BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking on the Commission's Own Motion to Adopt New Safety and Reliability Regulations for Natural Gas Transmission and Distribution Pipelines and Related Ratemaking Mechanisms.	Rulemaking 11-02-019 (Filed February 24, 2011)

COMMENTS OF THE OFFICE OF RATEPAYER ADVOCATES ON THE PROPOSED DECISION SETTING THE "MAXIMUM OPERATING PRESSURE" FOR PACIFIC GAS AND ELECTRIC COMPANY'S NATURAL GAS TRANSMISSION LINE 147

KAREN PAULL
TRACI BONE
Attorneys For The Office Of Ratepayer Advocates

California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102
Phone: (415) 703-2048
E-Mail: tbo@cpuc.ca.gov

December 13, 2013

83511416

TABLE OF CONTENTS

I. INTRODUCTION

Pursuant to Rule 14.3 of the Commission's Rules of Practice and Procedure (Rules), the Office of Ratepayer Advocates (ORA) files these Comments on the Proposed Decision of Administrative Law Judge (ALJ) Maribeth A. Bushey issued on December 6, 2013 (PD). The PD purports to establish the "maximum operating pressure" for Pacific Gas and Electric Company's (PG&E) Line 147. ORA presumes that the intent was to establish the "Maximum Allowable Operating Pressure," which is determined pursuant to federal safety regulations. The PD, however, interchangeably refers to "maximum pressure," "maximum operating pressure" (MOP), and "maximum allowable operating pressure" (MAOP). Each of these terms has a different meaning. If the purpose of the PD is to set the MAOP for Line 147, it should use that term consistently to avoid confusion. This is the first of several errors in the PD that should be corrected.

ORA does not dispute the PD's determination that PG&E may operate Line 147 at a Maximum Allowable Operating Pressure (MAOP) of 330 pounds per square inch gauge (psig) (assuming that was the intent). However, the PD contains factual and legal errors which should be corrected before it is issued. Among other things, essential evidence was arbitrarily excluded from the record. The only evidence in the record of this proceeding supporting the PD's determination that PG&E may operate Line 147 at a MAOP of 330 psig is testimony by PG&E witnesses who assert that Line 147 has been hydrotested and the hydrotests demonstrate that Line 147 is safe to operate at an MAOP of 330 psig (or higher), and the "Concurrence" of the Commission's Safety and Enforcement Division (SED). The Commission required PG&E to provide "Supporting Information" showing when, where, and how these hydrotests were performed, but that evidence was not allowed into the record of this proceeding, even though the adequacy of PG&E's Supporting Information was a contested issue in the proceeding. Further, there is no record in this proceeding that demonstrates that PG&E calculated its proposed MAOP of 330 psig consistent with federal regulations governing the establishment of MAOP. That is because PG&E refused to concede that 330 psig is the correct MAOP of Line 147 under the federal regulations, rather than 365 psig it had erroneously determined based on incorrect pipeline records. The Commission has the responsibility to ensure PG&E is determining the MAOP consistent with federal safety laws, but the PD sidesteps that question, just as PG&E has done in the proceeding.

While these errors do not preclude the Commission from establishing the MAOP for Line 147, they are not harmless, and should be corrected. Consider, for example, if Line 147 were to explode tomorrow and the National Transportation Safety Board (NTSB) were to do an investigation of the explosion. The NTSB would examine the Commission's establishment of the MAOP for the line. Because there would be no data in the record for the NTSB to determine whether or not the required pressure tests had been performed as PG&E represented, it would once again have to conclude that the Commission relied upon PG&E's representations without reviewing the data itself. If questions were raised regarding how PG&E calculated the MAOP of the line, the NTSB would find that the Commission remained silent on this issue. And the NTSB would have to conclude that the Commission, charged with overseeing the safety of PG&E's gas transmission system, does not know the difference between MOP and MAOP, since even the title of the PD refers to establishing the "maximum operating pressure" of Line 147, and not the MAOP.

If the Commission intends to turn the corner on its regulation of PG&E and the other gas utilities, it must hold itself to a higher standard. The law requires that Commission decisions be based on the evidence *in the record* (and on findings of fact and conclusions of law on all material issues).[1] Thus, the record should include evidence (and findings and conclusions) supporting any MAOP approved by this Commission. This did not happen in this case. The Commission should also confirm that PG&E has properly calculated the MAOP of Line 147 based on a correct interpretation of the federal regulations. This was a disputed issue in this case and the record shows that PG&E may be misinterpreting the regulations. However, this examination, also, did not happen in this case. Thus, while the proper MAOP for Line 147 may well be 330 psig under the federal regulations, the PD lacks any findings or conclusions to that effect. And it is likely that PG&E's understanding of the federal regulations on how to determine the MAOP of pipelines is flawed, but the PD does not address that issue either.

These deficiencies can be corrected. The Commission should reopen and supplement the record with PG&E's Supporting Information for its "Safety Certification" of Line 147 (Exhibits A and B, which contrary to what is stated in the PD were served on the active parties), and it should require PG&E to enter into the record the maps that demonstrate that every component of Line 147 was hydrotested (which were not included in the Supporting Information but which

[1] California Public Utilities Code §§ 1705, 1706, and 1757.

PG&E showed the parties after the first day of hearings). Because these documents cannot be redacted and remain useful, they should be submitted under seal. PG&E should also be required to provide supplemental testimony or an affidavit that explains how it calculated the MAOP for Line 147, and how this calculation is consistent with the governing federal regulation, 49 CFR 192.619. The final decision should include findings and conclusions (based on the record and the applicable law) on what is the correct MAOP for Line 147 and whether PG&E determined the MAOP correctly. Finally, the PD should be corrected to consistently refer to MAOP when it is MAOP that is intended.

Pursuant to Rule 14.3(b), ORA's proposed changes to the PD are set forth in Appendix A hereto.

