# BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Investigation on the Commission's Own Motion into Operations and Practices of Pacific Gas and Electric Company with Respect to Facilities Records for its Natural Gas Transmission System Pipelines

I.11-02-016 (Filed February 24, 2011)

# PACIFIC GAS AND ELECTRIC COMPANY'S REQUEST FOR OFFICIAL NOTICE

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March 25, 2013

# BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

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Pursuant to Rule 13.9 of the Commission's Rules of Practice and Procedure, PG&E requests that the Commission take official notice of the following documents from the parallel proceeding, I.12-01-007 (San Bruno OII). True and correct copies of the documents for which PG&E requests official notice are attached.<sup>1</sup>

Exhibit 1: Ex. CPSD-1 (CPSD Incident Investigation Report, September 9, 2012) (excerpted pages 90-91).

Exhibit 2: Ex. CPSD-5 (Rebuttal Testimony of Raffy Stepanian) (CPSD/Stepanian) (excerpted pages 1-3).

Exhibit 3: Ex. CPSD-9 (NTSB Report on PG&E Natural Gas Transmission Pipeline Rupture and Fire San Bruno, CA September 9, 2010) (excerpted page 9).

Exhibit 4: Ex. CPSD-32 (PG&E's Response to NTSB Data Request 036-004 (SA 534 Exhibit 2M) (p.44); PG&E's Response to NTSB Data Request 049-001).

Exhibit 5: Ex. PG&E-1 (Testimony of Witnesses) (excerpted pages 8-7 to 8-8 [PG&E/Slibsager and Kazimirsky], 9-6 to 9-8 [PG&E/Miesner], 11-28 to 11-29; Appendix B [PG&E/Bull]).

<sup>&</sup>lt;sup>1</sup> To minimize waste, and in the case of large documents, PG&E attaches the face page and excerpts of the pages cited in the Opening Brief.

Exhibit 6: Reporter's Transcript Volume 5 (October 1, 2012) (excerpted pages 415-16) (PG&E/Bull).

In addition to those documents listed above from the parallel proceeding, PG&E requests that the Commission take official notice of the following documents. True and correct copies of the documents for which PG&E requests official notice are attached.

Exhibit 7: R.11-02-019, Opening Comments of Pacific Gas and Electric Company on Proposed Decision (filed Nov. 16, 2012) (excerpted page 17).

Exhibit 8: Exhibit No. 3 to Xcel Energy Advice Letter No. 809-Gas, No. 11AL-809G, Col. Pub. Util. Comm'n (October 3, 2011) (rate filing cited in Ex. PG&E-62 at MD-33 & n.64 in the Records OII).

Exhibit 9: Grubb v. Dep't of Real Estate, No. RG08 364823 (Cal. Super. May 29, 2009).

Exhibit 10: NTSB January 3, 2011 Safety Recommendations

Exhibit 11: Letter from NTSB to Christopher P. Johns, President of Pacific Gas and Electric Company (March 14, 2013).

Rule 13.9 provides that the Commission may take official notice of "such matters as may be judicially noticed by the courts of the State of California pursuant to Evidence Code section 450 et seq."

#### A. Official Notice Of Records In Related Enforcement Proceedings Is Proper

In determining whether it may properly take judicial notice of facts, a court may resort to "[a]ny source of pertinent information." Evid. Code § 454. Section 452 provides that it is appropriate for a court to take judicial notice of official acts of the legislative, executive, and judicial departments of the United States and of any state of the United States. Evid. Code § 452(c). It is also proper to take judicial notice of records of any court of this state or of any state as well as "[f]acts and propositions that are not reasonably subject to dispute and are capable of immediate and accurate determination by resort to sources of reasonably indisputable accuracy." Evid. Code § 452(d) & (h). Section 453 provides that granting a request under Section 452 is mandatory, where the requesting party: (1) gives sufficient notice to the adverse party, through the pleadings or otherwise; and (2) includes sufficient information to enable the court to take judicial notice. Evid. Code § 453.

The Commission has routinely taken official notice of records in related proceedings. In Application of Pacific Gas and Electric Company to Restructure and Establish Natural Gas

Rates, the Commission took official notice of the facts reflected in the exhibits and transcripts admitted into evidence in another proceeding. No. 99-011-053, Application No. 96-08-043, 1999 Cal. PUC LEXIS 843, at \*8 (1999). Similarly, in *Investigation on the Commission's Own Motion into the Operations, Practices, and Conduct of Sonic Communications*, the Commission took official notice of the record in two related proceedings. Decision No. 95-03-016, 59 CPUC2d 30, 1995 Cal. PUC LEXIS 262, at \*16 (1995). Numerous Commission decisions hold the same. *See, e.g., In the Matter of the Application of SCE Corp.*, Decision No. 91-05-028, 40 CPUC2d 159, 1991 Cal. PUC LEXIS 253, at \*8-9 (1991) (noting that official notice was taken of pre-filed testimony, hearing exhibits, and transcripts in the parallel FERC proceeding to the extent they are specifically referred to or relied upon in briefs); *W. Victor v. GTE California Inc.*, Decision No. 98-07-021, 81 CPUC2d 34, 1998 Cal. PUC LEXIS 552, at \*4 (1998) (taking official notice of exhibits and testimony in the cases decided in D.98-01-052).

#### B. The Cited Materials Are Relevant To This Proceeding

The Records OII substantially relates to and overlaps with the San Bruno OII. The "prosecutor" (CPSD) and respondent (PG&E) are identical and the intervenors are nearly identical,<sup>2</sup> the factual and legal issues overlap, many of the witnesses are the same, and the evidence in the proceedings is interrelated. Both OIIs proceeded on parallel courses, and the overlap of witnesses and evidence resulted in several joint Records and San Bruno OII evidentiary hearings, one of which also included the Class Location OII. The Commission recognizes the overlap and has ordered coordinated briefing among the Records OII, the San Bruno OII, and the Class Location OII with respect to fines and remedies.

In the San Bruno OII, TURN, DRA and the City of San Bruno, collectively cite materials from the Records OII (I.11-02-016), the Class Location OII (I.11-11-009), the proceedings in R.11-02-019 on PG&E's Pipeline Safety Enhancement Plan, and materials not in any evidentiary record.<sup>3</sup> Due to the obvious relation between the Records and San Bruno OIIs, the ALJ ordered that Ms. Keas' testimony from the Records OII be admitted into the San Bruno OII:

<sup>2</sup> C.A.R.E. is a party to the Records OII, but submitted no testimony. Otherwise, the intervenors are identical.

<sup>&</sup>lt;sup>3</sup> TURN cites documents from the Records OII and the PSEP proceeding (TURN Opening Brief at 4, 6, 11); DRA cites testimony from the PSEP proceeding (DRA Opening Brief at 30, 58, 60-61); and the City of San Bruno cites material from the Records and Class Location OIIs, as well as materials outside all the evidentiary records (San Bruno Opening Brief at 5-7, 10, 12, 15, 16-17, 23, 36).

ALJ YIP-KIKUGAWA: Are you planning to incorporate Ms. Keas' testimony from the records OII with San Bruno? I think you mentioned it real briefly at one point that that might be something you were considering.

