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)

REPLY BRIEF OF PACIFIC GAS AND ELECTRIC COMPANY REGARDING ORDER TO SHOW CAUSE WHY ALL COMMISSION DECISIONS AUTHORIZING INCREASED OPERATING PRESSURE SHOULD NOT BE STAYED PENDING DEMONSTRATION THAT RECORDS ARE RELIABLE

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Dated: January 31, 2014

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I. INTRODUCTION

The purpose of this Order to Show Cause (OSC) is to determine whether the Commission should suspend pressure restoration orders on Lines 101, 131 -30, 132A, and the suction side of the Topock Compressor Station (the Pressure Restoration Lines) in light of record issues that PG&E identified on Line 147. [1] The only conclusion supported by the evidence is that no such suspension is warranted. After an internal PG&E records review, hundreds of data requests, four days of evidentiary hearings, and access by the parties to the pipeline specification records for each Pressure Restoration Line, the record leaves no doubt that the Pressure Restoration Lines are each operating at a safe and appropriate pressure. There is no evidence of any record discrepancy on the Pressure Restoration Lines other than those PG&E identified on Line 147. The integrity of the Pressure Restoration Lines was fully validated by t he hydrostatic testing upon which the Commission based its pressure restoration orders. On this evidence, the

[1] R.T. 3174 (ALJ Bushey). While Line 147 was originally within the scope of the OSC, the Commission's separate decision authorizing Line 147 to operate up to 330 psig settles the issue for that line. *See* D.13-12-042.

Commission recently authorized PG&E to restore pressure in Line 147, [2] and should similarly affirm the remaining pressure restoration orders.

Indeed, no party other than the City of San Bruno recommends suspending the pressure restoration orders. [3] The parties instead raise generalized concerns regarding PG&E's records and make recommendations that far exceed the scope of this proceeding. [4] Implicit in many of these recommendations is the desire to continue litigating the long-closed Records OII (I.11-02-016). Because these recommendations are outside the scope of this OSC proceeding, PG&E has not addressed them in evidence or in its briefs. PG&E does address the claim that the Commission erred in directing all California gas utilities to validate "grandfathered" Maximum Allowable Operating Pressures (MAOPs) based on historic operating pressures through hydrostatic strength testing.

II. THE RECORD DEMONSTRATES THAT THE PRESSURE RESTORATION LINES OPERATE SAFELY AT THEIR CURRENT MAOPS

The record here does not identify a single pipeline specification error in the Pressure Restoration Lines other than those on Line 147 discovered by PG&E. In fact, the record consists entirely of evidence to the contrary. PG&E has demonstrated the safety of the Pressure Restoration Lines through hydrostatic strength testing and records validation, as discussed in detail in the pressure restoration safety certification filings required by D.11-09-006 and explored by the parties through extensive data requests and cross-examination in this OSC.

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[2] D.13-12-042.

[3] San Bruno OB at 3; *see* TURN OB at 17; ORA OB at 4-5. SED concurred with PG&E's Safety Certification filings for each of the Pressure Restoration Lines at the time they were made, and recently concurred with restoring pressure on Line 147 to 330 psig. PG&E OB at 2.

[4] For example, TURN suggests the Commission reduce the MAOP on Line 101 to 330 psig. TURN OB at 18. The procedurally proper method for TURN to raise that issue would be a petition to modify D.11-12-048. Rules Prac. & Proc., Rule 16.4. In such a proceeding, the Commission could fully consider the facts: (1) that the segment on Line 101 that has a lower MAOP is more than 30 miles downstream from the beginning of Line 101 at the Milpitas Terminal; (2) that PG&E is installing regulation upstream of that segment; and (3) that unnecessarily reducing the MAOP for the entire line could adversely affect PG&E's ability to serve customers on the Peninsula.

The Commission issued the OSC following the discovery of errors in the Pipeline Features List (PFL) for Line 147. As described a t length in the Verified Statement of Kirk Johnson,[5] and as PG&E's witnesses explained over four days of evidentiary hearings, [6] PG&E identified how incorrect information was entered into the Line 147 PFL and examined the PFLs for the remaining Pressure Res toration Lines to ensure that there were no errors for the other pipelines. This re -review did not identify any other MAOP error in the Pressure Restoration Lines.[7] The parties also served hundreds of discovery requests; spent four days questioning PG&E witnesses regarding PG&E's MAOP Validation process; and had access to PG&E's supporting information for each pressure restoration application and safety certification, including PFLs, strength test pressure reports, and other pipeline data. [8] Despite this access and opportunity, the parties did not identify any specification error in the Pressure Restoration Lines.[9] TURN acknowledges that there is no evidence of any incorrect MAOP in the other Pressure Restoration Lines.[10]