II. DISCUSSION

A. The PD Commits Factual And Legal Error Because It Interchangeably Refers To MAOP, MOP, And Maximum Pressure When MAOP Is Intended

The PD interchangeably refers to "maximum pressure," "maximum operating pressure" (MOP), and "maximum allowable operating pressure" (MAOP).[2] Each of these terms means something different and has different implications. MAOP is a legally defined value in the federal gas pipeline safety regulations,[3] and must be calculated pursuant to the federal regulations at 49 CFR § 192.619. It is the maximum *allowable* operating pressure for the line, and must not be exceeded unless otherwise specifically permitted under the federal regulations. Related federal regulations specify the equipment required to ensure a line operates consistent with the MAOP restrictions.[4]

---

[2] See PD, p. 1, Title ("Decision Establishing Maximum Operating Pressure For Pacific Gas And Electric company's Natural Gas Transmission Line 147"); p. 4 ("maximum pressure" and "maximum operating pressure" are used interchangeably at least 5 times on this page and were likely intended to refer to "maximum allowable operating pressure" or "MAOP"); p. 9 ("The end result is that PG&E must be fully accountable for the pressure test and the assertion that the line can be safety [sic] operated at the maximum operating pressure ordered by the Commission."); p. 12 (this page contains at least three references to MOP where MAOP appears to have been intended), p. 13 ("Therefore, we conclude that PG&E has demonstrated that the MOP of Line 147 can be safely restored to 330 psig."); p. 13 (language in "Conclusion" and Finding of Fact 3); p. 14, Conclusion of Law 3 and Ordering Paragraph 1; and p. 15, Ordering Paragraph 2.

[3] 49 CFR § 192.3.

[4] See, e.g., 49 CFR §§ 192.195 and 192.201.

In contrast, ORA understands that MOP, which is not defined in the federal gas pipeline regulations, is a term used by PG&E for the actual operating pressure limit, determined by the operator, and which may vary depending on conditions and operational needs but is usually lower than the MAOP. It is possible that PG&E's "MOP" is shorthand for "maximum *actual* operating pressure," which is defined in the federal regulations as: "the maximum pressure that occurs during normal operations over a period of 1 year."[5] "Maximum pressure" is also not defined in the gas pipeline regulations, and references in the PD to "maximum pressure" could be understood to refer to either MAOP, MOP, "maximum actual operating pressure," or something else entirely.

The NTSB recognizes these important differences between MAOP and MOP, and that the definition of MAOP is tied to the federal regulations. In its accident report on the San Bruno explosion the NTSB explains on the first page in footnotes 6 and 7:

> [6] MAOP is defined by the Pipeline and Hazardous Materials Safety Administration (PHMSA) as the maximum pressure at which a pipeline or segment of a pipeline may be operated under Title 49 *Code of Federal Regulations* (CFR) Part 192. (Part 192 contains the minimum Federal safety standards for the transportation of natural gas by pipeline.)
>
> [7] MOP is an operating limit defined by PG&E. As explained by PG&E, sometimes a line's MOP equals the MAOP. But when a line is crosstied to (open to) a line with a lower MAOP, the higher rated line is limited by the MAOP of the lower rated line. In the case of Line 132, when it was open to Line 109 (which had a MAOP of 375 psig), as it was at the time of the accident, the MOP of Line 132 was 375 psig.[6]

PG&E itself has also acknowledged the distinction between MAOP and MOP. PG&E provided the following definitions of those terms in an attachment to a data response:

> "MAOP" is the maximum pressure at which a gas pipeline, pipeline segment, or component is qualified to operate according to the requirements of 49 CFR 192.

---

[5] 49 CFR § 192.3.

[6] See National Transportation Safety Board, Pipeline Accident Report, Pacific Gas and Electric Company, Natural Gas Transmission Pipeline Rupture and Fire, San Bruno, California, September 9, 2010, adopted August 30, 2011 (NTSB Report), p. 1, footnotes 6 and 7. The NTSB Report is available at http://www.ntsb.gov/doclib/reports/2011/PAR1101.pdf.

> "MOP" is the maximum pressure at which a system may be operated according to the criteria established in UO Standard D-S0430/S4125.[7]

While the definition of MOP may be unsettled, all definitions of MAOP point back to the federal regulations. It is ORA's understanding that this PD intends to set the MAOP for Line 147 consistent with the federal regulations; consequently, it should use that term consistently to avoid confusion and any future misunderstandings. To eliminate further confusion, it may be advisable for the PD to define both MAOP and MOP.

B. The PD Commits Legal Error Because There Is No Showing That PG&E Properly Calculated The MAOP Consistent With Applicable Federal Regulations

As described above, the federal regulations at 49 CFR § 192.619 set forth the calculations required for a gas transmission operator to establish the MAOP of a line. This requirement is set forth in Subpart L of the code (Operations). Oddly, the Commission's decision describing the showing that PG&E must make to establish MAOP – D.11-09-006 – does not require PG&E to show that it has properly complied with that federal regulation.[8] **Rather, a review of the Commission decisions issued in this proceeding, and the discussions in the November 18 and 20 hearings, reveal that the issue of what is required to establish an appropriate MAOP consistent with federal regulations has been overlooked by the Commission for over two years.**[9] Instead, the Commission's focus, as articulated in numerous decisions, has been on

---

[7] PG&E Data Response to ORA, PG&E identifier "GasPipelineSafetyOIR_DR_DRA_025-Q20Atch02-CONF." The document provided is PG&E's "Piping Design and Test Requirements," A-34, Rev. #03: 12-09-03.

[8] See D.11-09-006, pp. 4-6, 11-12, 17-18, which explains the showing PG&E must make; see also PD, pp. 2-3, which reiterates the showing PG&E must make pursuant to D.11-09-006. Neither of these lists make any reference to the relevant federal regulations which establish the rules for calculating the MAOP of a line, which are in subpart L of the code. There is one reference to subpart J of the code in item G(b) of the D.11-09-006 list. However, subpart J does not address the establishment of MAOP. It addresses the requirements for performing a proper hydrotest.