MR. MALKIN: I may well have said that, and we're certainly open to that.

ALJ YIP-KIKUGAWA: Well, I mean it's --

MR. MALKIN: I guess thinking about that there's so much overlap in the proceedings, we had thought that that makes sense. And to the extent we don't think of it in advance, the testimony in the various proceedings is probably a proper subject of official notice in the other proceeding. So we're happy making it formal with respect to Ms. Keas and any other witnesses who overlap as well. The testimonies – her testimony overlaps somewhat but is also quite different in San Bruno.

ALJ YIP-KIKUGAWA: Okay. Mr. Foss, do you have any thoughts on that?

MR. FOSS: I have no objection, your Honor.

ALJ YIP-KIKUGAWA: Okay.

MR. LONG: Your Honor, I think that would be a helpful thing. It might help shorten some of our cross of Ms. Keas in the San Bruno matter.

ALJ YIP-KIKUGAWA: Okay.

ALJ WETZELL: All right. Well, we'll order that to happen then. That testimony is taken into the San Bruno proceeding.

MR. MORRIS: A point of clarification talking about cross-examination, and responding testimony is also consolidated into the proceeding with the other testimony?

ALJ YIP-KIKUGAWA: Yes.4

As these brief examples from the evidentiary record demonstrate, the proceedings substantially overlap.

The evidence for which PG&E requests official notice includes CPSD's written testimony, Reporter's Transcripts of oral testimony, and exhibits admitted into evidence in the San Bruno OII proceeding. Each of these documents is relevant to the Records OII and is a proper subject for official notice:

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<sup>&</sup>lt;sup>4</sup> Joint R.T. 623-25.

Exhibit 1 (Ex. CPSD-1) includes two excerpted pages from the CPSD Incident Investigation Report, released on January 12, 2012. The material in the Report discussing clearance procedures at the Milpitas Terminal is directly relevant to CPSD's allegation in the Records OII that PG&E failed to follow procedures to create a clearance record.

Exhibit 2 (Ex. CPSD-5) includes three excerpted pages from the rebuttal testimony of Raffy Stepanian, submitted on August 20, 2012. Mr. Stepanian's testimony addresses CPSD's use of Section 451 as a basis for alleged legal violations, which is directly relevant to CPSD's use of Section 451 to assert violations against PG&E in the Records OII.

Exhibit 3 (Ex. CPSD-9) is an excerpted page from the NTSB Report on the PG&E Natural Gas Transmission Pipeline Rupture and Fire in San Bruno. As stated with respect to Exhibit 1, the material in the Report discussing the clearance at the Milpitas Terminal on September 9, 2010 is relevant to CPSD's allegation that PG&E failed to follow procedures to create a clearance record in the Records OII.

Exhibit 4 (Ex. CPSD-32) is an excerpt from PG&E's response to NTSB Data Request No. 036-004 and PG&E's response to NTSB Data Request 049 -11. Exhibit 4 provides relevant pressure data to demonstrate that the section of pipeline from milepost 35.84 to milepost 46.59 did not experience pressures above 390 psig. This data response is directly relevant to CPSD's allegation in the Records OII that PG&E operated Line 132 in excess of 390 MAOP.

Exhibit 5 (Ex. PG&E-1) includes pages excerpted from PG&E written testimony. The testimony from Keith Slibsager and Mark Kazimirsky responds to CPSD's allegations regarding the control system at the Milpitas Terminal. CPSD alleges in the Records OII that SCADA was designed in an unsafe manner. The excerpts from PG&E's testimony are directly relevant to CPSD's allegations. This testimony should not require official notice since both Mr. Slibsager and Mr. Kazimirksy testified in the joint proceeding. The testimony from Thomas Miesner discussing the analysis of SCADA data is likewise directly relevant to CPSD's allegations regarding the design of SCADA. The testimony from David Bull responds to CPSD's allegations regarding PG&E's emergency response plan. CPSD alleges in the Records OII that PG&E's emergency response plans were too difficult to use. The testimony from David Bull related to his review of the transcripts and accounts of PG&E's emergency response plan is similarly relevant to CPSD's allegations.

Exhibit 6 is a two-page excerpt from the testimony of David Bull from the Reporter's Transcript in the San Bruno OII related to PG&E's response time on September 9, 2010. As stated with respect to Exhibit 5, CPSD alleges in the Records OII that PG&E's emergency response plans were too difficult to use. David Bull's testimony is directly relevant to that issue. The following exhibits are documents relevant to the Records OII which are a proper subject for official notice:

Exhibit 7 includes an excerpted page from the Opening Comments of Pacific Gas and Electric Company on Proposed Decision (filed Nov. 16, 2012) in R.11-02-019, the related rulemaking that the Commission opened on the same day as this proceeding. As a relevant document from a related proceeding, it is an appropriate subject of official notice.

Exhibit 8 is an exhibit to an Advice Letter filed by Xcel Energy, Denver CO, with the Public Utilities Commission of Colorado (October 3, 2011), requesting an increase in Xcel Energy's rates. This exhibit accompanying the rate increase request is cited in the testimony of Maura Dunn (Ex. PG&E-62 at MD-33 & n.64). It acknowledges deficiencies in Xcel Energy's records as they relate to its integrity management program. The fact of its filing may be judicially noticed, Evid. Code § 452(d)(2), and the statements contained in it may be considered for their truth because they are statements against interest. *See* Evid. Code § 1230. There is no prejudice to other parties because the rate filing letter itself was referenced (though not included) in Maura L. Dunn's testimony.

Exhibit 9 is *Grubb v. Dep't of Real Estate*, No. RG08 364823 (Cal. Super. May 29, 2009). As a decision of a court of this state, judicial notice is proper. *See* Evid. Code § 452(a), (d).

Exhibit 10 is the January 3, 2011 Safety Recommendations from the National Transportation Safety Board (NTSB) related to recordkeeping. These safety recommendations were the "principal basis" for the Commission issuing this OII. The recommendations are subject to judicial notice because they reflect an official act by an agency of the United States. Evid. Code § 452(c).

Exhibit 11 is a recent letter from the NTSB to PG&E, dated March 14, 2013. In this letter, NTSB classifies three of its safety recommendations to PG&E from the San Bruno accident as "Closed – Acceptable Action." In particular the NTSB wrote that because "PG&E validated the MAOP of its pipeline system, as requested, Safety Recommendation P-10-3 is classified 'Closed

- Acceptable Action." The letter is subject to judicial notice because it reflects an official act by an agency of the United States. Evid. Code § 452(c).

As the discussion above demonstrates, good cause exists for the Commission to take official notice of each of these Exhibits. See, e.g., Decision No. 99-011-053, Application No. 96-08-043, 1999 Cal. PUC LEXIS 843, at \*8 (1999) (taking official notice of the facts reflected in the exhibits and transcripts admitted into evidence in another proceeding); Evid. Code §§ 451-454.

