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)

OPENING COMMENTS OF THE CITY AND COUNTY OF SAN FRANCISCO ON ADMINISTRATIVE LAW JUDGE BUSHEY'S PROPOSED DECISION MANDATING PIPELINE SAFETY IMPLEMENTATION PLAN, DISALLOWING COSTS, IMPOSING EARNINGS LIMITATIONS, ALLOCATING RISK OF INEFFICIENT CONSTRUCTION MANAGEMENT TO SHAREHOLDERS, AND REQUIRING ON-GOING IMPROVEMENT IN SAFETY ENGINEERING

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November 16, 2012

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- The Proposed Decision errs by adopting a flawed decision tree analysis. PG&E's Decision Trees should perform a risk analysis of manufacturing and construction defects for DSAW pipe, and for cyclic fatigue.
- The Proposed Decision fails to correct the fact that the PSEP does not use the most accurate information available.
- The Proposed Decision fails to correctly apply the burden of proof.
- The Proposed Decision fails to adequately account for PG&E's imprudence in rates.
- The Proposed Decision should be modified to provide for an independent monitor to ensure the psep is effectively managed.

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I. INTRODUCTION

Pursuant to the Commission's Rule of Practice and Procedure Rule 14.3, the City and County of San Francisco (CCSF) submits these comments on the Proposed Decision of Administrative Law Judge Bushey (Proposed Decision).

The Proposed Decision contains many strong findings indicating the Pipeline Safety Enhancement Plan (PSEP or Implementation Plan) is necessary to remediate PG&E's historic failure to conduct its gas operations in a reasonable and prudent manner in compliance with safety standards. Specifically, the Proposed Decision properly recognizes that significant problems in PG&E's performance allowed the San Bruno explosion to occur and created the need for the intensive effort now underway to examine and repair PG&E's gas pipeline system and operations. Yet, the Proposed Decision fails to hold PG&E financially accountable for creating the need for the "extraordinary safety investments," glosses over critical issues, and ultimately fails to adequately ensure public safety and reasonable rates.

The Proposed Decision should also be more forthcoming. The first sentence of the Proposed Decision states that PG&E must "continue its work towards becoming a safe natural gas transmission system operator." This statement implies, but fails to explicitly state, what is obvious from the record in this proceeding--that PG&E has not been and is not now such an operator. In a similarly delicate fashion, the Proposed Decision describes PG&E's proposed Implementation Plan as "a promising start at developing a coherent engineering-based analysis and decision-making process for pipeline safety improvement." In other words, PG&E currently lacks such a process, which is the basis of pipeline safety. PG&E is a public utility that has been earning substantial revenues operating a gas system for decades. PG&E's ratepayers and the public have the right to expect more than "a promising start." The Proposed Decision does not serve the public well by carefully avoiding the plain statement of this and other key facts.

In order to make sure that safety is a top priority for PG&E, the Commission should adopt a decision that plainly identifies PG&E's past safety problems that are clear from the record and that

¹ Proposed Decision at p. 2.

² *Id.* at p. 48.

holds the company financially accountable for the decades of poor operation and management of its gas pipelines. This Proposed Decision fails on both of these accounts. As the Proposed Decision states, both this Commission and PG&E must learn from the mistakes of the past. In order to do so, and to engender the trust of the public, the Commission should modify the Proposed Decision in order to be consistent with the record on both safety and cost issues, and prove that this is "only the beginning of a permanent change in operations, attitude, and perspective, for both PG&E and this Commission."

The Proposed Decision errs technically, factually and legally by: (1) approving Decision Trees with incomplete analysis, (2) approving a program that does not use the best available information and analysis, (3) misapplying the burden of proof in this proceeding, (4) failing to sufficiently account for PG&E's imprudence in rates, and (5) failing to establish appropriate oversight and accountability mechanisms.