[9] The issue of PG&E's failure to show compliance with the federal regulations governing the setting of MAOP was repeatedly raised in the November 18 and 20 hearings and the parties were discouraged from pursuing this issue. See, e.g. 18 RT 2748-2750: 20-25 and 18 RT 2864-2865: 6–26. This issue was expressly raised in no uncertain terms at 18 RT 2749-2750: 24-20:

> MS. BONE: Your Honor, if the Commission is using an incorrect protocol to set MAOP that is not consistent with federal regulations, that is an issue that needs to be addressed here when you decide to set the next MAOP for Line 147. It cannot be ignored. It would be legal error to ignore the fact that we have an improper application of the federal code to calculate the MAOP.

whether PG&E's hydrotests met the requirements of a different section of the federal code – Subpart J (Test Requirements), which addresses how to perform a proper hydrotest.[10] In this myopic focus on hydrotests, the Commission has apparently failed to understand that a properly performed hydrotest is *only one component* considered in establishing the MAOP consistent with the regulations in Subpart L of the code. To ORA's knowledge, no prior decision by the Commission in this proceeding even recognizes that Subpart L, or 49 CFR § 192.619, even exist.

Whether PG&E has complied with the federal regulations when establishing the MAOP is not just an academic concern because the record reflects that PG&E's interpretation of the code governing the establishment of MAOP may be flawed. Section § 192.619 of the code mandates that "[n]o person may operate a segment of … pipeline at a pressure that exceeds a maximum allowable operating pressure determined …. *[by] the lowest of the following*:" the MAOP calculated based on the design of the weakest element of the segment ("design MAOP");[11] the MAOP based on strength test (i.e. hydrotest) calculations ("test MAOP");[12] the "grandfather provision", discussed below,[13] or the operator's engineering judgment.[14]

While PG&E at times appears to acknowledge that this is how MAOP should be established,[15] during the hearings PG&E witnesses repeatedly refused to reach this conclusion.

> MAOP is not just based on hydrotest records. You take the Subpart J record, and you run it through the requirements of 619, and you look at the design MAOP as well. And that section is the one that determines what MAOP does. You cannot ignore that section to set MAOP. And that is what appears to be happening here.
>
> ALJ BUSHEY: If it's happening here, then it's happened throughout this proceeding. I don't agree that it is happening here. But we need to get started. We've spent an hour on this now. And it appears that there are no factual disputes. If there are any disputes, they're legal disputes.

A review of the Commission's decisions setting the MAOPs for other PG&E gas lines confirm that the Commission has not previously considered whether or not PG&E's proposed MAOPs complied with Subpart L of the code, which govern how MAOP is established. See, e.g., D.12-09-003, D.11-12-048, and D.11-10-010.

[10] See, e.g., D.12-09-003, pp. 5 and 7, D.11-12-048, pp. 4 and 7-10, and D.11-10-010, p. 3 (there is also a mention of Subpart K in this decision (Uprating), but no mention of Subpart L).

[11] 49 C.F.R. § 192.619(a)(1).

[12] 49 C.F.R. § 192.619(a)(2).

[13] 49 C.F.R. § 192.619(a)(3).

[14] 49 C.F.R. § 192.619(a)(4).

[15] See, e.g., Paragraph 42 of Mr. Johnson's August 30, 2013 Verified Statement acknowledges some role for "Design MAOP" in setting the ultimate MAOP consistent with § 192.619.

Rather, at several points they suggested that the code's requirement that the operator use the "lowest of" the MAOPs calculated by any of the permissible methods does not apply to pipelines installed before 1970, and that a hydrotest, combined only with an operator's engineering judgment, could be used to set the MAOP for such lines.[16] In the case of Line 147, the now-corrected design MAOP is 330 psig, which is lower than the test MAOP, but PG&E takes the position that it can legally operate at a MAOP higher than 330 psig (based on pressure test results) because Line 147 was installed before 1970.

To be clear, there is nothing in the federal regulations stating that the requirements of § 192.619 do not apply to lines installed before 1970. Subsection (a)(3) – referred to as the "grandfather provision" – permitted gas pipeline operators to operate lines installed before 1970 based on the highest actual operating pressure during a five- year period. However, the Commission has ruled that California operators may no longer establish MAOP based on that provision.[17] While not fully articulated by PG&E at the hearings, PG&E's arguments suggest that the Commission replaced the grandfather provision with a hydrotest requirement, such that a hydrotest is all that is required to establish MAOP. However, there is nothing in the federal regulations that permits operators to establish the MAOP of a gas transmission line based solely on a hydrotest (or to disregard the design MAOP if it is lower than the test MAOP). Federal law requires that the calculation of MAOP for California operators must be consistent with or more

---

[16] See, e.g., Mr. Malkin's discussion of PG&E's position at 18 RT 2725-2729 which never once admits that design pressure is a consideration for setting the MAOP of a line, and where he implies that lines constructed before 1970 are not subject to § 192.611. See also Mr. Singh's testimony at 18 RT 2860-2865, where he similarly avoids answering direct questions regarding whether design MAOP is relevant to PG&E's proposal of a 330 psig for Line 147 and suggests that lines constructed before 1970 are not subject to § 192.611. There were similar discussions like this throughout the November 18 and 20 hearings.

[17] D.11-06-017, pp. 18 and 31. This decision was recognized in the NTSB Report, which explained:

> On June 9, 2011, the CPUC issued an order requiring PG&E and other gas transmission operators regulated by the CPUC to either hydrostatically pressure test or replace transmission pipelines with "grandfathered" MAOPs that have not been pressure tested or for which reliable records are not available. The CPUC concluded that all California natural gas transmission pipelines "must be brought into compliance with modern standards for safety," and that "[h]istoric exemptions must come to an end."