Respectfully submitted,

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Dated: March 25, 2013

### I.11-02-016

# PG&E'S REQUEST FOR OFFICIAL NOTICE EXHIBIT 1

San Bruno Ex. CPSD-1

(CPSD Incident Investigation Report, September 9, 2012)

Docket: : I.12-01-007
Exhibit Number : Peevey Admin. Law Judge : Wetzell
CPSD Witness : Stepanian

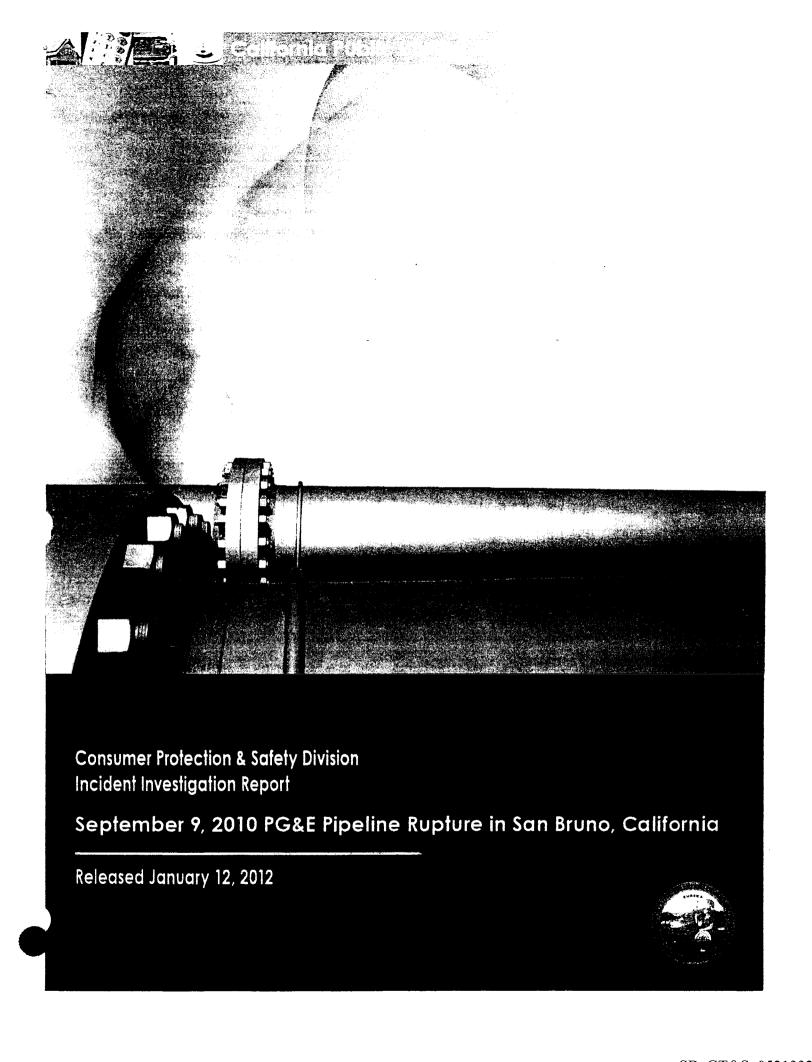


# CONSUMER PROTECTION AND SAFETY DIVISION CALIFORNIA PUBLIC UTILITIES COMMISSION

Order Instituting Investigation on the Commission's own Motion into the Operations and Practices of Pacific Gas and Electric Company to Determine Violations of Public Utilities Code Section 451, General Order 112, and Other Applicable Standards, Laws, Rules and Regulations in Connection with the San Bruno Explosion and Fire on September 9, 2010

I.12-01-007

San Francisco, California



for L-300B were closed.<sup>154</sup> High pressure within Milpitas Terminal was observed by the Gas Control Operator as he mentioned to the Gas Technician that they were seeing almost 500 psig downstream.<sup>155</sup> It was after the set points within the Milpitas Terminal were lowered and the bypass line was closed that a pressure gauge was placed on one of the outgoing lines. At 6:04pm, the Gas Technician reported reading 396 psig on his pressure gauge on Valve 49, downstream of L-132.<sup>156</sup>

PG&E records show that the station piping MAOP at Milpitas Terminal is rated for 720 psig. <sup>157</sup> The highest recorded pressure on SCADA within the Milpitas Terminal was 497 psig. <sup>158</sup> before the mixer.

The pressures leaving Milpitas Terminal peaked at 396 psig between 5:22pm and 5:25pm. Also, it can be noted from the SCADA data that between 5:22pm to 5:25pm, the pressure went from 363.2 psig to 394.6 psig on L-101 Los Esteros meter located about half a mile from the Milpitas Terminal. SCADA data on L-101 Los Esteros meter shows a pressure read of approximately 393 psig around the same time the Gas Technician reported the 396 psig downstream pressure on L-132 to Gas Control at 6:04pm. Since L-101 and L-132 come from the same header #2,161 the pressure in both lines should be relatively close within half a mile from Milpitas Terminal. However, there is no record showing a pressure higher than 396 psig leaving the Milpitas Terminal prior to the rupture.

<sup>154</sup> Id., page 116, lines 10-14.

<sup>155</sup> Id., page 116, lines 15-17.

<sup>156</sup> *Id.*, page 120, lines 1-13.

<sup>157</sup> NTSB Exhibit 2AJ, Milpitas Operations & Maintenance (NTSB 033-006).

<sup>158</sup> NTSB 064-001.

<sup>159</sup> *Ibid.* 

<sup>160</sup> NTSB 084-010.

<sup>&</sup>lt;sup>161</sup> A header is a common pipeline where two or more pipelines are combined through connections. These are typically required when a single or multiple inlet sources are used to feed a single downstream location.

The highest pressure recorded at an upstream location closest to L-132 Segment 180 was 386 psig. 162 This recorded pressure is lower than the established MAOP of 400 psig for L-132. Line 132 MAOP established by the "grandfathering rule" based on the highest recorded pressure at Milpitas Terminal of 400 psig on October 16, 1968, but the actual pressure on Segment 180 during in 1968 is unknown.

A properly constructed pipeline that met PG&E and industry standards during its installation in 1956 would have most likely withstood a pressure of 386 psig. However, it was apparent that there were more underlying causes which led to Segment 180 rupturing at a pressure that it was expected to safely withstand.

#### M. Post-Incident Replication by PG&E

PG&E conducted tests in an attempt to replicate the alarms that were generated during the time when control was lost on September 9, 2010. They were able to recreate all of the types of alarms observed but not necessarily all of the conditions that could cause them. The Supervising Engineer who performed the replication and analysis stated that he could not explain all of the alarms that occurred. PG&E confirmed that they were unable to determine the cause of controller errors from 5:01pm to 5:09pm, or why there were none from the time pressure control was lost at 5:23pm until after 8:40pm. Also they could not determine why the three malfunctioning controllers never generated an alarm. The loss of 24 Volts supplied by power supplies PS-A and PS-B would create some of the controller alarms observed, but not all.

In its replication documentation, PG&E referred to "failure" of PS-A and PS-B as the fluctuating voltages that were observed by the Contract Engineer and Construction Lead. The 24 volt power supplies PS-A and PS-B, which were the subject of the loss of

<sup>162</sup> NTSB\_001-013.

<sup>163</sup> CPUC\_ 202-04.

<sup>164</sup> Id.

<sup>165</sup> NTSB April Interview of SCADA Control Group Supervising Engineer, April 20, 2011, page 26.166 CPUC 259-03.