II. DISCUSSION

A. The Proposed Decision Errs By Adopting A Flawed Decision Tree Analysis.

The Proposed Decision finds that "PG&E's Decision Tree analysis is a promising beginning of a comprehensive decision-making process based on safety concerns related to historical pipeline manufacturing, fabrication and testing practices." It is error, however, for the Proposed Decision to approve "promising beginnings" of analysis when public safety is at risk. The record is clear that the Decision Tree analysis is essentially unchanged from when PG&E first proposed the Decision Trees as part of Pipeline 2020. Surprisingly, the Proposed Decision fails to mention this fact or even mention the Pipeline 2020's relationship to the PSEP at all. The Proposed Decision also ignores the fact that the Commission's Independent Review Panel described Pipeline 2020 as "grossly underdeveloped,"

³ *Id.* at p. 44.

⁴ *Id.* at p. 51.

⁵ See Cross Examination Exhibits 33 (CCSF Data Request 005-03 "the Decision Trees [for the valve automation program] included in the PSEP filing are identical to those developed by Pipeline 2020, as are the 80 identified Phase 1 project sites for valve automation work") and Exhibit 34 (CCSF Data Request 005-05 PG&E made "only minor adjustments to the program from the completion of development as part of Pipeline 2020 to the PSEP Implementation Plan filing.").

⁶ Independent Review Panel Report at p. 17.

"lack[ing] sufficient analysis," and "not well reasoned or based on a thoughtful examination of alternatives."

In addition, the Proposed Decision errs by approving a Decision Tree analysis that does not address potential manufacturing defects in Double Submerged Arc Welded (DSAW) pipe. The NTSB made clear that PG&E had an extensive history of weld failures on its pipelines, including "at least four longitudinal seam weld cracks found during radiography or the girth welds as part of the 1948 construction of Line 132 that were allowed to remain in service." The NTSB also presented a table containing a list of seam leaks or failures in PG&E's system dating back to 1948. At least six of these leaks and failures occurred in DSAW pipe. Based on these findings, the CPSD Report into the San Bruno explosion found that "PG&E's procedure should have considered the category of DSAW as one of the weld types potentially subject to manufacturing defects, and subject to Part 192.917(e)(3)." Yet, the PSEP contains no specific risk analysis addressing manufacturing and construction defects on DSAW pipe. The Commission should modify the Proposed Decision to require PG&E to perform a risk analysis of manufacturing and construction defects for DSAW pipe.

The Proposed Decision also errs by failing to address PG&E's own cyclic fatigue analysis of pipeline segments on the San Francisco Peninsula. The report, ¹¹ prepared for PG&E by PG&E's own witness Rosenfeld, analyzes the effects of pressure-cycle-induced fatigue-crack growth and contains an expected time to failure analysis for Lines 101, 109, and 132. While the report is very technical, it is highly relevant to the schedule and priorities of PSEP, the prudency of PG&E's historic operations, and the overall safety of PG&E's gas pipeline system. Yet, the Proposed Decision does not address how or whether the safety issues identified in the report are being remedied by the PSEP or whether they have been remedied already.

⁷ *Id.* at p. 13.

⁸ NTSB Report at p. 111.

⁹ *Id.* at p. 39.

¹⁰ CPSD San Bruno Report at pp. 41-42.

¹¹ The report and accompanying data response were admitted into the evidentiary record as Exhibit 156 in ALJ Bushey's June 28, 2012 Ruling Granting Unopposed Motions.

The report raises concerns that some potentially large cracks appear to be reaching levels that threaten the integrity of PG&E's pipelines. It finds that that "applying the safety factor to the L 109 fatigue predictions and beginning at the time the pipe was installed, the PG&E-grade pipe would be expired (the pipe was tested in 1936 and the recommended interval as half of the 139-year fatigue life, 70 years, would place reassessment in the year 2006)." In other words, using conservative assumptions, *the reassessment interval for segments of Line 109 expired in 2006*, and PG&E should have already assessed the historic vintages on Line 109.

