PREPARED TESTIMONY OF THOMAS J. LONG ON COST RESPONSIBILITY ISSUES

PIPELINE SAFETY RULEMAKING

R. 11-02-019

THE UTILITY REFORM NETWORK (TURN)

115 Sansome Street, Suite 900 San Francisco, CA 94104 Telephone: (415) 929-8876 x303 E-mail: TLong@turn.org

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I. INTRODUCTION AND SUMMARY

This testimony addresses the apportionment, between the shareholders of Pacific Gas and Electric Company("PG&E") and the utility's ratepayers, of responsibility for the costs of PG&E's proposed Pipeline Safety Implementation Plan ("Implementation Plan" or "Plan") Put another way, the testimony deals with the issue of how much of the Plan's costs should be recovered from ratepayers and how much should be disallowed from rate recovery.

The testimony begins with a discussion of the various principles that the Commission should use to determine cost responsibility. One of the key determinants of cost responsibility is whether errors or omissions by PG&E contribute to the need for various projects in the Plan for which PG&E seeks cost recovery. As will be explained, the Commission does not yet have a complete record of all of PG&E's errors and omissions in the operation of its gas transmission pipeline system and how those failings may have contributed to the need for the programs and projects in the Plan. Accordingly, it is too early to offer a final quantified recommendation on cost apportionment.

The testimony then applies some of the recommended principles to the different elements of PG&E's Plan. In addition to some more specific recommendations, one general recommendation emerges: Because of the many errors or omissions by PG&E that have already been documented and that continue to be investigated and analyzed, and because these failings may contribute to most, if not all, of PG&E's Plan, ratepayers should not be required to pay for any work under the Plan until PG&E has demonstrated -

1	- and the Commission has found that the need for such work is not the direct or indirect
2	result of an error or omission by PG&E. At this point, there is a serious question
3	whether any of PG&E's proposed costs for pipeline replacement, pipeline testing
4	and record-keeping should be recovered from ratepayers.
5	The testimony concludes with TURN's recommendation that, in light of the well-
6	documented findings that PG&E management has long elevated profits over safety,
7	PG&E should not be allowed to collect a profit on its Plan expenditures. Instead,
8	PG&E's rate of return on such expenditures should be limited to PG&E's cost of debt.
9	At PG&E's current cost of debt, this single adjustment would reduce PG&E's recovery of
10	capital costs by approximately 26% over the life of the assets.
11	This testimony should be considered in conjunction with the accompanying
12	testimony of William Marcus of JBS Energy, Inc. and of Richard Kuprewicz of
13	Accufacts, Inc. Mr. Marcus presents additional specific recommendations related to the
14	cost responsibility issue. In addition to a detailed analysis of PG&E's Plan from the
15	standpoint of ensuring safety, Mr. Kuprewicz assesses some of the conduct of PG&E and
16	identifies some of the ways in which PG&E's errors or omissions have contributed to the
17	need for the Implementation Plan. A summary of all of TURN's recommendations
18	concerning the cost responsibility issue is attached to this testimony as Appendix A.
19	This testimony is presented by Thomas J. Long, TURN's Legal Director. A
20	summary of his qualifications is attached as Appendix B.
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II. PRINCIPLES FOR APPORTIONING COST RESPONSIBILITY

- TURN recommends that the Commission follow the following principles in
- 3 apportioning costs under PG&E's Implementation Plan. These principles are equally
- 4 applicable to the Phase 1 activities and costs presented in PG&E's August 26, 2011
- 5 Prepared Testimony and the future, as-yet unspecified Phase 2 activities and costs.

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Disallowance of Costs Resulting from PG&E Errors or Omissions

- 8 Consistent with Public Utilities Code Section 463 and sound public policy, the
- 9 Commission "shall disallow" any direct or indirect costs resulting from unreasonable
- 10 errors or omissions in PG&E's management of its gas transmission pipelines, including
- the failure to prepare or maintain records necessary to "completely evaluate" the
- reasonableness and prudence of any proposed expenditure.² Errors or omissions should

- (a) For purposes of establishing rates for any electrical or gas corporation, the commission shall disallow expenses reflecting the direct or indirect costs resulting from any unreasonable error or omission relating to the planning, construction, or operation of any portion of the corporation's plant which cost, or is estimated to have cost, more than fifty million dollars (\$50,000,000), including any expenses resulting from delays caused by any unreasonable error or omission. Nothing in this section prohibits a finding by the commission of other unreasonable or imprudent expenses. This subdivision is a clarification of the existing authority of the commission, is not intended to limit or restrict any power or authority of the commission conferred by any other provision of law, and applies to all matters pending before the commission. This section does not prohibit the commission from establishing rates for an electrical or gas corporation on a basis other than an allowed rate of return on undepreciated capital costs.
- (b) Whenever an electrical or gas corporation fails to prepare or maintain records sufficient to enable the commission to completely evaluate any relevant or potentially relevant issue related to the reasonableness and prudence of any expense relating to the planning, construction, or operation of the corporation's plant, the commission shall disallow that expense for purposes of establishing rates for the

¹ In his testimony, Mr. Marcus presents additional reasons and grounds for shareholders to assume responsibility for certain Implementation Plan costs.