NTSB Report, p. 73. The NTSB Report also notes that it has previously recommended elimination of the grandfather clause. NTSB Report, p. 79.

stringent than the safety standards in the federal regulations.[18] To the extent that the grandfather provision is eliminated in California, operators must now establish MAOP based on the lower of the calculation resulting from the hydrotest results, the design pressure of the weakest element in the segment, or the operator's engineering judgment. To assume that MAOP can be established based solely on a hydrotest is a violation of the federal regulations because, among other things, it removes these conservative factors – design pressure and engineering judgment – set forth in the code, and substitutes the operator's judgment for the code requirements. It also makes no sense because it would result in less stringent requirements – only a hydrotest – being placed on older (pre-1970 pipe).

It became apparent in the course of the Line 147 pressure restoration proceedings that PG&E's compliance with the federal regulations to establish MAOP is a significant issue, and this is reflected in the transcript of the hearings.[19] In addition to the issue identified above, it has become evident in this proceeding that PG&E has been misapplying 49 CFR § 192.611 – what PG&E refers to as the "one class out rule" – for decades. ORA has done a comprehensive review of that code section and is prepared to brief the significance of PG&E's failure to comply with that code provision, if permitted, in the next set of briefs addressing the "broader issues" raised by the Orders to Show Cause issued on August 19, 2013.[20]

---

[18] 49 USC 60104(c): "Preemption. A State authority that has submitted a current certification under section 60105(a) of this title may adopt additional or more stringent safety standards for intrastate pipeline facilities and intrastate pipeline transportation only if those standards are compatible with the minimum standards prescribed under this chapter. …"

[19] See footnotes 9 and 16 above.

[20] August 19, 2013 "Ruling Of Chief Administrative Law Judge And Assigned Administrative Law Judge Directing Pacific Gas And Electric Company To Show Cause Why It Should Not Be Sanctioned By The Commission For Violation Of Rule 1.1 Of The Commission's Rules Of Practice And Procedure" and "Ruling Of Assigned Commissioner And Assigned Administrative Law Judge Directing Pacific Gas And Electric Company To Appear And Show Cause Why All Commission Decisions Authorizing Increased Operating Pressure Should Not Be Stayed Pending Demonstration That Records Are Reliable" (MAOP OSC).

C. The PD Commits Legal Error By Failing To Include Necessary Findings And Conclusions And Erroneously Excluding Key Evidence From The Record

The PD outlines the "expedited process" adopted in Decision (D.) 11-09-006, which specified the showing that PG&E must make to raise the MAOP on its natural gas transmission lines.[21] The PD states that D.11-09-006 requires PG&E to "submit" the following information:[22]

A. [Name/]number of segment, general description, location, length of segment, and percent specified minimum yield strength (SMYS) at maximum allowable operating pressure (MAOP).

B. Maximum operating pressure (MOP) and MAOP for each segment and the entire Line prior to the pressure reduction.

C. Reason for MAOP reduction.

D. Complete Pressure Test Results for each segment in Class 3 or Class 4 locations or Class 1 or Class 2 High Consequence Areas (HCA) where MAOP will be restored. Explain findings and any actions taken based on results of pressure testing.

E. MAOP validation records for non-HCA segments where MAOP will be restored.

F. Proposed MOP and MAOP for each segment and the entire Line and proposed effective date.

G. Safety Certification. Verified statement from the PG&E officer responsible for gas system engineering that:

   a. PG&E has validated pipeline engineering and construction;

   b. PG&E has reviewed pressure test results and can confirm that a strength test was performed on the segment in accord with 49 CFR Part 192, subpart J, or the regulations in effect at the time the pressure test was performed; and

   c. in the professional judgment of the engineering officer, the system is safe to operate at the proposed MAOP.

---

[21] PD, pp. 2-3. D.11-09-006 is entitled "Decision Adopting Procedure for Lifting Operating Pressure Restrictions," and it was issued in the wake of an earlier Executive Director order responding to the San Bruno explosion and requiring PG&E to immediately lower the MAOPs for certain gas transmission lines in its system. The Commission ratified the Executive Director's order in Resolution L-403 on September 24, 2010.

Here, PG&E and the Commission are seeking to lower the MAOP for Line 147, and so ORA assumes that, notwithstanding the intent of D.11-09-006 and the language contained in the PD, the directives sets forth in D.11-09-006 are not restricted to situations where PG&E seeks to lift or raise the MAOP. It seems reasonable to infer that the rules set forth in D.11-09-006 would be applied whenever the Commission seeks to establish the MAOP of a line through a formal Commission procedure.

[22] PD, pp. 2-3.

H. Concurrence of the Commission's Consumer Protection and Safety Division.[23]

While the PD states that D.11-09-006 required PG&E to "submit" this information, D.11-09-006 actually required PG&E to "file" this information – thus making it part of the record of the proceeding.[24] D.11-09-006 also contemplated that the list above would be the "minimum requirements for future such filings."[25]

Pursuant to an October 8, 2013 Ruling of the Assigned Commissioner and the Assigned ALJ (October 8 Ruling), PG&E made most of this showing in a "Safety Certification" served on some of the parties on October 11 and 16. PG&E's "Safety Certification" included a four-page cover note, which included as Attachment B a one-page Verified Statement from Mr. Kirk Johnson, PG&E's Vice President, Major Projects and Programs, Gas Operations. That 4 page cover note is Appendix B hereto. However, the Safety Certification also included confidential Appendices A and B, two volumes of materials approximately 1 1/2" high, which were provided to support the statements made in Mr. Johnson's one-page Verified Statement. Appendix A includes, among other things, hydrotest information on the mainline portion of Line 147. Appendix B includes, among other things, hydrotest information on the "shorts" related to Line 147.[26]

With regard to the record of this proceeding, the first legal error was committed when only the four-page cover note for PG&E's Safety Certification was entered into the record as PG&E's "Safety Certification" supporting PG&E's claim that every foot of Line 147 has been properly hydrotested. PG&E stipulated that Exhibits A and B to the Safety Certification could be entered into the record, under seal if necessary,[27] and ORA repeatedly moved to have them

---

[23] PD, pp. 2-3. It is unclear how PG&E could provide the Concurrence of the Commission's Consumer Protection and Safety Division (see Item H), but this is what D.11-09-006 requires.