As the Commission previously fou nd, PG&E satisfied all Commission requirements for pressure restoration. The company affirmatively demonstrated the safety of the Pressure Restoration Lines through Commission -ordered hydrostatic strength testing. PG&E exceeded the requirements of D.11 -09-006 by strength testing all segments of the Pressure Restoration

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[5] Verified Statement of Kirk Johnson at 12-14 (Aug. 30, 2013).
[6] *E.g.,* R.T. 2454 (PG&E/Singh).
[7] R.T. 2467-68 (PG&E/Singh).
[8] *See, e.g.,* ORA OB at 13 n.31.
[9] San Bruno incorrectly argues that PG&E discovered a records error on Line 101. San Bruno OB at 2. The issue on Line 101 did not involve pipeline specifications , but instead turned on PG&E's changed interpretation of 49 C.F.R. § 192.611, also known as the "one class out" provision. Verified Statement of Kirk Johnson at 17 -18 (Aug. 30, 2013); R.T. 3181 (ALJ Bushey) ("101 doesn't have errors. 101 is a different case. It's a changed regulatory interpretation[.] . . . So it's a different premise, and we all know about it.").
[10] *E.g.,* TURN OB at 17 ("TURN has seen no evidence that there are Type 5 MAOP Validation errors for the other pressure restoration lines, and, absent such evidence, does not recommend suspending the pressure restoration orders.").

Lines, not just the HCA segments. [11] SED concurred that the lines could safely have their pressure restored. [12] Michael Rosenfeld, a pipeline industry expert and American Society of Mechanical Engineers (ASME) B31.8 committee member, testified that hydrostatic strength testing establishes the margin of safety, regardless of the underlying pipeline records. [13] There is no legitimate safety-related reason to suspend the pressure restoration orders.

III. PG&E'S MAOP CALCULATION IS MORE CONSERVATIVE THAN STATE AND FEDERAL REGULATORY REQUIREMENTS

ORA objects to the Commission -approved MAOP Validation methodology set forth in D.11-06-017.[14] ORA's criticisms are baseless, and were previously rejected in D.13-12-042.[15] In any event, PG&E calculates MAOP for its pipelines in a manner that is more conservative than both Commission requirements and federal regulations. PG&E's approach to calculating pipeline MAOP renders ORA's objection moot.

Under federal pipe line safety regulations, pipelines must have an MAOP that is the lowest of four values: (1) the design pressure of the weakest element in the segment; (2) the pressure obtained by dividing the post-construction pressure test by a factor tied to the segment 's class location; (3) the highest actual operating pressure to which the segment was subjected between July 1, 1965 and June 30, 1970; and (4) the pressure determined by the operator to be the maximum safe pressure after considering the history of the seg ment, particularly known

[11] R.T. 2438 (PG&E/Johnson).
[12] SED Report on Investigation of Pacific Gas and Electric Company's Gas Transmission Pipeline 147 at 24 (Nov. 14, 2013).
[13] PG&E OB at 4-5.
[14] ORA OB at 16.
[15] D.13-12-042 at 13-14 ("That subsection is applicable to pipelines installed beyond the effective date of these regulations since all pipelines are expected to be designed per these regulations. The Commission adopted a specific pipeline features analysis methodology for PG&E to use in its Pipeline Safety Enhancement Program with the older in-service pipeline.").

corrosion and the actual operating pressure. [16] However, pipelines that were designed and installed prior to July 1, 1970 (pre-1970 pipelines) are not subject to this provision. As stated in 49 C.F.R. § 192.619(c) (emphasis added),

> ***The requirements on pressure restrictions in this section do not apply*** in the following instance. An operator may operate a segment of pipeline found to be in satisfactory condition, considering its operating and maintenance history, at the highest actual operating pressure to which the segment was subjected during the 5 years preceding [July 1, 1970].

Thus, under the federal pipeline regulations, pre-1970 pipelines may operate at the highest pressure experienced in the five years prior to July 1, 1970, even if that pressure exceeds the design pressure calculated under 49 C.F.R. § 192.105. As explained by PHMSA's Associate Administrator for Pipeline Safety, Jeffrey D. Wiese:

> When these rules were first promulgated in 1970, PHMSA recognized that an operator may not have all the pressure data needed for existing pipelines. Therefore, we included in the rules a "grandfather clause" to allow pipeline operators to establish the MAOP of an existing pipeline segment in satisfactory condition, and considering its operating and maintenance history, at the highest actual operating pressure to which the segment was subjected during the 5 years prior to July 1, 1970. This "grandfather clause" is codified in § 192.619(c) . . .[17]

Mr. Wiese's correspondence is consistent with PHMSA's formal instruction to operators in establishing MAOP:

> For transmission pipelines, under certain circumstances a design pressure limit (or lack of information on which to set a design pressure limit) may be overridden by Part 192.619(c). This regulation allows systems components installed prior to July 1, 1970, to remain in service at the same pressure they were subjected to between July 1, 1965, and June 30, 1970, even if that pressure exceeds the pressure rating for the component. If that is the case,