² Section 463(a) and (b) provide:

- 1 not just be limited to violations of specific rules (CPUC General Orders, federal
- 2 regulations, CPUC decisions, and applicable statutes), but also deviations from industry
- 3 standards and other imprudent behavior.
- 4 This requirement will be particularly important in apportioning the costs of
- 5 PG&E's Implementation Plan in light of the many findings of unreasonable actions or
- 6 inactions by PG&E that are already documented in the NTSB Report,³ the Independent
- 7 Review Panel Report,⁴ and in other reports that will be considered in pending
- 8 enforcement dockets,⁵ including the Commission's Consumer Protection & Safety
- 9 Division ("CPSD") Incident Investigation Report regarding the San Bruno explosion,⁶
- and the Overland Consulting Audit Report, ⁷ each of which is incorporated by reference.
- Of significant relevance to the proposed Plan expenditures, the documented errors and
- omissions include: inaccurate pipeline records; missing and incomplete records; tests,
- inspections, in-line inspection ("ILI") retrofits, pipeline replacement, or other work that
- was not done that should have been done; and negligent oversight of pipeline

corporation. This subdivision does not apply where the commission determines that a reasonable person could not have anticipated either the relevance or potential relevance, to an evaluation of costs incurred on the project, of preparing or maintaining the records or the extent of recordkeeping required to adequately evaluate those costs.

³ 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.

⁴ Report of the Independent Review Panel, San Bruno Explosion, Prepared for California Public Utilities Commission, revised copy, June 24, 2011.

⁵ The CPSD is scheduled to submit its report in the Records Keeping OII on March 5, 2012.

⁶ CPSD, Incident Investigation Report, September 9, 2010 PG&E Pipeline Rupture in San Bruno, California, released January 12, 2012.

⁷ Overland Consulting, Focused Audit of Pacific Gas & Electric Gas Transmission Pipeline Safety-Related Expenditures for the Period 1996 to 2010, submitted to CPUC CPSD, December 30, 2011.

1	manufacturing and installation.	Each of these types	of errors	or omissions	may	be a
2	contributing factor in Plan proje	ects that PG&E has p	roposed.			

PG&E Should Have the Burden of Proof

PG&E is seeking major rate increases for the work proposed in its Plan. Under Public Utilities Code Sections 451 and 454, PG&E has the burden of proving that it entitled to any rate increase. Combined with the requirements of Section 463, this means that PG&E has the burden of showing that its errors or omissions do not contribute to any expenditure it seeks to recover from ratepayers.

Ratepayers Should Not Pay a Second Time for Work That Was Not Done Right

Consistent with Section 463 and basic notions of fairness, ratepayers should not have to pay a second time for ratepayer-funded work that was not done right the first time. As one example, the Commission should not allow rate recovery for replacement of pipeline that was defective when installed (such as Segment 180 of Line 132) for which PG&E should have known of the defect. As another example, Mr. Kuprewicz points out that most of the external corrosion direct assessment work that PG&E performed under Integrity Management requirements was likely a waste of ratepayer money. The cost of any such waste of ratepayer funds should be deducted from any recovery of Plan costs that may be allowed.

⁸ TURN Kuprewicz Testimony, pp. 77-78.

1 2 3	Ratepayers Should Not Pay Again for Work They Previously Funded, But That Was Not Performed
<i>3</i>	Consistent with the Commission's past treatment of "deferred maintenance" in
5	rate cases, ratepayers should not have to pay for work that PG&E was previously funded
6	to do, but did not carry out. Mr. Marcus discusses how the Commission should
7	implement any findings it may make regarding deferred maintenance.
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9	PG&E Should Not Be Allowed to Profit Off of Work to Achieve a Safe System
10	The Independent Panel Report shows that, for many years preceding the San
11	Bruno explosion, PG&E's top management was overly focused on financial performance
12	and corporate image and insufficiently attentive to public safety, and that this corporate
13	culture contributed to the serious failings in PG&E's operation of its gas transmission
14	system. ⁹ In addition, the Overland Audit shows that PG&E's shareholders benefited
15	from management's insufficient regard for safety. 10 Under these circumstances, PG&E's
16	shareholders should not enjoy the privilege of collecting a profit on expenditures to bring
17	PG&E's pipeline system to acceptable levels of safety.
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	⁹ Independent Review Panel Report, pp. 16-17, 48, 52-53. The NTSB Report (pp. 117-118) also characterized the San Bruno explosion as an "organizational accident" that reflected a "cystemic problem". In addition, the CPSD San Bruno Incident Investigation

¹¹⁸⁾ also characterized the San Bruno explosion as an "organizational accident" that reflected a "systemic problem." In addition, the CPSD San Bruno Incident Investigation Report (pp. 130-147) discusses several ways in which fiscal matters and corporate image enhancement were given higher priority than safety concerns.