[24] D.11-09-006, p. 11 ("We … adopt the following requirements for the Supporting Information to be filed by PG&E with this first request to lift an operating pressure limitation and we expect that this information will be the minimum requirements for future such filings.")

[25] D.11-09-006, p. 11.

[26] PG&E's October 16, 2013 filing in this proceeding defined shorts as follows: "Along the route of Line 147, there are 15 smaller diameter pipelines tapped off the mainline that supply gas to individual customers, feed the distribution system (DFMs) or are required for pipeline operations (such as blow-downs or drips). Even though some of the DFMs may not be short in an absolute sense, all of these appurtenances to the mainline pipe are referred to as 'shorts.'"

[27] PG&E offered to redact Exhibits A and B so that they could be entered into the public record. However, ORA determined that redaction would have rendered the information in the Exhibits

entered into the record. However, the ALJ repeatedly denied ORA's motion. Unfortunately, because the ALJ also routinely ordered that substantive discussions and motions be taken off the record, the transcript is sparse regarding ORA's repeated motion to have Exhibits A and B put into the record, and the reasons for its motion.

To reiterate ORA's position articulated in the hearings, but not necessarily recorded in the transcripts of those hearings: PG&E assertions regarding hydrotests are not sufficient to establish the MAOP of a natural gas transmission line in a formal Commission proceeding.[28] Nor is it adequate to rely upon assertions by the Commission's Safety and Enforcement Division (SED), or any other party.[29] The hydrotests, and any other evidence necessary to establish the safety of the line, should be included in the record of the proceeding. Here, the only record available to establish the MAOP of Line 147 is PG&E's 4 page cover note to its Safety Certification, SED's "concurrence,"[30] and testimony (mainly from PG&E witnesses) over two days of hearings. Without any corroborating data whatsoever in the record, there is no way for an independent observer to review the record of this proceeding, and determine that the MAOP was properly set. If the NTSB were to review the record of this proceeding, it could not fail to see that the Commission made a decision impacting public safety based on PG&E's representations without checking those representations against the actual data – and to conclude, as it did in its investigation of the San Bruno explosion, that the Commission's oversight of PG&E is "ineffective."[31]

Notably, even if Exhibits A and B (the Supporting Information for PG&E's Safety Certification) were included in the record, they still do not demonstrate that all of Line 147 was hydrotested. This is because (as parties learned during the hearings) PG&E does not rely on the hydrotest reports included in those exhibits to track where each hydrotest was performed.

---

meaningless.

[28] Notwithstanding ORA's repeated requests to put hydrotest information and Exhibits A and B of PG&E's Safety Certification into the record, the only discussion of ORA's motion that it can find in the transcript is at 18 RT 2974:6-18.

[29] For example, ORA's witness testified at 18 RT 2718:20-25 that "… [T]o the degree that we were able to look at the documents and confirm that the line had been hydrotested, I can say that I believe the line has been hydrotested to the pressure that PG&E has stated."

[30] SED's "Report on Investigation Of Pacific Gas and Electric Company's Gas Transmission Pipeline 147" was filed on November 14, 2013 in this docket.

[31] NTSB Report, p. 88.

Indeed, it could not rely on those reports because the hydrotest information in them is internally contradictory and inaccurate. This was the subject of ORA's testimony in this proceeding.[32] Despite ORA's considerable efforts via discovery to get PG&E to explain discrepancies in the hydrotest information provided in support of its Safety Certification, it was only after the first day of hearings that PG&E divulged that it relies solely upon as-built maps of a line to identify where hydrotests of that line start and stop (maps that were not included in the supporting information for its Safety Certification).[33] Only by reviewing those as-built maps, with guidance from PG&E, can a person determine whether or not there has been a complete hydrotest of every foot of a line. Thus, the second legal error committed by the PD is that the record of this proceeding does not include the as-built maps necessary to determine where the hydrotests actually occurred.

ORA's motion requesting that additional evidence be added to the record was denied on the basis that previous pressure setting proceedings had not included this information in the record, and that it would be too cumbersome to include confidential information in the record.[34] The PD obliquely addresses this issue by emphasizing that PG&E did not provide Exhibit A to all of the parties because "PG&E explained that Exhibit A contained sensitive information regarding the location critical infrastructure [sic], the disclosure of which could post [sic] a public safety risk."[35] The PD then continues: "PG&E made [Exhibit A] available for the parties' inspection but not copying."[36] The PD makes the same representations regarding Exhibit B.[37]

---

[32] ORA's testimony and supporting documents regarding PG&E's flawed showing were entered into the record of this proceeding as Exhibits P and Q.

[33] Note that when directly asked: "Please explain which record DRA should consider accurate for understanding where hydrotests were performed on PG&E's system and how much mileage the hydrotests covered, and provide supporting documentation" PG&E did not tell ORA to look at the as built drawing, or offer to provide those drawings to ORA – which would have been the proper response to a very direct question. Instead PG&E answered: "The PFLs are up to date with the most current information for 2011 tests performed on L-147. This is corroborated by the STPRs, as-built drawings, and the Data in the Update PSEP filing due October 29th." See Exhibit Q, Supporting Documentation to ORA Testimony, at Exhibit 5, answer to question 2(g).

[34] 18 RT 2974: 15-18 ("… [C]onsistent with our past practice in dealing with pressurization, that information is not included in the formal record.")

[35] PD, p. 5.