### I.11-02-016

## PG&E'S REQUEST FOR OFFICIAL NOTICE

### **EXHIBIT 2**

San Bruno Ex. CPSD-5

(Rebuttal Testimony of Raffy Stepanian)

Docket: : I.12-01-007

Exhibit Number : S

Commissioner : Peevey

Admin. Law Judge : Wetzell

CPSD Witness. :



# CONSUMER PROTECTION AND SAFETY DIVISION CALIFORNIA PUBLIC UTILITIES COMMISSION

### REBUTTAL TESTIMONY OF RAFFY STEPANIAN

Order Instituting Investigation on the Commission's own Motion into the Operations and Practices of Pacific Gas and Electric Company to Determine Violations of Public Utilities Code Section 451, General Order 112, and Other Applicable Standards, Laws, Rules and Regulations in Connection with the San Bruno Explosion and Fire on September 9, 2010.

1.12-01-007

San Francisco, California August 20, 2012

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# I. GENERAL REPLY TO THE PREPARED TESTIMONY OF PG&E

witnesses' testimony.

This testimony is submitted by the Consumer Protection and Safety

Division (CPSD) in reply to PG&E's Prepared Testimony served on the parties to

this proceeding on June 25, 2012 (hereinafter, PG&E's Testimony). It was

prepared under my direction and control, and I personally authored several

sections. Chapter I responds to general comments by PG&E throughout its

testimony. CPSD's general responses are compiled in Chapter I, although they

appear throughout PG&E's Testimony. Silence on any particular issue does

indicate agreement. The Chapters following Chapter I reply to specific PG&E

#### A. Applicability Of Public Utilities Code Section 451

PG&E violated Section 451 by violating good utility safety practices in its construction and maintenance of Segment 180. Section 451 requires all public utilities to provide and maintain "adequate, efficient, just, and reasonable" service and facilities as are necessary for the "safety, health, comfort, and convenience" of its customers and the public. Any unsafe condition or a violation of a utility safety practice may be a violation of Section 451. (CPSD Report, pp.3-4.)

Section 451, which has been in effect since 1909 (half a century prior to the installation of Segment 180), is a broad and general requirement for utilities to create and follow safe operating practices. Section 451 is not prescriptive in the specific manner in which its obligations must be met. Without such specifics and because no set of regulations can cover every single possible unsafe condition, one looks to the industry standards and guidelines for guidance. When Segment 180 was constructed and installed there were industry standards in place; standards which PG&E failed to follow. Additional guidance was established in 1961 with the promulgation of the Commission's General Order 112, and in 1968 with the Natural Gas Pipeline Safety Act. However, from 1909 forward the plain language

of Section 451 has clearly stated that utilities must furnish and maintain equipment 1 2 and facilities necessary to promote the safety of the public. 3 However, PG&E considers the industry safety practices in existence prior to 1961 merely "guidelines" that are essentially "voluntary". (PG&E Testimony, 4 5 p.2-7.) PG&E fails to acknowledge that its actions (or inactions) that violate 6 industry practices may, and often did, create violations of Section 451. PG&E 7 does not acknowledge that unsafe practices during the construction of Segment 8 180 in 1956 constitute legal violations and are not merely infractions of 9 "voluntary" best practices. PG&E had an obligation created by Section 451 10 during its construction and maintenance of Line 132 to follow good utility 11 practices, which it did not do. 12 In 1961, when the Commission adopted GO 112, it recognized that utilities 13 had a pre-existing responsibility to the public to provide safe service that goes 14 beyond GO 112 because no code of safety rules can cover every conceivable 15 situation. The Commission stated: 16 Public utilities serving or transmitting gas bear a great responsibility to the 17 public respecting the safety of their facilities and operating practices. 18 19 It is recognized that no code of safety rules, no matter how carefully and 20 well prepared can be relied upon to guarantee complete freedom from 21 accidents. Moreover, the promulgation of precautionary safety rules does 22 not remove or minimize the primary obligation and responsibility of 23 respondents to provide safe service and facilities in their gas operations. 24 Officers and employees of the respondents must continue to be ever 25 conscious of the importance of safe operating practices and facilities and of 26 their obligation to the public in that respect. (CPUC Decision No.61269 27 (1960), p.12.) 28 29 Clearly, PG&E's obligation to furnish safe facilities and operate safely did 30 not begin in 1961. Furthermore, PG&E states that GO 112's enforcement of safety

1961. In the section quoted above, the Commission clearly did not intend to

rules and practices was not meant to apply retroactively. (PG&E Testimony, p.7-

2.) In effect, PG&E argues that that there were no enforceable safety rules prior to

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- absolve utilities from safety violations that were not specifically covered under the
- 2 new GO 112. Moreover, CPSD does not attempt to apply GO 112 retroactively,
- 3 because CPSD alleges that unsafe conditions prior to 1961 violate Section 451 not
- 4 GO 112.
- 5 In this OII, the Commission noted that Section 451 requires all public
- 6 utilities to provide safe service. (1.12-01-007, p.7.) The Commission further
- 7 noted that "the California Court of Appeals has upheld the Commission's
- 8 authority to find Section 451 violations that are separate and distinct from any
- 9 other rule or regulation. PacBell Wireless v. PUC (2006) 140 Cal.App. 4th 718."
- 10 PG&E cannot claim that Section 451 does not create a duty separate from GO 112
- 11 for PG&E to provide safe service.
- 12 CPSD alleges that PG&E violated Public Utilities Code Section 451 by
- installing and operating its system in an unsafe manner. (CPSD Report, p.15.)
- 14 This is true even though industry safety practices were not codified on the state
- level until 1961 and the federal level until 1968. PG&E is incorrect in claiming
- that industry safety rules in existence in 1956 were merely "guidelines" that
- created no duty for PG&E to follow them. In fact, Section 451 placed (and
- continues to place) an affirmative duty on the utility to act in a safe manner. That
- duty would apply even if there were no specific guidelines, even if there were no
- 20 General Order, and even if there were no federal law. PG&E's attempt to confuse
- 21 Section 451's legal obligations with "voluntary" industry standards should be
- 22 rejected.

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#### B. Mental State Requirement

- In its testimony, PG&E disavows any intent to violate state or federal
- regulations. (See, e.g., PG&E Testimony, p.2-1; PG&E admits that it
- 26 "unknowingly and unintentionally installed a piece of pipe that was missing an
- 27 interior long seam weld." PG&E also states that there is "no indication or evidence
- that PG&E ever had actual knowledge of the existence of either the pup sections
- or the missing welds in the three pup sections of the pipe." P.2-4; see also, p.2-5.)

