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)

RESPONSE OF THE UTILITY REFORM NETWORK

TO PG&E MOTION FOR APPROVAL OF

MAOP VALIDATION METHODOLOGY

Marcel Hawiger, Energy Attorney

THE UTILITY REFORM NETWORK
115 Sansome Street, Suite 900
San Francisco, CA 94104
Phone: (415) 929-8876 ex. 311
Fax: (415) 929-1132
Email: marcel@turn.org

April 29, 2011

TABLE OF CONTENTS

RESPONSE OF THE UTILITY REFORM NETWORK TO PG&E MOTION FOR APPROVAL OF MAOP VALIDATION METHODOLOGY

Pursuant to Rule 11.1 and to the schedule set by Administrative Law Judge Bushey in her Ruling of April 25, 2011, the Utility Reform Network (TURN) submits this reply to the "Pacific Gas and Electric Company's Motion for Adoption of a Maximum Allowable Operating Pressure Validation Methodology and Request for Order Shortening Time to Respond," filed on April 21, 2011.

I. SUMMARY OF PG&E's REQUEST

PG&E requests that the Commission approve its proposed methodology for validating a pipeline's maximum allowable operating pressure ("MAOP") based on available pipeline records and certain assumptions regarding pipeline components. PG&E notes that it had described this methodology for performing a "records-based MAOP validation" in its March 21, 2011 Supplement filed in this proceeding, as well as in the Compliance Plan submitted with the March 24th Stipulation between PG&E and the Commission's Consumer Protection and Safety Division (CPSD). PG&E had used the methodology in its draft MAOP validation report for Lines 101 and 132-A.

PG&E cautions that its proposed validation methodology includes a process for "making assumptions about certain components," because it is highly unlikely that PG&E will locate traceable, verifiable and complete records for *all* pipeline components. PG&E concludes that it "does not believe that it – or any pipeline operator – can validate older pipeline MAOPs through a records

approach" if the Commission requires a "100% perfect document chain" for every pipeline component, including the pipe itself as well as associated vlaves, fittings, bends, etc. (p. 5)[1]

PG&E thus asks the Commission to adopt PG&E's proposed MAOP validation methodology which includes making assumptions regarding certain components when complete records cannot be found. These assumptions are based on historical knowledge concerning the types of components available on the market during the installation timeframe and PG&E's materials procurement practices, engineering judgment and limited field testing if necessary. (p. 4)

PG&E concludes that "a record-based MAOP validation approach that accepts only a 100% perfect document chain is not feasible. The only alternative to a records-based MAOP validation is a pressure test." PG&E asserts that if the Commission does not approve PG&E's methodology, it will need to pressure test or replace all 705 miles of HCA pipeline over the next five years.

II. TURN SUPPORTS THE POSITION OF CPSD IN ITS APRIL 26 RESPONSE LETTER

PG&E states that "it is not clear that the [Commission] staff agrees with PG&E's proposed methodology or that they believe any records-based MAOP is an adequate substitute for hydrostatic testing." (p. 5) Indeed, the April 26, 2011 letter from Richard Clark, Director of CPSD, to Kirk Johnson of PG&E explains that staff does not believe any MAOP validation process should use assumptions or indirect evidence. The letter also appears to reject the use of any record-based

[1] All pages numbers refer to the PG&E Motion if not otherwise identified.

method for setting the MAOP for segments "which have never been hydro-tested."[2]

Mr. Clark goes on, however, to conclude that the search for records and the determination of MAOP's using PG&E's proposed methodology is still useful for prioritizing future testing and inspection work.

TURN supports the conclusions in Mr. Clark's August 26 letter. Indeed, if the following comments appear to be redundant, it is because our response to PG&E had closely paralleled the position provided by staff on April 26.

III. A RECORDS-BASED MAOP VALIDATION SHOULD ONLY SERVE TO INFORM FUTURE TESTING, INSPECTION AND REPAIR WORK

There are really two key issues in PG&E's motion. One is whether any records-based MAOP validation is sufficient to address public safety. The second is whether assumptions concerning pipeline characteristics are appropriate to conduct a records-based MAOP assessment.

A. Even a 100% Perfect Document Chain Cannot Identify Defective Welds

The first key question is really whether a records-based MAOP evaluation provides adequate assurance of safety. Such a process is apparently authorized pursuant to federal regulations; however, those regulations require other testing and do not approve any "assumptions" or the Pipeline Features List process

[2] The letter is not crystal clear on this point; but strongly implies that Staff agrees that PG&E will eventually need to hydrotest or replace all 705 miles of HCA pipeline.

being proposed by PG&E.[3] The NTSB issued an urgent safety recommendation directing that PG&E use "traceable, verifiable and complete records" to determine an MAOP "based on the weakest section of the pipeline or component." (NTSB Safety Recommendation P-10-3). The NTSB's recommendation was based in part on the fact that PG&E's GIS system contained erroneous information concerning pipeline 132.

However, the NTSB also apparently found potential defective welds in pipeline 132.[4] This finding implicates the big elephant in the room. Even if PG&E locates adequate records for a records-based MAOP validation, can we have sufficient assurance that the actual pipeline characteristics comport with the records? In other words, even a perfect records chain would not provide any information concerning defective welds resulting from manufacturing defects or faulty installation.

For this reason TURN believes that staff's concern about any records-based MAOP determination is warranted.