10 Overland Audit Report, pp. 1-1 to 1-6 (summarizing findings of constrained expenditures and above-authorized earnings on gas, transmission and storage operations).

III. TIMING OF COST RESPONSIBILITY DETERMINATION

At this point, while TURN is able to recommend principles for cost responsibility
and some specific proposals, TURN is not able to present and quantify a final, detailed
and comprehensive set of recommendations, for the following reasons.
First, PG&E's Phase 1 cost estimates are likely to change considerably. PG&E
has made clear that its records database, which drives the results of the pipeline
testing/replacement decision tree analysis in Chapter 3, is subject to considerable change
from the version of the database on which the August 26, 2011 Implementation Plan's
proposed pipeline replacement and testing spending was based. 11 Moreover, given the
identified failings in PG&E's records management in the past, including blatant
inaccuracies and the failure to make appropriately conservative assumptions in the
absence of missing or incomplete data, PG&E's revisions to its database will need to be
carefully scrutinized. 12 Until the Commission has confidence that PG&E is using
accurate and reliable data, PG&E's proposed scope of work is subject to substantial

Second, as discussed in the accompanying testimony of Richard Kuprewicz, TURN believes that PG&E's Chapter 3 decision tree analysis and its Chapter 4 valve automation program should be revised significantly. Other parties may also recommend major changes. If adopted by the Commission, such changes would also significantly affect PG&E's scope of work.

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revision.

¹¹ See., e.g., PG&E Testimony, pp. 1-8 to 1-9. ¹² See, e.g., NTSB Report, pp. 108-110.

1	Third, PG&E has not yet provided any overall cost estimates for the lower priority
2	work it is putting off to Phase 2 of its Plan. However, PG&E has indicated that Phase 2
3	costs may be as much as an additional \$6.8 to \$9.0 billion. 13 The cost responsibility
4	principles identified above apply equally to Phase 2, so disallowances and shareholder
5	responsibility will be significant issues for these costs as well.
6	Fourth, as the above-listed principles show, PG&E's past conduct is highly
7	relevant to the cost responsibility determination. Past conduct is also relevant because if
8	PG&E had acted prudently in its records-keeping and pipeline maintenance practices, it
9	would have discovered and addressed many of the problems we now face at a potentially
10	lower cost than must now be spent to play catch-up. While the Commission has the
11	benefit of completed reports by the NTSB and the Independent Review Panel, the record
12	regarding highly relevant past practices is still being developed in the Record-Keeping
13	OII (I.11-02-016), the San Bruno Explosion OII (I.12-01-007), and the High Population
14	Density OII (I.11-11-009). As these records are developed and Commission findings
15	made, TURN and other parties will have a better factual base on which to assess the
16	impact of past conduct on cost responsibility.
17	TURN notes that, even the NTSB and Independent Panel reports and the pending
18	enforcement proceedings may not fully shed light on all of the improper conduct by
19	PG&E that warrants disallowance of Plan costs. Just to give one example, it is now clear,
20	after an exhaustive NTSB investigation, that PG&E failed to follow accepted industry
21	practice in overseeing the manufacture and installation of Segment 180 of Line 132, the
22	segment that exploded in San Bruno. PG&E has accepted that it should pay for the
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¹³ Data Request Response DRA_022-6.

- 1 replacement of this segment. However, it is certainly possible perhaps probable that
- 2 PG&E's conduct was similarly deficient with respect to other pipeline segments slated
- 3 for replacement under the Plan for which PG&E is not accepting cost responsibility.
- 4 Accordingly, the Commission should expand an existing investigation, or open a new
- 5 investigation, to determine if the findings of improper conduct identified in the CPSD
- 6 San Bruno Incident Investigation Report, Section IV (Construction of Failed Pipe
- 7 Section) and Section V (Integrity Management) extend beyond the pipeline and pipeline
- 8 segments at issue in the San Bruno explosion.
- 9 For all of these reasons, TURN believes it would be premature for the
- 10 Commission to authorize rate recovery for any Implementation Plan costs at this time.
- However, in the event the Commission disagrees with this recommendation, any rate
- recovery should be made subject to refund.