### I.11-02-016

### PG&E'S REQUEST FOR OFFICIAL NOTICE

### **EXHIBIT 3**

San Bruno Ex. CPSD-9

(NTSB Report on PG&E Natural Gas Transmission Pipeline Rupture and Fire San Bruno, CA September 9, 2010)

Docket: : I.12-01-007
Exhibit Number : 9
Commissioner : Peevey
Admin. Law Judge : Wetzell
CPSD Witness : Stephanian



# CONSUMER PROTECTION AND SAFETY DIVISION CALIFORNIA PUBLIC UTILITIES COMMISSION

Order Instituting Investigation
on the Commission's own Motion
into the Operations and Practices of Pacific Gas
and Electric Company to Determine Violations
of Public Utilities Code Section 451, General Order 112,
and Other Applicable Standards, Laws, Rules and
Regulations in Connection with the San Bruno
Explosion and Fire on September 9, 2010

I.12-01-007

San Francisco, California

Pacific Gas and Electric Company Natural Gas Transmission Pipeline Rupture and Fire San Bruno, California September 9, 2010



**Accident Report** 

NTSB/PAR-11/01 PB2011-916501



National Transportation Safety Board

NTSB/PAR-11/01 PB2011-916501 Notation 8275C Adopted August 30, 2011

# **Pipeline Accident Report**

Pacific Gas and Electric Company Natural Gas Transmission Pipeline Rupture and Fire San Bruno, California September 9, 2010



490 L'Enfant Plaza, S.W. Washington, DC 20594

At 5:22 p.m., as a result of regulating valves fully opening and the erroneous signals caused by the erratic voltages, the SCADA center alarm console displayed over 60 alarms within a few seconds, including controller error alarms and high differential pressure and backflow alarms from the Milpitas Terminal. (See figure 8a.) These alarms were followed by high and high-high pressure alarms <sup>13</sup> on several lines leaving the Milpitas Terminal, including Line 132. At 5:25 p.m., SCADA operator C called the Milpitas technician to report the high pressure alarms, stating that they "look real." During this conversation, the Milpitas technician realized that the pressure and regulating valve controller displays on the local control panel had lost all data. At the same time, the SCADA consoles displayed constant pressures <sup>14</sup> on the downstream lines and showed all regulating and a majority of monitor and incoming line valves <sup>15</sup> at the Milpitas Terminal as not open. <sup>16</sup> (See figure 8b.)

At 5:28 p.m., the Milpitas technician called SCADA operator D to ask what pressure values were being displayed on his SCADA console. During the discussion, they both realized that the SCADA center was not receiving valid data for incoming and outgoing lines at the Milpitas Terminal. Operator D notified the Milpitas technician that his SCADA console was showing 458 psig at the Milpitas Terminal "mixer." Operator D concluded that the regulating and/or station bypass valves may have opened. This was confirmed by the Milpitas technician. With all of the regulating valves wide open, the pneumatically controlled and actuated monitor valves limited pressure on the outgoing lines. The monitor valves were set at 386 psig; <sup>18</sup> however, due to a typical lag in the monitor valves response time, the pressure in the lines leaving the Milpitas Terminal peaked at 396 psig<sup>19</sup> between 5:22 p.m. and 5:25 p.m.

At 5:42 p.m., the Milpitas technician called the SCADA center and reported to SCADA operator C that the regulating valves on incoming Line 300B (the primary line feeding the mixer) had opened fully. Operator C reminded the Milpitas technician that he was unable to see valid pressures or valve positions from the Milpitas Terminal on his SCADA console. The Milpitas technician asked if he could reduce the local set point of the monitor valves from 386 to 370 psig to bring down the line pressures; operator C approved the reduction.

<sup>&</sup>lt;sup>13</sup> High pressure alarms are set at or below the MOP, and high-high pressure alarms are set at MOP plus 3 psi.

<sup>&</sup>lt;sup>14</sup> On a loss of data, the SCADA system displays the last valid reading.

<sup>15</sup> The valves on incoming lines are locally controlled at the Milpitas Terminal and are either fully open or closed.

Any position less than 100 percent open is considered "not open."

<sup>&</sup>lt;sup>17</sup> In the 1980s, a mixer was used at the Milpitas Terminal to mix several gas grades from various sources. The mixer has since been removed but the terminology is still used.

<sup>&</sup>lt;sup>18</sup> The monitor valve set point is set locally. The PG&E monitor valves are set to a value above the MOP of the line but below the MAOP. SCADA operators have the ability to remotely set the monitor valve position but cannot override the local pressure set point.

<sup>&</sup>lt;sup>19</sup> Until 5:22 p.m., the pressure had been 359 psig

### I.11-02-016

### PG&E'S REQUEST FOR OFFICIAL NOTICE

### **EXHIBIT 4**

San Bruno Ex. CPSD-32

(PG&E's Response to NTSB Data Request 036-004 (SA 534 Exhibit 2M) (p.44); PG&E's Response to NTSB Data Request 049-001)

Docket: : I.12-01-007

Exhibit Number : 32

Commissioner : Peevey

Admin. Law Judge : Wetzell

CPSD Witness. : Stepanian



# CONSUMER PROTECTION AND SAFETY DIVISION CALIFORNIA PUBLIC UTILITIES COMMISSION

Order Instituting Investigation on the Commission's own Motion into the Operations and Practices of Pacific Gas and Electric Company to Determine Violations of Public Utilities Code Section 451, General Order 112, and Other Applicable Standards, Laws, Rules and Regulations in Connection with the San Bruno Explosion and Fire on September 9, 2010.

I.12-01-007

San Francisco, California

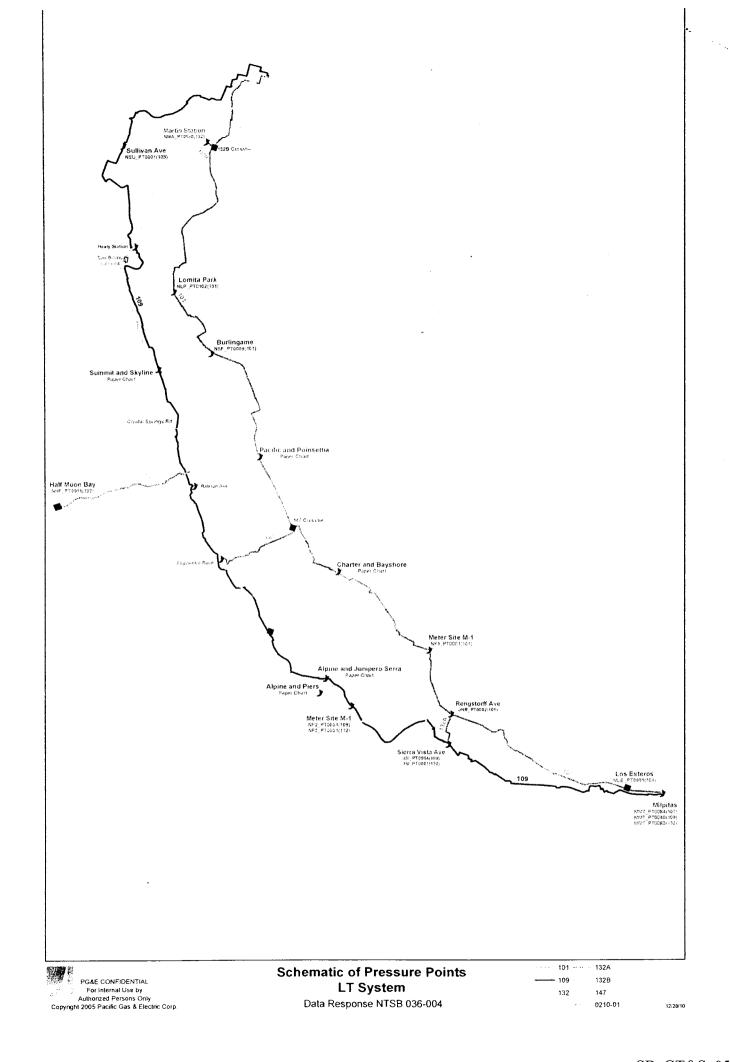
Docket No. SA-534
Exhibit No. 2-M

### NATIONAL TRANSPORTATION SAFETY BOARD

Washington, D.C.