Table 1 in that report lists the expected time to failure for segments on Line 101, 109 and 132. The last column of that table "Mill Test Time to Failure, years" should be divided by two to apply the safety factor of two, as referenced above. Based on this table, and using the safety factor of two, the reassessment interval for some segments of Line 132 *expired in 1978*, and the *estimated time to failure expired in 2008*. If PG&E has not prioritized and addressed these segments already they present substantial safety risks.

Table 3 of the Report lists "Estimated Years to Failure for other Segments of L132 Based on a Pressure Reduction." Table 3 notes that if PG&E reduces the pressure to 350 psig for 36 inch pipeline segments on Line 132 with DSAW seams, the estimated years to failure is 7.3 years (before the safety factor of two is applied). This means that with the safety factor, the time to failure for these segments with the proposed pressure reduction is 3.65 years. It is unclear how many years remain if PG&E does not reduce the pressure. In light of these findings, the Commission must ensure that the segments identified as needing urgent assessment are addressed in Phase I of the PSEP, or if they are not included in the PSEP, that PG&E performs these assessments urgently and solely at shareholder expense.

¹² The Report applies a safety factor of two to its analysis. "A safety factor of two (2) has generally been recommended for determining reassessment intervals for the seam-fatigue threat in liquid pipelines for analyses based on test pressure. In other words, reassessment is recommended at half of the predicted time to failure and the reassessment interval begins at the time of hydrostatic test used in the fatigue calculation." Exhibit 156 (PG&E Cyclic Fatigue Report for Peninsula Transmission Lines) at p. 2.

¹³ *Id.* at p. 7.

¹⁴ *Id*.

The Proposed Decision errs by approving PG&E's Decision Tree analysis rather than requiring substantive improvements to that analysis based on the public record in this proceeding. While these saplings of analysis might be useful beginnings, it is imprudent for the Commission to approve this immature analytical framework in light of the safety implications and large costs associated with the work. The Proposed Decision should be modified to addresses the presence of manufacturing defects on DSAW pipeline segments and the threats posed by cyclic fatigue.

B. The Proposed Decision Fails To Correct The Fact That The PSEP Does Not Use The Most Accurate Information Available.

The Proposed Decision errs by approving a plan that does not use the best information available. Just as the PSEP is flawed because it does not incorporate the most recent analysis described above, the PSEP is equally flawed because it does not use most the accurate information to plan and prioritize the safety projects to be performed. When developing the priorities for the PSEP, PG&E relied on its existing, records system, even though the inadequacy of those records has been well-documented. In addition to the obvious safety implications of this decision, planning a multibillion dollar program using faulty data is patently unreasonable. The NTSB reviewed PG&E's GIS system and found that "in many cases, PG&E used assumed values for key pipeline parameters. The records also included many obvious errors in key pipeline parameters, including but not limited to seam type, SMYS, and depth of cover." Based on these inaccuracies, the NTSB expressed "concern[] that the PG&E GIS still has a large percentage of assumed, unknown, or erroneous information for Line 132 and likely its other transmission pipelines as well." Further, the investigation into PG&E's record keeping investigation has revealed thousands of corrections to PG&E's GIS database since 2010.

There is no reason for PG&E to continue to rely on this inaccurate information. Since March 2011, PG&E has been developing a database of its pipeline features as part of its MAOP validation work. As of December 31, 2011, PG&E had completed its MAOP validation for 1,805 miles of

¹⁵ Exhibit 2 (PG&E Direct Testimony) at pp. 3-18:31-3-19:28.

¹⁶ NTSB Report at p. 108.

pipeline segments identified in class 3 and 4 locations as well as class 1 and 2 high consequence areas. In addition, as of January 2012, PG&E completed the MAOP validation for an additional 283 miles reclassified as being class 3 and 4 and class 1 and 2 high consequence areas. Despite having these updated, presumably accurate records, PG&E is not using this data in its Decision Trees.