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IV. APPLICATION OF COST SHARING PRINCIPLES TO PG&E'S PLAN

A. Pipeline Replacement

- PG&E estimates that, in Phase 1, it will need to carry out 169 individual projects
- to replace 186 miles of pipeline at a total cost (without contingency) of \$834.2 million in
- capital expenditures. 14 PG&E's conclusion that these projects are needed is determined
- by its Chapter 3 decision tree, ¹⁵ as applied to the information in PG&E's database about
- 20 each of its transmission pipeline segments. The decision tree suggests that the proposed

¹⁴ PG&E Testimony, p. 3-63, Table 3-3.

¹⁵ PG&E Testimony, Attachment 3A.

1 Phase 1 replacement projects would not be preceded by any new testing of the pipeline

2 segments in question.

The principle, embodied in Public Utilities Code Section 463, that shareholders should pay for any costs that result from utility errors or omissions has the potential to require the disallowance of most, if not all, of the Plan's costs to replace pipeline.

Inspections or tests that should have been performed, but were not, or missing or incomplete records, if available, could obviate the need for pipeline replacement. Such absent records might discount the likelihood of the threats that are driving the decision to replace, and may, at least, show that further testing, rather than replacement, is warranted. For example, TURN's analysis of PG&E's database shows that 124 of the 186 miles to be replaced are intended to address a potential manufacturing threat. As discussed further below, a strength test required under 1955 or later standards or rules or under Integrity Management Program requirements could very well show that the threat is stable and either that replacement is not needed, or that additional testing is warranted

Accordingly, replacement costs should be disallowed if any PG&E errors or omissions contribute to the need for replacement under the Implementation Plan, including but not limited to the following: failure to conduct a required strength test; failure to maintain reliable records of tests it did conduct; failure to maintain pipeline features records that should have been maintained; failure to meet Integrity Management Program requirements (including the requirement to conduct a strength test or other test to assess a potential threat); and failure to properly oversee the manufacture, construction,

before going to the more extreme and expensive step of replacement.

¹⁶ TURN Kuprewicz Testimony, Figure 2, p. 11.

- and installation of the pipeline. For each replacement project, PG&E should have the
- 2 burden of demonstrating and the Commission should find that no PG&E error or
- 3 omission contributes to the replacement decision. Any replacement project for which
- 4 PG&E does not meet this burden should be disallowed from rate recovery.
- 5 PG&E's problems with failing to conduct required tests and maintaining reliable
- 6 records for the tests it did conduct are likely to be significant drivers of disallowance of
- 7 replacement costs. TURN's analysis of PG&E's database shows, of the 186 miles
- 8 targeted for replacement, only 5% (9 miles) show a complete record of a strength test,
- 9 even though PG&E has evidence that it conducted a strength test for 50% of those
- 10 miles.¹⁷
- PG&E claims it should only be held accountable for pipeline installed post-
- 12 1970. 18 However, as discussed by Mr. Kuprewicz and acknowledged by PG&E, industry
- standards required strength testing of all new pipeline at least as early as 1955. 19 Thus,
- 14 PG&E should at least have strength test records for the 59 miles of 1955 or later pipe that
- 15 it proposes to replace.²⁰
- Moreover, as CPSD discusses extensively in its San Bruno Report and as Mr.
- 17 Kuprewicz further discusses, Integrity Management rules required PG&E to assess all
- 18 High Consequence Area ("HCA") pipeline segments, regardless of vintage. CPSD's

¹⁷ These numbers should be considered illustrative at this point, because of inconsistencies in data entered into the database at different times, and because, as noted previously, the database is undergoing significant revision.

¹⁸ PG&E Testimony, p. 8-10. TURN notes that PG&E is seeking to replace 9 miles of pipeline installed in 1970 or later and does not appear to be charging this cost to shareholders.

¹⁹ TURN Kuprewicz Testimony, pp. 75-76; PG&E Data Request Response DRA_045-07(a), attached to Kuprewicz Testimony.

²⁰ Source: PG&E Implementation Plan database.