PRESSURE TRANSDUCER LOCATIONS ALONG LINES 101, 109, AND 132

(3 Pages)



# PACIFIC GAS AND ELECTRIC COMPANY San Bruno Gas Transmission Line Incident Data Response

PG&E Data Request No.:	NTSB_049-001		
PG&E File Name:	San Bruno GT Line Incident_DR_NTSB_049-001		
Request Date:	February 4, 2011	Requesting Party:	NTSB
Date Sent:	February 4, 2011	Requestor:	Operations (Chhatre)

#### **QUESTION 1**

NTSB requests the following documents be reviewed to determine whether PG&E would agree to not assert a claim of privilege.

- NTSB\_008-004
- NTSB 008-004S1
- NTSB\_011-008
- NTSB\_004-004
- NTSB\_004-001
- NTSB\_014-006
- NTSB\_036-004
- PIR print with overlay entitled "PIR between line 132 mlv 38.49 to MLV 40.05"
- NTSB\_001-011
- NTSB\_035-12
- NTSB\_008-003

#### **ANSWER 1**

PG&E did not assert, or has agreed not to assert a claim of privilege for the following documents:

- NTSB\_008-004
- NTSB\_011-008 (Names Redacted)
- NTSB\_004-004
- NTSB 004-001 (Amended)
- NTSB\_014-006 (Name Redacted)
- NTSB\_036-004
- PIR print with overlay entitled "PIR between line 132 mlv 38.49 to MLV 40.05" (NTSB\_016-003)
- NTSB\_001-011

SAN BRUNO\_DR\_NTSB\_049-001

#### PACIFIC GAS AND ELECTRIC COMPANY San Bruno Gas Transmission Line Incident Data Response

- NTSB\_035-12
- NTSB\_008-003

With respect to NTSB\_008-004S1, PG&E is waiting for a response from NTSB in order to make a determination.

### I.11-02-016

### PG&E'S REQUEST FOR OFFICIAL NOTICE

## **EXHIBIT 5**

San Bruno Ex. PG&E-1

(Testimony of Witnesses)

Investigation:	<u>12-01-007</u>	***************************************		
Exhibit No.:				
Date: Witnesses:				

# PACIFIC GAS AND ELECTRIC COMPANY'S RESPONSE TO THE CONSUMER PROTECTION AND SAFETY DIVISION'S INCIDENT INVESTIGATION REPORT:

### SEPTEMBER 9, 2010, PG&E PIPELINE RUPTURE IN SAN BRUNO, CALIFORNIA

#### **TESTIMONY OF WITNESSES**



Testimony, Chapter 9.) At approximately 6:29 p.m., based on the SCADA low pressure alarms and reports of a fire they had received, gas system operators concluded that there likely had been a rupture on Line 132 in the San Bruno area. (Ex. 8-1.) As described in the testimony of Thomas Miesner, under these circumstances, the response of PG&E's gas system operators to the pressure increase and the rupture was reasonable.

#### 2. The Control System at Milpitas Performed as Designed

 While the pressure increase at Milpitas Terminal was unexpected, PG&E's redundant pressure limiting system operated as designed and kept pressure on the outgoing pipelines within regulatory limits. As CPSD describes in its report, the pressure increase at Milpitas Terminal began when the voltage output from two 24v power supplies, PS-A and PS-B, fluctuated. (CPSD Report at 87.) When the voltage from the power supplies fluctuated, the pressure transmitters they powered sent zero or negative pressure readings to the valve controllers, which then acted as designed to command their respective regulator valves open. When the pressure reached the established set point, the monitor valves operated as designed to limit the pressure increase and maintain pressure control.

In response to a PG&E data request, CPSD acknowledged that the "[e]vidence of those monitor valves reviewed by CPSD shows they functioned as intended." (Ex. 8-2.) The monitor valves kept pressures in Milpitas Terminal and downstream on the Peninsula pipelines under the established MAOP and well-under the MAOP plus 10% limit permitted for abnormal operations under 49 CFR § 192.201. As both CPSD and the NTSB found, the pressure at Segment 180 did not exceed approximately 386 psig. (CPSD Report at 8; NTSB Report at 12.) And as CPSD and the NTSB also acknowledge, the pressure increase from Milpitas Terminal would not have caused a non-defective pipe to rupture, all leading to the reasonable conclusion that the pressure control system at Milpitas Terminal functioned properly and as intended. (CPSD Report at 91; NTSB Report at 124.)

<sup>&</sup>lt;sup>3</sup> The highest pressure on the outgoing lines reached at Milpitas Terminal was 396 psig, measured manually by the gas transmission technician at Milpitas Terminal.

As a means of potentially preventing the pressure increase, CPSD suggests that the Programmable Logic Controller (PLC) at Milpitas Terminal should have been programmed to disregard pressure values that can be assumed to be invalid, such as a zero or negative pressure reading. PG&E does not believe that programming the regulation pressure control system to disregard information is the appropriate practice. Rather, in addition to the alarm function SCADA provides, the redundant, pneumatic pressure limiting system serves to limit pressure in situations where the regulation system experiences a power or equipment failure. At the same time, the redundant pressure control system allows gas control operators and field crews to assess the situation and take action, as occurred on September 9, 2010. In PG&E's view, that redundant system provides a more predictable and reliable countermeasure than would overriding normal regulation functionality.

# D. The Clearance for the September 9, 2010 Work at Milpitas Terminal

PG&E acknowledges that the written clearance application prepared for the electrical work at Milpitas Terminal for September 9, 2010, did not identify the clearance supervisor, fully describe the work to be performed or contain written contingency planning. However, the field crew and gas system operators did follow good communication practices and took actions that focused on and furthered the safety of the work. Below is a description of the preparation work as well as the activities during the clearance.

Prior to beginning work, the crew at Milpitas Terminal conducted pre-work meetings (tailboards) on September 9, 2010, at which they addressed safety issues, discussed the day's project, and outlined the steps they would follow. When ready to begin, the lead gas control technician called Gas Control to alert them that the clearance was beginning. As the work progressed, the gas control technician called Gas Control several more times. The purpose of these

<sup>&</sup>lt;sup>4</sup> The PLC at Milpitas Terminal did not have a direct connection to the regulating valves or the electric valve controllers. PG&E understands CPSD to be stating that the valve controllers should have been programmed to disregard zero or negative pressure readings.

<sup>&</sup>lt;sup>5</sup> In addition, a pre-construction meeting was held in August in preparation for the project.

300 automated valves, the majority of which were remotely-controlled valves located in PG&E's major gas terminals and stations where regulation, flow rates and pressure control are most often needed and implemented. Based on the components of PG&E's SCADA system described above, my discussions with SCADA vendors, my involvement in designing SCADA systems, and my experience teaching classes to pipeline operators and SCADA suppliers, it is my opinion that, on September 9, 2010, PG&E's SCADA system was a capable system, consistent with industry norms, that made available to PG&E gas control operators the operational information and remote control functionality for safe and reliable gas transmission.