At a minimum, the Proposed Decision should order PG&E to re-run the Decision Trees with the verified data to ensure that the scope of work proposed is complete and that the prioritization of work is proper. PG&E's use of GIS data potentially hinders prioritization of the most pressing work. Given that Phase I was developed using inaccurate data, the Commission and the public can have little confidence that the most pressing projects are undergone first.

C. The Proposed Decision Fails To Correctly Apply The Burden Of Proof.

While the Proposed Decision correctly states that PG&E has the burden of affirmatively establishing the reasonableness of all aspects of its application, ¹⁷ the analysis does not require PG&E to meet that burden, and instead shifts it to other parties. This is unlawful and contrary to decades of precedent established by the Commission. ¹⁸

This error is plain in the Proposed Decision's analysis of whether PG&E's requested Implementation Plan costs should be disallowed because a prudent operator would have already made the improvements proposed in the plan. The Proposed Decision concludes that the costs should not be disallowed on that basis, but that "such management imprudence does provide an evidentiary basis for a reduction in Return on Equity due to management ineptitude." If appropriately implemented, as discussed in the next section below, this can be a reasonable approach to the kind of widespread imprudence presented here. But the analysis in the Proposed Decision on the potential disallowance of Implementation Plan costs is legally and factually wrong and ignores PG&E's failure to meet its burden of proof in the record.

¹⁷ Proposed Decision at p. 42.

¹⁸ The Proposed Decision footnotes 31 and 32 cite D. 09-03-025 and D. 08-12-058, both of which correctly discuss this issue.

¹⁹ Proposed Decision at p. 55.

First, the Proposed Decision notes that TURN failed to show that PG&E already received funding for these activities. That question turns the burden of proof upside down. The correct question should have been whether PG&E showed that its request is reasonable by, among other things, showing that it did not receive such funding already. In many prior decisions, the Commission has noted that it is not up to other parties to prove the unreasonableness of the utility's request. In this instance, PG&E did not demonstrate that the costs it sought to recover were "incremental" and therefore reasonable, even though that is what it claimed. PG&E presented only the most cursory analysis, limited to funding it received in the last Gas Accord proceeding. The property of the property of the last Gas Accord proceeding.

Second, the Proposed Decision finds that "PG&E's ratepayers have not been subject to unreasonable costs; rather, as a result of needed but not performed safety improvement projects, ratepayers ended up paying rates lower than may have been reasonable due to the absence of the needed projects."²⁴ There is no evidence the record to support that finding. The Proposed Decision *speculates* that ratepayers paid lower rates than they would otherwise have paid if PG&E had been doing the safety work it needed to do.²⁵ The Commission cannot assume this simply because other parties did not show the contrary. This unsupported speculation that ratepayers have been paying lower rates should be deleted from the Proposed Decision.

Similarly, the Proposed Decision misapplies the burden of proof in its treatment of Interim Safety Measures and costs for Program Management of the Implementation Plan. The Proposed

²⁰ *Id.* at p. 54.

²¹ Under Public Utilities Code § 451, the Commission has the obligation to ensure that ratepayers are paying only reasonable charges whether or not TURN or any other party successfully questions the costs.

²² See, e.g., D. 08-12-058 at p. 18; and D. 06-05-016 at p. 7. (The utility "has the burden of affirmatively establishing the reasonableness of all aspects of its application. Intervenors do not have the burden of proving the unreasonableness of [the utility's] showing.").

²³ Exhibit 2 (PG&E Direct Testimony Ch. 3-32 and 3-38). Even this limited comparison, however, is inapt as the record clearly demonstrates that PG&E's historic operations were deficient. The more proper comparison is to what should have been done has PG&E been complying with all relevant safety standards.

²⁴ Proposed Decision at p. 55.

²⁵ The only support for this conclusion offered by the PD is footnote 44, which posits a hypothetical case.

Decision approves both of these items because "No party objected." The Proposed Decision skips two steps here. First, it fails to ask whether PG&E demonstrated that the proposed costs are reasonable. Second, it makes no findings exercising the Commission's independent obligation to review the proposed costs and determine that they are in fact reasonable in light of the record.