[36] PD, p. 5.

[37] PD, p. 6 ("As with the October 11 submission [Exhibit A], the specific pipeline information was made available to the parties for inspection but not copying as part of Exhibit B to the request to lift operating pressure limitation." [sic]).

The PD is wrong on both counts. PG&E made both Exhibits A and B fully available – not just for inspection – to the parties who had rights to confidential information, including ORA. ORA has several copies of both Exhibits A and B in its possession. The actual data to support PG&E's assertions concerning the safety of Line 147 is or should be in those two exhibits. ORA reviewed the information contained in those exhibits, propounded discovery on it, commented on it in prepared testimony, and used Exhibit A to cross examine PG&E's witnesses during hearing on November 18.[38] Up to that point, both Exhibits were treated the same as any other confidential exhibit provided in a proceeding. There is nothing "special" about them that requires their exclusion from the record. Indeed, ORA's reliance on them for cross examination suggests there should be no question that they should be part of the record.

Contrary to what the PD implies, and the ALJ ruled, the fact that Exhibits A and B include confidential information, and that they have not been entered into the record of previous pressurization proceedings, is not sufficient reason to refuse to include them in the record – especially given the fact that PG&E agreed to their inclusion in the record. The PD refers to the data in these documents multiple times as if to show that this evidence (which was required) was not ignored.[39] But that does not fill the gaping hole in the record. These documents are critical to supporting PG&E's showing and should be part of the record of this proceeding.

D. The PD Contains Factual And Legal Error Because It Fails To Consider Whether PG&E's Showing Demonstrates That Its Records Can Be Relied Upon

The August 19, 2013 ruling leading to this pressure restoration proceeding expressly raised the issue of PG&E's ongoing recordkeeping problems in its title: "Ruling Of Assigned Commissioner And Assigned Administrative Law Judge Directing Pacific Gas And Electric Company To Appear And Show Cause Why All Commission Decisions Authorizing Increased Operating Pressure Should Not Be Stayed *Pending Demonstration That Records Are Reliable*" (emphases added). However, nowhere does the PD consider whether the documents provided by PG&E to support its proposed MAOP for Line 147 are *accurate* or *complete.*

In fact, ORA submitted unchallenged testimony that shows that those records were *inaccurate, unreliable, and incomplete* and that they therefore failed to make the showing

[38] See, e.g., 17 RT 2683:26, 2685:13, and 2699:22.

[39] PD, pp. 2-3, 10-11.

required by D.11-09-006. These issues were ignored in the hearings – with the sole focus being to get everyone to agree that PG&E had, in fact, pressure tested every foot of Line 147 – regardless of the actual showing PG&E had made. These recordkeeping issues have presumably been moved to the "broader issues" hearing to be held on Monday, December 18, 2013. However, it seems axiomatic that before the Commission approves a proposed MAOP for Line 147, it would require PG&E to provide accurate, complete, and reliable data to support that decision, and that this data would be in the record of this proceeding. For all of these reasons, ORA recommended that PG&E be required to re-submit its showing with accurate supporting documentation.[40] This recommendation was ignored.

The OSC specifically stated that PG&E will be required to demonstrate that its pipeline records are reliable, for purposes of determining whether to revise PG&E's MAOPs.[41] ORA and other parties submitted evidence on this issue, which is briefly noted in the PD, but otherwise ignored. The PD's failure to consider whether PG&E's MAOP showing rests on reliable records constitutes legal error.

III. CONCLUSION

For the reasons set forth above, in the record of this proceeding, and in ORA's oral arguments not on the record, but made in this proceeding, the PD should be revised to move Exhibits A and B of PG&E's Safety Certification into the record of this proceeding, and PG&E should be required to update its showing for the record to be accurate and complete, including the as-built drawings that demonstrate that all of Line 147 has been hydrotested. Findings and conclusions based on the record should be added to the PD to address these issues, and to require PG&E to demonstrate whether it correctly determined the MAOP consistent with federal regulations. Changes reflecting these recommendations are set forth in Appendix A hereto as required by Rule 14.3(b).

---

[40] Exhibit P, ORA Testimony, p. 2, lines 5-16.

[41] MAOP OSC, p. 6 ("Due to the serious issues raised in the attempted July filing, PG&E is ordered to appear at the hearing scheduled below and show cause why all orders issued by this Commission authorizing increased operating pressures should not immediately suspended pending competent demonstration that PG&E's natural gas system records are reliable.").

Respectfully submitted,

KAREN PAULL
TRACI BONE

/s/ TRACI BONE

TRACI BONE

Attorneys For the Office of Ratepayer Advocates
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102
Phone: (415) 703-2048
Email: traci.bone@cpuc.ca.gov

December 13, 2013

APPENDIX A

PROPOSED CHANGES TO PROPOSED DECISION

Textual Changes

The entire Proposed Decision (PD) should be reviewed and modified to use the term "maximum allowable operating pressure" or "MAOP" where that term is intended. Preliminary review reflects that such changes are likely appropriate in the title of the decision, and on pages 4, 9, 12, and 13, in addition to the changes required in the Findings of Fact and Conclusions of Law identified in the redlines below.

Further, the claims at pages 5 and 6 that Exhibits A and B to PG&E's Safety Certification were available for parties' inspection but not copying should be deleted.

Additional textual changes may be necessary to be consistent with the proposed changes to the Findings of Fact and Conclusions of Law proposed below.