On September 9, 2010, PG&E's San Francisco Gas Control Room had five operator consoles from which PG&E's gas control room personnel monitored and controlled the gas transmission system. Three consoles were manned by Gas System Operators. PG&E's Gas System Operators have primary daily responsibility to monitor and control PG&E's gas transmission system. Two gas control room consoles were manned by Transmission Coordinators, who are responsible for establishing and overseeing gas delivery plans, as well as generally overseeing system operations. At each of the five consoles, separate computer monitors provide operators access to PG&E's SCADA system, Geographic Information System, PG&E's intranet, and the Internet. Based on my visits to PG&E's Gas Control Room, my involvement in designing SCADA systems, and my experience teaching classes on SCADA and control room operations, my opinion is that the PG&E's Gas Control Room was appropriately configured and equipped to enable PG&E's gas control operators to safely and reliably operate PG&E's gas transmission system.

#### b. Analyzing SCADA Data

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30 31 Like all pipeline SCADA systems, PG&E's SCADA system depends on monitoring and control devices in the field that transmit information

A Geographic Information System (GIS) is a computer-based information system that stores, manages, and integrates a variety of geographically-referenced information that can be displayed in the form of maps, globes, reports and charts.

to and receive operational commands from gas control operators, many of which are transmitted through wireless communications.

Occasionally, wireless communications will experience interruptions or "failures," as will monitoring devices in the field. Thus, PG&E's gas control operators will at times receive and need to address "stale" or potentially invalid SCADA data and SCADA alarms when monitoring and operating the gas transmission system. As PG&E gas control operators are trained to do, "trending" multiple SCADA points at a station or along a pipeline is the appropriate and effective method to analyze potentially stale or invalid SCADA data, integrate such data with other SCADA information, and determine the actual operating conditions and responsive action that may be needed. By looking at operating conditions at multiple locations, gas control operators can determine whether potentially anomalous or erroneous alarms or SCADA information are reliable.

For example, if a SCADA monitoring point tells an operator that the pressure at a location on the pipeline is 620 psig (pounds per square inch gauge), but the SCADA pressure data on both sides of that reading is 380 psig, the operator infers that the 620 psig information is invalid. (Absent compression or major elevation changes, gas pressure cannot be higher in the middle of a pipeline section than the pressure at the ends.) By trending the data in that situation, the operator is able to confirm that the 620 psig reading is invalid, and then investigate the reason for the erroneous data. In both normal and abnormal operating conditions, "trending" SCADA data is an appropriate tool the pipeline operator uses to effectively monitor and operate the pipeline system.

CPSD states in its January 12, 2012 Report, that during the unexpected pressure increase at Milpitas Terminal PG&E gas control operators "relied on pressure readings at locations several miles downstream of the Milpitas Terminal which are not fully indicative of the

PG&E's SCADA system automatically re-scans, or re-polls, the monitoring and lata collection points throughout the transmission system to refresh the connect

data collection points throughout the transmission system to refresh the connection and confirm the validity of the data. If the communication link is not reestablished after three polls, PG&E's SCADA system sends an alarm to the gas control operators.

discharge pressure out of Milpitas Terminal." (CPSD Report at 97.) CPSD's statement appears to be intended as a criticism, but the statement actually describes the appropriate response to the situation that confronted PG&E's gas system operators. Gas system operators were aware that the SCADA information and alarms they were receiving from Milpitas Terminal were a mixture of valid and invalid data due to the power issues that had occurred. As explained above, trending SCADA data up and downstream from the point at issue is the most effective way of analyzing and verifying the conditions being experienced on the system. Because PG&E's gas system operators knew the information from Milpitas Terminal was a mixture of good and bad information, they acted appropriately by looking at data points surrounding the problem area to determine the nature of the abnormal operating conditions. Confirming the conditions up and down the pipeline by trending pressures away from Milpitas Terminal also served to corroborate that the monitor valves, which limit pressure at Milpitas Terminal, were working and that the Peninsula pipelines had not been pressurized over the maximum allowable operating pressure (MAOP).

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## c. PG&E's Gas Control Operators Responded Reasonably on September9, 2010

Based on my review of the SCADA data, the recordings from the PG&E Gas Control Room, interview transcripts of the involved personnel, and my experience with control room and pipeline operations, it is my opinion that, on September 9, 2010, PG&E's gas control operators responded reasonably both prior to and after the Line 132 rupture.

Beginning at 5:22 p.m., the power issues at Milpitas Terminal caused invalid and unreliable SCADA data and an unusual volume of SCADA alarms to come into PG&E's Gas Control Center. The gas control operators trended and analyzed the mixture of incoming SCADA information and alarms to determine and confirm actual operating conditions at Milpitas Terminal and downstream on the outgoing transmission pipelines. Gas control operators recognized that the pressure had increased at Milpitas Terminal and was also increasing on

CPSD Report indicates the M&C Superintendent of the Bay Area conversed with the fire battalion chief incident commander regarding shutting the gas off and that thereafter PG&E personnel coordinated with fire officials at the incident site to respond to the rupture.

The response actions of the PG&E personnel involved in identifying the San Bruno rupture location, responding to obtain equipment, developing an action plan and shutting off the flow of gas, and coordinating with the police and fire crews go to the very intent and purpose of the PG&E Emergency Plan, which itself meets the requirements of 192.615. PG&E personnel were responding within minutes of learning of the rupture, identifying what actions would be needed and working to implement those actions. Their training, qualification and experience allowed them to implement the actions required by the PG&E Plan.

#### D. Conclusion

It is my opinion the Company Wide Emergency Plan, Peninsula Emergency Plan, and the GT&D Manual meet the regulatory requirements of §192.615. They satisfy the provisions in the PHMSA Enforcement Guidance, and follow the basic outline as described in the GPTC Guide. The plans are similar in design and organization to those of other pipeline operators.

The PG&E Plan identifies numerous job descriptions that may be required to respond to gas emergencies and indicates specific actions each job classification would undertake. These duties are reinforced in the annual and five-year reviews. Internal and external communications requirements are discussed in specific sections of the Plan. The job duties, response actions, internal and external communication requirements are adequately described in PG&E's plan to meet the requirements of §192.615.

According to the Staff Report and the NTSB San Bruno report, PG&E personnel responded to the pipeline rupture within minutes of learning of its occurrence. They recognized a possible gas emergency, notified PG&E dispatchers and reported to work locations. These personnel understood the actions that would be required to control such an emergency and prepared to implement the actions, seeking confirmation by a supervisor. Their actions reflect elements of the training required by the emergency plan. The response

- of the personnel to the San Bruno rupture was in line with the requirements of
- the PG&E Plan, the regulations and guidance discussed.