[16] 49 C.F.R. § 192.619(a).
[17] Ex. OSC-13 (March 17, 2008 letter from Jeffrey D. Wiese to Dennis Fothergill).

the historic operating pressure may be used to set the MAOP in lieu of the design pressure.[18]

California pipeline operators must follow the federal pipeline safety regulations, as adopted and supplemented by the Commission. The Commission has largely adopted the federal regulations through General Order 112-E, and has imposed additional requirements from time to time. In D.11-06-017, the Commission determined that California gas utilities may not continue to rely on § 192.619(c) to establish the MAOP of pipelines based solely on their historical operating pressure.[19] Instead, all pre-1970 pipelines without records of past pressure tests must be strength tested to validate the historical operating pressure, or replaced.[20] As an interim measure and to help prioritize the testing and replacement schedule, the CPUC further ordered PG&E to complete its MAOP determination based on calculations using engineering-based assumptions for pipeline components where complete strength test records were not available.[21]

PG&E's MAOP Validation process reviews records to determine the pipeline's historic operating pressure, identifies the maximum pressure established by a qualifying strength test, and uses records and conservative engineering assumptions to calculate the component MAOP of each pipeline feature. For all pipelines (including those built before 1970) PG&E sets the MAOP at the lowest value of the calculated pressure of the weakest component in the line, the pressure allowed by a qualifying hydro test, and the historic operating pressure. While D.11-06-017 allows an operator to restore MAOP to the historic operating pressure once the pipe is successfully strength tested, PG&E has chosen to implement the additional conservative step of

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[18] Ex. OSC-12 (Determination of Maximum Allowable Operating Pressure in Natural Gas Pipelines) (emphasis added).
[19] D.11-06-017 at 18.
[20] D.11-06-017 at 18 n.22 ("We approve using the calculated MAOP to lower operating pressure as an interim measure pending replacement or testing.").
[21] D.11-06-017 at 27 ("MAOP determined by component calculation is useful for prioritizing segments for interim pressure reductions and replacement or pressure testing, but MAOP determined in this manner is not reliable enough for permanent pipeline operations.")

limiting MAOP to the calculated component pressure, even if the line is subsequently strength tested.[22]

While the records issues on Line 147 resulted in PG&E lowering the MAOP to the newly calculated component pressure, the 365 psig MAOP did not violate state or federal regulations. Line 147 was initially constructed prior to implementation of federal pipeline safety regulations in 1970, and lacks traceable, verifiable, and complete pipeline specification and historical hydrostatic strength test records for every pipeline feature. Under the federal regulations, PG&E did not possess the records required to establish MAOP under § 192.619(a). PG&E therefore followed § 192.619(c) and established Line 147's MAOP at the historic operating maximum pressure of 400 psig. However, PG&E must also follow the Commission's prohibition against reliance solely on historical operating pressure to establish MAOP. PG&E successfully strength tested Line 147 in 2011 to pressures in excess of 600 pounds, validating the historic MAOP of 400 psig under D.11-06-017. PG&E's own policy, however, limits MAOP to the lowest of component, test, and historic operating pressure, which in this case is 330 psig.[23]

IV. CONCLUSION

This proceeding has developed an ample record to conclude that PG&E has demonstrated the safety of the Pressure Restoration Lines at their respective MAOPs. PG&E validated the integrity of the Pressure Restoration Lines through hydrostatic strength testing. The safety of

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[22] TURN argues that PG&E is legally required to use the lowest of design and test MAOP for pipe installed prior to the 1970s. TURN OB at 7 n.16. TURN's argument is incorrect and outside the scope of this OSC. Even if this issue were within the scope, PG&E's policy is consistent with TURN's position.

[23] ORA objects to PG&E's use of assumed pipeline specifications derived from the Company's historic procurement practices rather than the minimum SMYS value for unknown pipe used on new pipelines contained in 49 C.F.R. § 192.107. ORA OB at 16. Section 192.107 is found in Subpart C – Pipe Design, one of the sections of the code that does not retroactively apply to pipelines designed and installed prior to implementation of the federal regulations in 1970. Ex. OSC-14 (OPS List of Retroactive and Non-Retroactive Subparts of Pipeline Safety Laws and OPS Pertinent Contacts). As ALJ Bushey pointed out, PG&E's "approach to the unknowns has been approved at least twice by the Commission." R.T. 2723.

these lines was confi rmed by SED, a view shared by Michael Rosenfeld of Kiefner and Associates. This proceeding, which has included hundreds of discovery requests, multiple days of cross examination and a workshop where PG&E provided unfettered access to its pipeline and hydrostatic strength test documentation, has revealed no further records discrepancies on the Pressure Restoration Lines and no legitimate reason to question the safe operation of those lines. Accordingly, PG&E respectfully requests that the Commission affirm the pressure restoration orders.

Respectfully submitted,

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