculated MAOP; and (3) D.11-06-017 ordering PG&E to complete its MAOP Validation, and allowing the use of engineering-based assumptions where complete records are not available, PG&E used the following rationale to report its transmission MAOP determination for years 2012, 2013, and 2014:

- *2012 Report* – Because PG&E's MAOP Validation project was still pending, PG&E reported:
 - § 192.619(a)(1), *Total*: 2686.3¹ transmission miles for which PG&E did *not* have TVC pressure test records, but for which PG&E's record review was complete and thus had a calculated component MAOP. Included miles in § 192.619(a)(1), *Incomplete*.
 - § 192.619(a)(1), *Incomplete*: 417.2¹ transmission miles for which PG&E did *not* have TVC pressure test records, and for which PG&E records review had *not* yet been completed.
 - § 192.619(a)(2), *Total*: 3119¹ transmission miles for which PG&E *had* TVC pressure test records.(See Attachments "2012 PGE Annual Transmission Report.pdf" and "2012 StanPac Annual Trans 7100 Report – Supp.pdf")

¹ This mileage includes both PG&E and Stanpac pipelines.

- *2013 Report* – Because PG&E had completed its MAOP Validation project in July 2013, and thus completed the “records review” contemplated by Form PHMSA F 7100.2-1, PG&E reported:
 - § 192.619(a)(1), Total: 2292.5¹ transmission miles for which PG&E did *not* have TVC pressure test records, but for which PG&E’s *record review was complete* and thus had a calculated component MAOP.
 - § 192.619(a)(2), Total: 3499¹ transmission miles for which PG&E *had* TVC pressure test records.(See Attachments “2013 PGE Annual Trans – subm 2014-03-14.pdf” and “2013 StanPac Trans Annual – subm 2014-03-14.pdf”)
- *2014 Report* – Following the same rationale as the 2013 Report, PG&E reported:
 - § 192.619(a)(1), Total: 2040² transmission miles for which PG&E did *not* have TVC pressure test records, but for which PG&E’s *record review was complete* and thus had a calculated component MAOP.
 - § 192.619(a)(2), Total: 3747.9² transmission miles for which PG&E *had* TVC pressure test records.(See Attachments “2014 Trans Annual PGE – subm 2015-03-13.pdf” and “2014 Trans Annual StanPac – subm 2015-03-13.pdf”)

New Reporting Methodology

In an attempt to comply with SED’s new guidance provided on November 5, 2015, PG&E’s revised reporting methodology categorizes the MAOP of transmission pipelines under §§ 192.619(a)(1)-(4), and Other categories including both “Complete” and “Incomplete” records sections for the 2014 Annual Report, as follows:

- § 192.619(a)(1), Total: 1482.7² transmission miles for which PG&E has TVC design specifications *and* strength test records; the pipeline was installed on or after July 1, 1970 and the MAOP of Design is *less than* the MAOP of Test.
- § 192.619(a)(2), Total: 1077.4² transmission miles for which PG&E has TVC design specifications *and* strength test records; the pipeline was installed on or after July 1, 1970 and the MAOP of Design is *greater than* the MAOP of Test.
- § 192.619(a)(3), Total: 948.1² transmission miles for which PG&E has TVC design specifications *and* strength test records; the pipeline was installed before July 1, 1970. Includes miles in § 192.619(a)(3), *Incomplete*.
- § 192.619(a)(3), *Incomplete*: 37.7² transmission miles for which PG&E has TVC design specifications *and* strength test records; the pipeline was installed before 1970. These pipeline sections are not listed explicitly in PG&E’s MAOP list of historic operating pressures (PG&E drawing 086868).
- § 192.619(a)(4), Total: 669.2² transmission miles for which PG&E has TVC design specifications *and* strength test records; the pipeline was installed either before, during or

² This mileage includes both PG&E and Stanpac pipelines.

after 1970. The operating pressure of these pipeline sections is currently reduced as a result of potential operational considerations.

- *Other, Total*: 1610.4² transmission miles for which PG&E has TVC strength test record and is calculating component MAOP using conservative assumptions in accordance with D.11-06-019 and Public Utilities Code § 958 and the pipeline was installed either before, during or after 1970. Includes miles in *Other, Incomplete*.
- *Other, Incomplete*: 238.9² transmission miles for which PG&E **does not** have TVC strength test record, and is calculating component MAOP using conservative assumptions in accordance with D.11-06-019 and Public Utilities Code § 958 and the pipeline was installed either before, during or after 1970.

Using this new reporting methodology, PG&E has re-categorized its entire transmission pipeline system³ as shown in the revised Parts Q and R of the 2014 PHMSA Form 7100.2-1 (See Attachment "PHMSA 2014 7100 Report Update to Parts Q R.pdf"). PG&E will be updating the 2014 PHMSA Form 7100.2-1 on the PHMSA website and will provide an explanation to PHMSA of the new methodology and rationale for revising Parts Q and R of the report. PG&E is also in the process of revising its 2012 and 2013 PHMSA Forms 7100.2-1 using the new outlined reporting methodology and will submit updated versions when completed. In addition, PG&E is reviewing any relevant semi-annual reports previously submitted to the CPUC and will update and resubmit them, accordingly. PG&E believes its new reporting methodology is in accordance with SED's new guidance while continuing to comply with all prior Commission decisions and orders. If that is not the case, please let me know as soon as possible; as always, PG&E welcomes SED's continued review, oversight and guidance.

Sincerely,

/s/

Sumeet Singh
Vice President, Asset and Risk Management

Attachments

cc: Dennis Lee, CPUC
Elizaveta Malashenko, CPUC
Peter Allen, CPUC
Darryl Gruen

Michael Falk, PG&E
Larry Deniston, PG&E

³ The above reported mileage excludes the mileage that PG&E will reclassify from distribution to transmission as referenced in the 2015 GT&S rate case. PG&E will begin reporting this mileage in the 2015 Annual Report to be filed in 2016.