D. The Proposed Decision Fails to Adequately Account for PG&E's Imprudence in Rates

The Proposed Decision correctly finds that the Commission has the authority and the obligation to adjust PG&E's rate of return on equity to reflect the widespread imprudence of the company's management decisions.²⁷ Yet the Proposed Decision adopts a modest adjustment to the return on equity that does not adequately reflect the nature and extent of PG&E's imprudence. Given the Proposed Decision's findings that "the record shows that the need to do this amount of testing and replacement on an 'urgent' basis has been caused, in part, by PG&E's mismanagement of its natural gas transmission system over multiple decades" and that "the majority of pipeline to be tested and replaced has been part of PG&E's system for decades, and the safety value of pressure testing has similarly been well-known for decades," the proposed five-year reduction of return on equity is unreasonable for ratepayers. The Proposed Decision should modify to period of reduction to be commensurate with the decades of historic mismanagement. Ratepayers deserve to know that PG&E will not allowed to profit from its historic mismanagement.

1. The Urgent Need For Testing And Replacement Is A Prime Example Of Historic Mismanagement.

As the Proposed Decision recognizes, PG&E "let its natural gas transmission system deteriorate to the point where the Commission was required to order a massive and relatively short-term testing and replacement plan."³⁰ The rush to test and replace pipeline is the clearest reflection of

²⁶ *Id.* at p. 80.

²⁷ Proposed Decision at p. 107.

²⁸ *Id.* at p. 101.

²⁹ *Id*.

³⁰ *Id.* at p. 102.

PG&E's historic mismanagement. Clearly, many of the older pipeline segments PG&E now proposes to test or replace should have been addressed as part of its ongoing pipeline operations and maintenance. As CCSF witness Gawronski testified, in the PSEP, PG&E proposes to perform the same actions already required by the federal regulations, but that "pipe should not be counted as being under both the existing [Transmission Integrity Management Program (TIMP)] and under the proposed Implementation Plan." In fact, Mr. Gawronski was able to calculate that 86% of the PSEP's proposed pressure testing costs on the San Francisco Peninsula lines would have already been incurred if PG&E had faithfully been following the TIMP rules.

Moreover, on cross-examination, PG&E witness Bottorff acknowledged PG&E only realized after it had submitted the PSEP in August 2011, that PG&E should have been performing some of the same testing and replacement under TIMP. He also conceded that PG&E shareholders should bear the costs of that work.

"the PSEP application included work that had not yet contemplated the integrity management work that would be performed in 2012. Once we identified integrity management work to be performed in 2012, and recognized that portions of it overlap with what had originally been proposed in the PSEP, we agreed that the work that proposed in the PSEP would be funded by our shareholders for that portion of the integrity management work that would be completed in 2012."³³

While the Commission cannot determine exactly how many other projects should have already been performed without a complete record in the three investigations, the record is still very clear that PG&E's TIMP was historically deficient, and that PG&E did not take all necessary actions.³⁴ Indeed, the Proposed Decision states "[t]he record also shows serious deficiencies in PG&E's Integrity

³¹ Exhibit 137 (CCSF Testimony) at p. 10-11.

³² *Id.* at p. 16.

³³ OIR Tr. Vol. 9 at p. 944:11-22 (Bottorff).

³⁴ See Proposed Decision at pp. 7, 8, 45, 51, and 74.

Management programs, some of which may be caused by the unreliability of its quality control and field oversight."³⁵ Given the extraordinary imprudence evident in PG&E's handling of its TIMP, the Commission should modify the Proposed Decision to extend and even further reduce the return on

E. The Proposed Decision Should Be Modified To Provide For An Independent Monitor To Ensure The PSEP Is Effectively Managed.