Findings of Fact – Additions Are Shown In Underline

1. PG&E reduced pressure on Line 147 to 125 psig.
2. On October 11 and October 16, 2013, PG&E presented its pipeline features list, maximum pressure analysis, and pressure test results for Line 147 as part of its Supporting Information required by D.11-09-006.
3. Some of that Supporting Information was incorrect, inconsistent, and/or internally contradictory so that it was impossible to confirm whether the data supported PG&E's assertions that every foot of Line 147 had been hydrotested.
4. PG&E represents that its as-built drawings of Line 147 confirm where each hydrotest started and stopped so that a person reviewing those drawings can determine whether every foot of Line 147 has been hydrotested.
5. PG&E's Vice President of Gas Transmission, Maintenance, and Construction, verified that PG&E has validated the engineering and construction of, and performed pressure tests in accordance with 49 CFR 192 Subpart J or the pressure test requirements then in effect, on all segments of Line 147 that will be operating at or above 20% of SMYS, and concluded that these pipelines could be safely operated at the restored MAOP of 330 psig.
6. PG&E has not demonstrated that its proposed MAOP of 330 psig complies with the federal regulations governing the establishment of MAOP in 49 CFR 192 Subpart L.

7. PG&E retained the services of an outside expert to review its pressure testing of Line 147, and the expert concluded that Line 147 is fit for service at an MAOP in excess of that being sought by PG&E.

8. SED reviewed PG&E's supporting information and concluded that the information presented was adequate to support the conclusion that pressure on the lines could be safely restored to 330 psig.

9. SED investigated the information related to PG&E's 2012 leak repair and found no evidence that would limit PG&E's safe operation of Line 147 to below 330 psig.

10. ORA presented compelling evidence that PG&E's recordkeeping practices continue to be substandard.

Conclusions of Law - Additions Are Shown In Underline

1. PG&E has complied with the Supporting Information requirements of D.11-09-006.

2. In addition to meeting the requirements of D.11-09-006, PG&E should be required to explain how its proposed MAOP for Line 147 complies with federal regulations, including, among others, 49 CFR § 192.619. This requirement should be added to the list of Supporting Information to be provided by all gas system operators seeking to modify the MAOP of a gas transmission line.

3. PG&E has demonstrated through testimony and sworn statements that transmission pipe segments and components on Line 147 operating at or above 20% of SMYS have been successfully pressure tested in accordance with 49 CFR 192 Subpart J or the pressure test requirements in effect at the time of the test. However, it is critical that the record be supplemented with accurate, complete, and reliable data supporting this showing.

4. PG&E should be ordered to supplement the record of this proceeding with accurate, complete, and reliable data supporting its showing that the MAOP for Line 147 should be 330 psig. This showing should include correct pipeline feature information for Line 147, including accurate information showing the start and end point of each hydrotest, and any data supporting those pipeline features, such as hydrotest data and as-built maps.

5. The MAOP on Line 147 can safely be restored to 330 psig.

6. The Commission should use the special process adopted in D.11-09-006 for comment.

7. This decision should be effective immediately.

Ordering Paragraphs – Additions Are Shown In Underline

1. Pacific Gas and Electric Company may operate natural gas transmission Line 147, with associated shorts, with a maximum operating pressure of 330 pounds per square inch gauge.

2. Pacific Gas and Electric Company shall, within 30 days of the mailing of this decision, update the record of this proceeding with accurate, complete, and reliable data supporting its showing that the MAOP for Line 147 should be 330 psig. This showing should include correct pipeline feature information for Line 147, any data supporting those pipeline features, and hydrotest data, including accurate information showing the start and end point of each hydrotest, such as as-built maps. These documents should be submitted as late-filed exhibits and may be filed under seal to the extent that they contain confidential information. PG&E shall also file an explanation of how its proposed MAOP for Line 147 complies with federal regulations, including, among others, 49 CFR § 192.619. PG&E shall specifically address: (1) whether it believes that 49 CFR § 192.619 does not apply to lines installed before 1970, and if it doesn't apply, what regulations do apply; and (2)whether it believes that a hydrotest is all that is required to establish a MAOP for a gas transmission line consistent with federal regulations, and how this position is consistent with 49 USC 60104(c).

3. Pacific Gas and Electric Company must operate Line 147 in accord with applicable state and federal law and regulations. Should such law and regulations require a decreased maximum allowable operating pressure, Pacific Gas and Electric Company shall provide written notice to the parties to this proceeding within 30 days of a discovery that the MAOP should be decreased.

4. Rulemaking 11-02-019 remains open.

This order is effective today.

APPENDIX B

PG&E'S OCTOBER 11, 2013 COVER NOTE TO ITS SAFETY CERTIFICATION

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking on the Commission's Own Motion to Adopt New Safety and Reliability Regulations for Natural Gas Transmission and Distribution Pipelines and Related Ratemaking Mechanisms	R.11-02-019 (Filed February 24, 2011)

PACIFIC GAS AND ELECTRIC COMPANY'S SUPPORTING INFORMATION FOR SAFETY CERTIFICATION OF LINES 147 PURSUANT TO RULING OF ASSIGNED COMMISSIONER AND ASSIGNED ADMINISTRATIVE LAW JUDGE

ALEJANDRO T. VALLEJO
Pacific Gas and Electric Company
Law Department
77 Beale Street, B30A
San Francisco, CA 94105
Telephone: (415) 973-1611
Facsimile: (415) 973-5520
E-Mail: AXVU@pge.com

JOSEPH M. MALKIN
Orrick, Herrington & Sutcliffe LLP
The Orrick Building
405 Howard Street
San Francisco, CA 94105
Telephone: (415) 773-5505
Facsimile: (415) 773-5759
Email: jmalkin@orrick.com

Attorneys for
PACIFIC GAS AND ELECTRIC COMPANY

October 16, 2013

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking on the Commission's Own Motion to Adopt New Safety and Reliability Regulations for Natural Gas Transmission and Distribution Pipelines and Related Ratemaking Mechanisms	R.11-02-019 (Filed February 24, 2011)

PACIFIC GAS AND ELECTRIC COMPANY'S SUPPORTING INFORMATION FOR SAFETY CERTIFICATION OF LINES 147 PURSUANT TO RULING OF ASSIGNED COMMISSIONER AND ASSIGNED ADMINISTRATIVE LAW JUDGE

Pacific Gas and Electric Company (PG&E) submits additional Supporting Information for the updated Safety Certification ordered by the October 8, 2013 Ruling of Assigned Commissioner and Assigned Administrative Law Judge Directing Pacific Gas and Electric Company to File and Serve Updated Safety Certification for Line 147 and Setting Prehearing Conference, as authorized by ALJ Bushey's October 10, 2013 email.