- 1 Report makes the case that PG&E violated several Integrity Management requirements
- 2 and that, had PG&E met those requirements, it would have conducted hydro-tests that
- 3 would have discovered the defects that led to the explosion. ²¹ In other words, had PG&E
- 4 been fully complying with Integrity Management requirements, it would have conducted
- 5 more strength tests. The CPSD Report is focused on the San Bruno explosion, but the
- 6 Commission needs to consider the extent to which PG&E's violations of Integrity
- 7 Management rules also prevented the required strength testing of other pipeline that
- 8 PG&E now seeks to replace. Mr. Kuprewicz points out that PG&E has relied on external
- 9 corrosion direct assessment ("DA"), rather than pressure testing or ILI inspection, for an
- unusually high 78% of its baseline assessments.²² He explains that DA's main use is to
- detect certain corrosion threats and is ill-suited to detecting the manufacturing and
- construction defects that are driving the Plan's replacement determination for 75% of the
- miles (140 miles out of the total 186 miles).²³ It is reasonable to ask why HCA pipeline
- without reliable test records that PG&E now deems to require replacement because of
- manufacturing threats was not pressure tested under Integrity Management requirements.
- 16 For the pre-1955 pipeline without test records that PG&E seeks to replace, PG&E has a
- 17 heavy burden to demonstrate that testing would not have been required if it complied
- with Integrity Management rules.
- Additional disallowances may be appropriate even for pipeline replacement that
- 20 PG&E is able to demonstrate is not the direct or indirect result of its errors or omissions.
- 21 If the record shows that such replacement should have been made at an earlier time,

²¹ CPSD Incident Investigation Report, pp. 25-61.

²² TURN Kuprewicz Testimony, pp. 77-78 and Table 10.

²³ *Id*.

- 1 PG&E should be required to demonstrate that the current replacement costs do not
- 2 exceed the earlier costs, adjusted for inflation. Any cost premium resulting from delayed
- 3 replacement should be paid by shareholders. Mr. Marcus points out there is significant
- 4 reason to believe that PG&E's costs will be elevated by a crush of California work under
- 5 the PG&E and Sempra Implementation Plans. 24

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B. Pipeline Testing

million in expenses and \$18 million in capital expenditures.²⁵ As with replacement, the principle embodied in Section 463 has the potential to compel the disallowance of most, if not all, of PG&E's testing costs. Tests that should have been done, but were not, and missing or incomplete test records, if available, may obviate the need for new testing.

PG&E estimates that it will need to test 783 miles in Phase 1, at a cost of \$393

Ratepayers should not be required to pay for new testing if reliable records of such previously required tests would make new testing unnecessary.

TURN's analysis of PG&E's database shows, of the 783 miles targeted for testing, only 7% (58 miles) show a complete record of a strength test, even though PG&E has evidence that it conducted a strength test for almost 65% of those miles. ²⁶ As noted in the discussion above relating to replacement, any pipeline installed from 1955 on should have been tested at the time of installation, and much of pre-1955 HCA pipeline potentially should have been tested under Integrity Management requirements.

²⁴ TURN Marcus Testimony, pp. 14-15.

²⁵ PG&E Testimony, p. 3-65, Table 3-5.

As noted previously, these numbers should be considered illustrative at this point, because of inconsistencies in data entered into the database at different times, and because, as noted previously, the database is undergoing significant revision.

1	As recommended above for replacement, testing costs should be disallowed if any
2	PG&E errors or omissions contribute to the need for testing, including but not limited to
3	the following: failure to conduct a previously required strength test; failure to maintain
4	reliable records of tests it did conduct; failure to maintain pipeline features records that
5	should have been maintained; failure to meet Integrity Management Program
6	requirements (including the requirement to conduct a strength test or other test to assess a
7	potential threat); and failure to properly oversee the manufacture, construction, and
8	installation of the pipeline. For each testing project, PG&E should have the burden of
9	demonstrating – and the Commission should find – that no PG&E error or omission
10	contributes to the replacement decision. Any testing project for which PG&E does not
11	meet this burden should be disallowed from rate recovery.
12	Under the principle that ratepayers should not pay twice for the same work,
13	ratepayer funded expenditures for DA need scrutiny. Mr. Kuprewicz has pointed out that
14	much of that DA work likely did not serve its intended purpose, particularly to the extent
15	it was used to assess manufacturing and construction-related threats. ²⁷ To the extent this
16	ratepayer money was wasted, such prior ratepayer funding should be used to offset any
17	cost recovery for Implementation Plan expenditures.
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²⁷ TURN Kuprewicz Testimony, pp. 77-78.

C. Records Integration Program

- 2 This program consists of two parts: an MAOP Validation project, forecast to cost
- 3 \$162 million in expenses, and a Gas Transmission Asset Management ("GTAM")
- 4 project, forecast to cost \$102 million in capital and \$21 million in expenses.²⁸
- 5 PG&E states that the MAOP Validation Project "involves collecting and verifying
- 6 the pipeline strength and pipeline features data necessary to validate and re-calculate the
- 7 MAOP" for PG&E's gas transmission pipelines.²⁹ For the reasons discussed by Mr.
- 8 Kuprewicz, this project is the result of errors or omissions in fulfilling PG&E's record-
- 9 keeping responsibilities, and its full cost should be disallowed from recovery in rates.³⁰ If
- the Commission has any doubt that PG&E's deficiencies caused the need for this project,
- then the Commission should withhold its final conclusion about cost responsibility for
- these expenses until the Records OII has concluded.
- PG&E states that the GTAM project will improve the amounts and types of
- information that PG&E collects about its pipeline system; its business processes for
- 15 collecting, validating and retaining data; the traceability of materials used in its pipelines;
- and PG&E's ability to assess and mitigate potential public safety risks.³¹ At this point,
- 17 TURN is unable to ascertain how much of the GTAM work is needed to remedy
- deficiencies in PG&E's processes and systems and therefore should be disallowed –
- and how much is to enable PG&E to exceed existing record-keeping requirements.
- 20 TURN expects the Records OII to shed light on this question. For this reason, until