Given the long and tedious road that will be required to make PG&E a "safe" company, extraordinary steps are necessary. It has become all too clear during the course of these proceedings that the Commission cannot rely solely on PG&E to do achieve this goal. Both the NTSB and the Independent Review Panel have criticized the Commission's oversight of PG&E. To ensure public confidence in the work being performed, the Commission should modify the Proposed Decision to provide for an independent monitor that will provide periodic audits to the public.

III. CONCLUSION

equity.

The Commission should modify the Proposed Decision as set forth above.

Dated: November 16, 2012 Respectfully submitted,

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³⁵ *Id.* at p. 52.

Appendix A

Proposed Findings of fact:

- The record is clear that the Decision Tree analysis is essentially unchanged from when PG&E first proposed the Decision Trees as part of Pipeline 2020.
- The Commission's Independent Review Panel described Pipeline 2020 as "grossly underdeveloped," "lack[ing] sufficient analysis," and "not well reasoned or based on a thoughtful examination of alternatives."
- The NTSB made clear that PG&E had an extensive history of weld failures on its pipelines, including "at least four longitudinal seam weld cracks found during radiography or the girth welds as part of the 1948 construction of Line 132 that were allowed to remain in service."
- At least six of these leaks and failures occurred in DSAW pipe.
- PG&E prepared a report analyzing cyclic fatigue on the San Francisco Peninsula lines. The report analyzes the effects of pressure-cycle-induced fatigue-crack growth on the Peninsula pipelines and contains an expected time to failure analysis for Lines 101, 109, and 132.
- The report is highly relevant to the schedule and priorities of PSEP, the prudency of PG&E's historic operations, and the overall safety of PG&E's gas pipeline system.
- The report raises concerns that some potentially large cracks appear to be reaching levels that threaten the integrity of PG&E's pipelines.
- Using conservative assumptions, the period for reassessment/expected time to failure for some segments of Lines 101, 109 and 132 have already expired.
- NTSB reviewed PG&E's GIS system and found that "in many cases, PG&E used assumed values for key pipeline parameters. The records also included many obvious errors in key pipeline parameters, including but not limited to seam type, SMYS, and depth of cover." Based on these inaccuracies, the NTSB expressed "concern[] that the PG&E GIS still has a large percentage of assumed, unknown, or erroneous information for Line 132 and likely its other transmission pipelines as well."
- The Commission's own investigation into PG&E's record keeping investigation has revealed thousands of corrections to PG&E's GIS database since 2010.
- As of December 31, 2011, PG&E had completed its MAOP validation for 1,805 miles of pipeline segments identified in class 3 and 4 locations as well as class 1 and 2 high consequence areas.
- Ratepayers deserve to know that PG&E will not allowed to profit from its historic mismanagement.
- Many of the pipeline segments PG&E now proposed to test or replace are located in High Consequence Areas (HCAs).

Proposed Conclusions of Law:

- The PSEP's Decision Tree analysis should address potential manufacturing defects in Double Submerged Arc Welded (DSAW) pipe.
- The Commission must ensure that the segments identified as needing urgent assessment are addressed in Phase I of the PSEP, or if they are not included in the PSEP, that PG&E performs these assessments urgently and solely at shareholder expense.
- The PSEP is flawed because it does not use most the accurate information to plan and prioritize the safety projects to be performed.
- Using faulty data is patently unreasonable, given the obvious safety implications and proposed costs of the PSEP.
- There is no reason for PG&E to continue to rely on this inaccurate information.
- PG&E's use of inaccurate GIS data potentially hinders prioritization of the most pressing work. Given that Phase I was developed using inaccurate data, the Commission and the public can have little confidence that the most pressing projects are undergone first.
- PG&E did not demonstrate that the costs it sought to recover were "incremental" and therefore reasonable, even though that is what it claimed. PG&E presented only the most cursory analysis, limited to funding it received in the last Gas Accord proceeding.
- Given the historic and ongoing nature of the imprudence and mismanagement, and the long term remedial program that the Proposed Decision describes, the proposed five-year reduction of return on equity is unreasonable for ratepayers.