The supporting information being provided at this time consists of the following:

1. Pipeline Features List for the Line 147 shorts[1]
2. MAOP Report for the Line 147 shorts
3. Pipeline Centerline Survey Results for the remaining 1.37 miles of Line 147 mainline pipe and shorts
4. Safety Certification by PG&E engineering officer

Except for the Pipeline Centerline Survey Results, which are Attachment A to this document, and the Safety Certification, which is Attachment B to this document, the Supporting Information is found in Exhibit B.

This information reflects updated information, work and assessments completed on Line 147 to-date. It supplements or replaces the supporting information submitted in October and

[1] Along the route of Line 147, there are 15 smaller diameter pipelines tapped off the mainline that supply gas to individual customers, feed the distribution system (DFMs) or are required for pipeline operations (such as blow-downs or drips). Even though some of the DFMs may not be short in an absolute sense, all of these appurtenances to the mainline pipe are referred to as "shorts."

November 2011 in connection with PG&E's request to lift the operating pressure restriction on Line 147.

The supporting information in Exhibit B contains sensitive information concerning the location of critical infrastructure, the disclosure of which could pose a public safety risk. Consequently, PG&E is providing such portions of the supporting documentation to the Safety and Enforcement Division and Office of Ratepayer Advocates pursuant to Public Utilities Code § 583, and to the active parties that have signed a nondisclosure agreement or are subject to a protective order in these proceedings. Pursuant to the Notice of Availability served and filed on October 11, 2013, PG&E will make a complete set of Supporting Information available for viewing (but not copying) on Thursday, October 17, 12 noon to 4 p.m., at PG&E headquarters, 77 Beale Street, San Francisco, by other interested parties that contacted Allie McMahon (a2mx@pge.com) by noon on Wednesday, October 16.

Respectfully submitted,

/s/ Alejandro T. Vallejo
ALEJANDRO T. VALLEJO
Pacific Gas and Electric Company
Law Department
77 Beale Street, B30A
San Francisco, CA 94105
Telephone: (415) 973-1611
Facsimile: (415) 973-5520
E-Mail: AXVU@pge.com

/s/ Joseph M. Malkin
JOSEPH M. MALKIN
Orrick, Herrington & Sutcliffe LLP
The Orrick Building
405 Howard Street
San Francisco, CA 94105
Telephone: (415) 773-5505
Facsimile: (415) 773-5759
Email: jmalkin@orrick.com

Attorneys for
PACIFIC GAS AND ELECTRIC COMPANY

October 16, 2013

ATTACHMENT A

Pipeline Centerline Survey Results

Pipeline Centerline Survey Background

To further refine the geospatial accuracy of its pipelines, PG&E has undertaken the Pipeline Centerline Survey of its transmission system. In addition to confirming the geospatial accuracy, PG&E is able to identify any potential occupied and unoccupied structures as well as vegetation directly above or in close proximity to the pipeline. The survey consists of the following:

- The physical position of the pipeline centerline is located by impressing a signal on the pipeline and it is marked
- Survey-grade, Global Positioning System (GPS) coordinates are acquired for the pipeline's centerline
- Any potential occupied and unoccupied structure as well as vegetation directly above or in close proximity to the pipeline is identified
- The new centerline data will be uploaded into the new, enhanced Geospatial Information System that PG&E is implementing for its transmission system

Pipeline Centerline Survey Results

PG&E has now completed the survey of Line 147 mainline pipe. The results are as follows:

- There were no occupied or unoccupied structures identified directly above the pipeline
- There was vegetation identified in close proximity to the pipeline, and PG&E has a vegetation management clearance project to clear such vegetation as appropriate

ATTACHMENT B

Safety Certification

I, Kirk Johnson, state as follows:

1. I am currently Vice President, Major Projects and Programs, Gas Operations, for Pacific Gas and Electric Company (PG&E). Until October 1, 2013, I was Vice President, Gas Transmission Maintenance & Construction responsible for Pipeline Safety Enhancement Plan engineering, and prior to that gas transmission system engineering. Because of my prior involvement with PG&E's filing to restore pressure on Line 147 as well as my responsibilities up to October 1, I am the PG&E officer most familiar with the engineering of Line 147.

2. I received a B.S. in mechanical engineering from the University of California, Davis, in 1980. I have worked PG&E as an engineer since graduating, spending 30 years in gas operations.

3. I have reviewed the information in support of the safety of Line 147. I certify that:

a. PG&E engineers have validated the engineering and construction through records review of piping and all associated components, including off-takes, as documented in the exhibits submitted in October and November 2011 and October 11 and 16, 2013; and

b. PG&E successfully completed hydrostatic pressure testing of all pipe segments and components on Line 147 in HCAs and operating at or above 20 percent of specified minimum yield strength (SMYS) for which we do not have complete records of a prior pressure test in accordance with the applicable standards at the time they were performed, in accord with Title 49 of the Code of Federal Regulations, Part 192, subpart J, at pressures above those required to confirm the safe operation of Line 147 at a maximum allowable operating pressure of 330 pounds per square inch gauge (psig) with an additional margin of safety.

4. In my professional judgment, Line 147 is safe to operate at an MAOP of 330 psig.

I declare under penalty of perjury that the foregoing is true and correct.

Executed at San Francisco, California, this 16th day of October 2013.

/s/ *Kirk Johnson*

KIRK JOHNSON, Vice President,
Major Projects and Programs, Gas Operations
PACIFIC GAS AND ELECTRIC COMPANY