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²⁸ PG&E Testimony, p. 5-13, Table 5-2, and p. 5-27, Table 5-4.

²⁹ PG&E Testimony, p. 5-1.

³⁰ TURN Kuprewicz Testimony, pp. 72-77.

³¹ PG&E Testimony, p. 5-2.

- findings on this issue have been made in the Records OII or some other docket, PG&E should not be allowed any rate recovery for GTAM.
- TURN further recommends that PG&E should not be allowed to recover any revenue requirements related to GTAM until the project has been rigorously audited by independent expert consultants retained by the appropriate division of the CPUC and the Commission has found, based on the audit results, that the project has successfully met all objectives and project costs were reasonably incurred.

To the extent that the record of any docket shows that ratepayers paid for records work or systems that did not serve the intended purpose, such wasted ratepayer funding should be deducted from any rate recovery for records work that the Commission may authorize.

V. RATE OF RETURN REDUCTION

As noted in Section II above, the Independent Panel Report finds that PG&E's corporate culture of emphasizing profits over safety contributed to the major failings that led to the San Bruno explosion. As noted, these findings are corroborated by the NTSB Report, the CPSD Incident Investigation Report, and the Overland Audit Report.

Moreover, as documented in the Overland Audit Report, shareholders have benefitted in the form of higher profits from PG&E's misplaced corporate priorities. In light of this record, it would be wrong to allow PG&E shareholders to gain further profits from implementing a Plan to achieve the system safety that the company long neglected.

In the event that the Commission ultimately finds that PG&E has met its burden

of justifying cost recovery for any Implementation Plan capital expenditures, PG&E's

- 1 rate of return on such expenditures should be limited to no more than PG&E's cost of
- debt, currently 6.05%. When the Commission adopts a new cost of debt for PG&E in the
- 3 next cost of capital proceeding, that new figure should be used. As noted by Mr. Marcus,
- 4 a 6.05% rate of return, by itself, would reduce the present value of PG&E's revenue
- 5 requirements for capital costs by 26%. 32

³² TURN Marcus Testimony, p. 9.

APPENDIX A

SUMMARY OF TURN'S RECOMMENDATIONS REGARDING COST RESPONSIBILITY ISSUES

General Principles

- 1. Disallowance of Costs Resulting from PG&E Errors or Omissions: Consistent with Public Utilities Code Section 463 and sound public policy, the Commission "shall disallow" any direct or indirect costs resulting from unreasonable errors or omissions in PG&E's management of its gas transmission pipelines, including the failure to prepare or maintain records necessary to "completely evaluate" the reasonableness and prudence of any proposed expenditure. Errors or omissions should not just be limited to violations of specific rules (CPUC General Orders, federal regulations, CPUC decisions, and applicable statutes), but also deviations from industry standards and other imprudent behavior.
- 2. PG&E Should Have the Burden of Proof: PG&E is seeking major rate increases for the work proposed in its Plan. Under Public Utilities Code Sections 451 and 454, PG&E has the burden of proving that it entitled to any rate increase. Combined with the requirements of Section 463, this means that PG&E has the burden of showing that its errors or omissions do not contribute to any expenditure it seeks to recover from ratepayers.
- 3. Ratepayers Should Not Pay a Second Time for Work That Was Not Done Right: Consistent with Section 463 and basic notions of fairness, ratepayers should not have to pay a second time for ratepayer-funded work that was not done right the first time.
- 4. Ratepayers Should Not Pay Again for Work They Previously Funded, But That Was Not Performed: Consistent with the Commission's past treatment of "deferred maintenance" in rate cases, ratepayers should not have to pay for work that PG&E was previously funded to do, but did not carry out. Mr. Marcus discusses how the Commission should implement any findings it may make regarding deferred maintenance.
- 5. PG&E Should Not Be Allowed to Profit Off of Work to Achieve a Safe System: In light of PG&E management's documented elevation of profits over safety, PG&E's shareholders should not enjoy the privilege of collecting a profit on expenditures to bring PG&E's pipeline system to acceptable levels of safety.