---

[3] See, 49 CFR 192.619(a)(1) allows use of "the design pressure of the weakest element in the segment" for setting the MAOP, but only if it is the lowest out of four possible numbers, including "the pressure obtained by dividing the pressure to which the segment was tested after construction."

[4] For example, NTSB Advisory, December 14, 2010 ("Investigators found that while the longitudinal seams on some of the pipe segments were fusion-welded from both inside and outside the pipe, some were fusion–welded only from the outside of the pipe.")

B. A Records-Based Validation Process May Provide Useful Data

TURN believes that PG&E will have to conduct additional pipeline testing, repair and/or replacement to ensure safe operations in the long run. However, we believe that further testing of the approximately 700 miles of HCA pipeline without pressure test records can be conducted over some reasonable amount of time and in an orderly fashion. It may very well be that a "records-based MAOP validation process" could be useful for prioritizing and defining this orderly process. Thus, we also strongly agree with the conclusion in the April 26 letter that there is merit to continuing the MAOP validation process as proposed by PG&E.

The issue should not be an "either/or" question of records-based MAOP validation versus hydrostatic testing. We believe that the results of the NTSB investigation, combined with further field testing by PG&E, may clarify the need for and role of "records-based MAOP validation" within the overall process of ensuring pipeline safety.

We anticipate that the result of this proceeding will be to adopt a plan for an orderly multi-year process of inspection, repair, testing and replacement that will ensure safe operation of the pipeline system. This process will require prioritization of activities. Pursuing a records-based MAOP validation process may have value for prioritizing pipeline segments for testing and/or replacement. Moreover, if subsequent data provide evidence that any weld

defects are strictly an isolated occurrence, for example due to a particular batch of pipe, the role of records-based MAOP validation may be reconsidered.

While we agree that it may not be worthwhile to pursue a records-based MAOP validation if the Commission finds the methodology completely suspect, we presume that there are safety benefits to completing the search for all pipeline records and conducting the records-based MAOP validation based on the resulting data. Nevertheless, the usefulness of pursuing the MAOP validation must be weighed against its costs. PG&E has testified that completing the entire records gathering and MAOP validation process will cost about one hundred million dollars.[5] It is unclear how much of this cost reflects purely the records search and gathering, and how much is due to the PFS validation process. If the validation process cost is minimal, it would be a "no regrets" strategy. However, if it costs tens of millions of dollars, the money would likely be better spent on testing and repair work.[6]

C. Assumptions May be Warranted Given a Limited Role for Records-Based MAOP Validation

The second key question is whether some assumptions concerning missing documents are a reasonable component of the validation process; and if yes, whether PG&E's actual proposal, as exhibited in the MAOP validation report for Lines 101 and 132-A, provides the appropriate method for making those assumptions.

---

[5] RT 140-141, March 28, 2011, Johnson/PG&E.

[6] The potential tradeoffs should be weighed in the context of an overall long-term plan for ensuring the integrity and safety of all pipelines.

PG&E's records indicate that it has pressure tested approximately 1,108 out of 1805 miles of pipeline in high consequence areas.[7] Thus, there remain approximately 785 miles of pipeline that may require testing; though PG&E's motion indicates that the Compliance Plan addresses 705 miles of pipeline.[8]

While TURN cannot provide an expert opinion at this time, we assume it is likely that some records may be missing for pipelines installed prior to 1970 or 1961, when record-retention regulations were implemented. While the focus has been on PG&E's inadequate records, especially as reflected in their GIS system, the Sempra Utilities stated that approximately 27% of their 1,622 miles of HCA pipeline "require additional analysis and action to verify the stability of the long seam at the pipeline segment's MAOP."[9] It is also possible that the impact of incomplete or inadequate records may be different depending on whether the missing records pertain to pipeline segments or additional pipeline components (fittings, elbows, joints, etc.).

If the records-based MAOP validation is done primarily to assist subsequent testing and repair activities, TURN would support PG&E's methodology for incorporating assumptions concerning missing evidence. If the

[7] PGE Report, March 15, 2011, p. 13. The table indicates that PG&E has located complete pressure test records for 1,018 miles, and partial records for an additional 133 miles.

[8] TURN has asked PG&E to clarify these numbers.

[9] Sempra Report, April 15, 2011, p. 11. TURN is unclear on how exactly Sempra's categorization relates to the federal MAOP validation and records retention regulations.

intent, however, were to use records-based validation as the primary and only means to set the MAOP, then TURN strongly opposes PG&E's proposal.

TURN was willing to support the Stipulation based on the explicit role of Commission staff in reviewing the methodology. The Commission could alternatively provide for some independent review – whether by staff, the Independent Review Panel, or some other group of outside experts – of the assumptions concerning pipeline elements. This is not a standard off-the shelf method, and there should be some independent corroboration of the procedure.

IV. CONCLUSION

In essence, TURN believes that there is value to pursuing the records-based MAOP validation with assumptions, as long as such a validation process is only a part of the eventual testing process for MAOP validation and integrity assessment. We believe that the proper role of MAOP validation is an issue that should continue to be addressed as we gain more information and move forward to ensure the safety of the entire pipeline system.

April 29, 2011

Respectfully submitted,

By: _____/s/_____
Marcel Hawiger, Energy Attorney

THE UTILITY REFORM NETWORK
115 Sansome Street, Suite 900
San Francisco, CA 94104
Phone: (415) 929-8876, ex. 311
Fax: (415) 929-1132
Email: marcel@turn.org