Specific Recommendations

6. Because of the many documented errors and omissions by PG&E, ratepayers should not be required to pay for any work under the Implementation Plan until PG&E has demonstrated, and the Commission has found, that the need for such work is not the direct or indirect result of PG&E errors or omissions. Based on the current record of PG&E's past conduct, there is a serious question whether <u>any</u> of PG&E's proposed costs for pipeline replacement, pipeline testing, and record-keeping should be recovered from ratepayers.

- 7. It is premature for the Commission to authorize rate recovery for any Implementation Plan costs at this time, because: (1) changes to PG&E's database are likely to significantly change the scope of work; (2) PG&E's decision tree model should be changed (as recommended by Mr. Kuprewicz), necessitating further changes to the scope of work; (3) PG&E has not provided cost estimates for Phase 2; and (4) a full record of PG&E's past errors and omissions is still being developed in several CPUC proceedings. In the event the Commission allows any rate recovery in this phase of the proceeding, such rate recovery should be made subject to refund.
- 8. Because of the importance of gaining a full record regarding the extent to which PG&E's errors or omission are contributing to Implementation Plan costs, the Commission should expand an already open investigation or open a new investigation to determine if the findings of improper conduct identified in the CPSD San Bruno Incident Investigation Report, Section IV (Construction of Failed Pipe Section) and Section V (Integrity Management) extend beyond the pipeline and pipeline segments at issue in the San Bruno explosion.
- 9. Pipeline replacement costs should be disallowed if any PG&E errors or omissions contribute to the need for replacement under the Implementation Plan, including but not limited to the following: failure to conduct a required strength test; failure to maintain reliable records of tests it did conduct; failure to maintain pipeline features records that should have been maintained; failure to meet Integrity Management Program requirements (including the requirement to conduct a strength test or other test to assess a potential threat); and failure to properly oversee the manufacture, construction, and installation of the pipeline. For each replacement project, PG&E should have the burden of demonstrating and the Commission should find that no PG&E error or omission contributes to the replacement decision. Any replacement project for which PG&E does not meet this burden should be disallowed from rate recovery.
- 10. Even for pipeline replacement that PG&E is able to show is not the result of its errors or omissions, if the record shows that the replacement should have been done at an earlier time, any cost premium resulting from the delayed replacement as part of the Implementation Plan should be paid by shareholders.
- 11. Testing costs should be disallowed if any PG&E errors or omissions contribute to the need for testing under the Implementation Plan, including but not limited to the following: failure to conduct a previously required strength test; failure to maintain reliable records of tests it did conduct; failure to maintain pipeline features records that should have been maintained; failure to meet Integrity Management Program requirements (including the requirement to conduct a strength test or other test to assess a potential threat); and failure to properly oversee the manufacture, construction, and installation of the pipeline. For each testing project, PG&E should have the burden of demonstrating and the Commission should find that no PG&E error or omission contributes to the replacement decision. Any testing project for which PG&E does not meet this burden should be disallowed from rate recovery.

- 12. To prevent ratepayers from paying twice for the same work, to the extent that the Commission finds that ratepayer money used for external corrosion direct assessment was wasted, the cost of such prior ratepayer funding should be used to offset any rate recovery for Implementation Plan costs.
- 13. The full \$162 million cost of the Maximum Allowable Operating Pressure ("MAOP") Validation Project should be disallowed from recovery in rates. If the Commission has any doubt that PG&E's errors or omissions caused the need for this project, then the Commission should withhold its final conclusion about cost responsibility for these expenses until the Records OII (I.02-016) has concluded.
- 14. Until the Records OII or other CPUC docket has made findings on the extent to which PG&E's Gas Transmission Asset Management ("GTAM") project is needed to remedy errors or omissions in PG&E processes and systems, PG&E should not be allowed any rate recovery for GTAM.
- 15. PG&E should not be allowed to recover any revenue requirements related to GTAM until the project has been rigorously audited by independent expert consultants retained by the appropriate division of the CPUC and the Commission has found, based on the audit results, that the project has successfully met all objectives and project costs were reasonably incurred.
- 16. To the extent that the record of any docket shows that ratepayers paid for records work or systems that did not serve the intended purpose, such wasted ratepayer funding should be deducted from any rate recovery for records work that the Commission may authorize.
- 17. In the event that the Commission ultimately finds that PG&E has met its burden of justifying cost recovery for any Implementation Plan capital expenditures, PG&E's rate of return on such expenditures should be limited to no more than PG&E's cost of debt, currently 6.05%. When the Commission adopts a new cost of debt for PG&E in the next cost of capital proceeding, that new figure should be used. A 6.05% rate of return, by itself, would reduce the revenue requirements for capital costs by 26%.

Additional Cost Responsibility Recommendations of William Marcus, JBS Energy

- 18. Tax savings from 2011-12 bonus depreciation provisions of federal tax law tracked under CPUC Resolution L-411A should be used as a source of funding for pipeline safety under PG&E's implementation, before any funding from ratepayers is used.
- 19. The Gas Transmission and Storage function (excluding safety funding associated with Phase 1 and 2 projects) should undergo an annual earnings review in each year starting in 2012, and all excess earnings, grossed up for taxes, should offset Implementation Plan revenue requirements.

- 20. Shareholders should be required to contribute an amount of money equal to executive and top manager incentive compensation approved in the General Rate Case (approximately \$24 million) to fund pipeline safety programs, effectively shifting the ratepayer money from incentive bonuses to safety funding.
- 21. In the event the Commission does not adopt recommendation 17 above to reduce PG&E's rate of return on Implementation Plan assets to PG&E's cost of debt, the rate of return on common equity (ROE) for gas pipeline safety programs should be reduced by a minimum of 115 basis points to the low end of the range of reasonableness previously determined by the CPUC, reducing the revenue requirement associated with capitalized costs by about 6%.
- 22. Depreciation for plant in FERC Account 367 (entitled "transmission mains") installed under the Implementation Plan should be extended to 60 years, reducing near-term capital revenue requirements by about 4%, though the present value of costs is the same over the life of the projects.
- 23. Specific details are recommended to implement a finding that PG&E is now seeking ratepayer funding for work that ratepayers previously funded and that PG&E either did not perform at all or performed inadequately.
- 24. The Commission should be skeptical of PG&E claims that the need to do a significant amount of pipeline safety work in a compressed period will not increase unit costs above levels had the work been done over time.

Additional Cost Responsibility Findings and Recommendations of Richard Kuprewicz, Accufacts, Inc.

- 25. The Commission should not authorize any rates or revenues based on PG&E's cost forecasts, since the scope of work will change substantially due to significant revisions resulting from PG&E's ongoing MAOP validation process.
- 26. Much of PG&E's Implementation Plan reflects the need to bring the company into pipeline safety regulatory compliance because of past PG&E mismanagement practices with respect to records keeping and integrity management.
- 27. Prudent pipeline operators maintain critical pipeline information, especially records of strength testing. PG&E admits that it followed industry standards for strength testing and record retention since at least 1955. If costs have been included in PG&E's Pipeline Modernization Program because historical hydrotesting records cannot now be found or readily produced by PG&E, that additional cost to now bring the system into compliance should be borne by PG&E and its shareholders. Shareholders should bear the full responsibility associated with reestablishing confidence in MAOP for any pipeline segment within the system where hydrotesting was required and the records cannot now be found, including the full \$162.3 million of costs for the MAOP Validation project.

- 28. PG&E unreasonably relied on an unusually high amount of direct assessment, and very little use of in-line inspection ("ILI") or hydrotesting, in the Baseline Assessments it performed to meet Integrity Management requirements, and PG&E significantly reduced its pipeline replacement work after 1999.
- 29. PG&E's cost forecasts for hydrotesting appear high, based on Mr. Kuprewicz' experience and published data.

APPENDIX B

QUALIFICATIONS OF THOMAS J. LONG

Mr. Long is TURN's Legal Director. He has practiced before, or been employed by, the California Public Utilities Commission for over 25 years and, in that period, has been involved, as an advocate or Commissioner advisor, in numerous important CPUC proceedings in the energy and telecommunications sectors. Energy cases in which Mr. Long has participated include the Diablo Canyon prudency review, PG&E's Cornerstone application; the Commission's investigation into the 2003 PG&E Mission Substation fire; the Community Choice Aggregation ("CCA") rulemaking, PG&E's 2011 general rate case, the 2012 Sempra general rate case, and Southern California Edison's 2011 rate design proceeding.

Prior to re-joining TURN as its Legal Director in September 2011, he served as a Deputy City Attorney for the City and County of San Francisco ("CCSF") for over six years. There, among other duties, he represented CCSF in proceedings before the CPUC and advised the City's Public Utilities Commission on its efforts to implement a CCA program. From 2001 through 2004, he served as a policy and legal advisor to CPUC Commissioner Loretta Lynch. Before that, he was TURN's Senior Telecommunications Attorney from 1990 through 2000. Mr. Long began his legal career as a Litigation Attorney for the law firm of Morrison & Foerster from 1986 to 1989, after serving as Law Clerk to United States District Court Judge Rudi M. Brewster.

Mr. Long earned his B.A. with High Honors in Economics and Political Science from Swarthmore College and his J.D. *cum laude* from New York University School of Law.