# CHAPTER 11 APPENDIX B COMPLETE LIST OF DOCUMENTS REVIEWED

#### **Documents reviewed**

Company-wide Emergency Plan in effect as of the San Bruno rupture (version provided in Recordkeeping Order Instituting Investigation proceeding in response to Legal Division Data Request 1, Question 8)

Peninsula Division Emergency Plan in effect as of the San Bruno Rupture (version provided in Recordkeeping Order Instituting Investigation proceeding in response to Legal Division Data Request 1, Question 8)

Gas Transmission & Distribution Emergency Plan Manual in effect as of the San Bruno rupture (version provided as exhibit P3-30152 in June 20, 2011 filing in Recordkeeping Order Instituting Investigation proceeding)

Gas Transmission System Incident Response Plan (version provided in Recordkeeping Order Instituting Investigation proceeding in response to Legal Division Data Request 1, Question 8)

Pacific Gas and Electric Company, Natural Gas Transmission Pipeline Rupture and Fire, San Bruno, California, September 9, 2010, NTSB San Bruno Pipeline Accident Report, August 30, 2011, NTSB/PAR-11/01, PB2011-916501

Consumer Protection & Safety Division, Incident Investigation Report, September 9, 2010 PG&E Pipeline Rupture in San Bruno, California, released January 12, 2012

Revised Report and Testimony of Margaret Felts (I.11-02-016), March 12, 2012, available at

http://www.cpuc.ca.gov/PUC/events/120312\_ReferenceDocumentsforCPSDReportsinRecordkeepingPenaltyConsiderationCase.htm

Index of Exhibits to Margaret Felts Testimony, available at http://www.cpuc.ca.gov/PUC/events/120312\_ReferenceDocumentsforCPSDReportsinRecordkeepingPenaltyConsiderationCase.htm

"Excerpt\_ER\_Confusion," available in Index of Exhibits to Margaret Felts Testimony, ftp://ftp.cpuc.ca.gov/pipelinerecordkeeping/ExhibitsToReportTestimonyOfMargaretFelts

PG&E Gas Operator Qualification Plan Abnormal Operating Conditions, Supplement to Basic Plan 1.1.2 Definition, Abnormal Operating Conditions Job Aid

PG&E DOT Operator Qualification Evaluation form, Inspect/Maintain Emergency Valves subtask, 17-01.00

#### I.11-02-016

## PG&E'S REQUEST FOR OFFICIAL NOTICE

## **EXHIBIT 6**

San Bruno Reporter's Transcript Volume 5 (October 1, 2012) (PG&E/Bull)

## BEFORE THE PUBLIC UTILITIES COMMISSION

### OF THE STATE OF CALIFORNIA

ADMINISTRATIVE LAW JUDGE MARK S. WETZELL, pre siding.

Order Instituting Investigation on the Commission's Own Motion into the Operations and Practices of Pacific Gas and Electric Company to Determine Violations of Public Utilities Code Section 451, General Order 112, and Other Applicable Standards, Laws, Rules and Regulations in Connection with the San Bruno Explosion and Fire on September 9, 2010.

EVIDENTIARY HEARING

Investigation 12-01-007

REPORTER'S TRANSCRIPT San Francisco, California October 1, 2012 Pages 264 – 476 Volume – 5

Reported by: Lynn A. Stanghellini, CSR No. 3489

Alejandrina E. Shori, CSR No. 8856 Thomas C. Brenneman, CSR No. 9554

PUBLIC UTILITIES COMMISSION, STATE OF CALIFORNIA 505 Van Ness Avenue, San Francisco, California 94102

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PUBLIC UTILITIES COMMISSION, STATE OF CALIFORNIA, SAN FRANCISCO, CALIFORNIA

1 Α Yes, sir. 2 0 Am I reading that sentence right in 3 that your testimony is that PG&E's plan and 4 PG&E's actions met the requirements of 615? Yes, sir, that's correct. 5 Α 6 Were you in this room for the previous witness' testimony? 8 Α Yes, I was. And it's your understanding that it 9 10 took approximately 90 minutes to isolate the 11 pipeline rupture? 12 Approximately 95 minutes, I believe 13 it was, yes, sir. 14 And do you believe that action 15 meets the code requirements of Part 615, 16 Subsection A3 that requires -- excuse me, 17 strike that -- yes, I'm sorry -- Section 615, 18 Subpart A3 which requires prompt and 19 effective response? 20 Yes, sir. If you look at the 21 response in total that PG&E effected at the 22 time of the incident, there was response that 23 began within just a few minutes of the 24 rupture occurring. And there was continual 25 response by PG&E through that time period 26 providing prompt and effective response of 27 dispatching a GSR, dispatching M&C personnel, 28 coordinating on scene with the fire

1 department that was on scene, identifying 2 valves to close, and then in effect closing 3 the identified valves throughout the entire 4 process. That whole time period and the response that they were engaged in does meet 5 the requirements of 192.615A-3. 6 Would you disagree with the NTSB's finding on page 102 of their report -- I'll 8 9 give you a minute to get that. Are you on 10 that page? 11 Α Yes, sir. 12 The paragraph that starts with 13 "NTSB," the last sentence of that paragraph: 14 These delays needlessly prolonged 15 the release of gas and prevented 16 emergency responders from accessing 17 the area. 18 Do you disagree that they were --19 that the response was needlessly delayed or 20 needlessly prolonged? 21 MR. WEED: If I could ask that the 22 witness have time to again read the two 23

paragraphs to get that sentence into context.

MR. REIGER: Certainly.

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MR. WEED: Mr. Bull, do you know which paragraphs he's talking about?

THE WITNESS: I am looking at the bottom of page 102, "The NTSB concludes that

#### I.11-02-016

## PG&E'S REQUEST FOR OFFICIAL NOTICE

## **EXHIBIT 7**

R.11-02-019, Opening Comments of Pacific Gas and Electric Company on Proposed Decision (filed Nov. 16, 2012)

#### 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)

(U 39 G)

## OPENING COMMENTS OF PACIFIC GAS AND ELECTRIC COMPANY ON PROPOSED DECISION

WILLIAM V. MANHEIM KERRY C. KLEIN

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Attorneys for PACIFIC GAS AND ELECTRIC COMPANY

Dated: November 16, 2012

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Having created the need for this remedial work by its imprudent historic document management practices, PG&E has not shown by a preponderance of the evidence that the costs of the current document search and organization projects can be included in revenue requirement and that the resulting rates will be just and reasonable."

Though denying cost recovery, the PD was careful not to express any opinion "on whether PG&E's natural gas system records violated federal or state law or regulations because those questions are pending in I.11-02-016." Based on that understanding, PG&E does not contest the disallowance for MAOP Validation costs (or the strength testing costs for post-1955 pipelines where PG&E lacks documentation of a previous strength test). PG&E's silence, however, should not be taken as acquiescence. The PD imposes hindsight judgments about how records should have been maintained, without taking into account the inter-play among the Grandfather Clause (49 CFR § 619(c)), historic industry recordkeeping practices, and the Commission's directives and orders eliminating the Grandfather Clause and requiring operators to re-verify MAOP using traceable, verifiable and complete records.

The PD's conclusion that the GTAM Project is a remedial effort is unsupported by the record evidence. The weight of the evidence indicates that GTAM is not a remedial effort to ameliorate any past record keeping deficiencies, but instead is a significant technology upgrade that will benefit ratepayers far into the future. GTAM includes: (1) upgrading PG&E's current GIS to reflect an improved "linear referencing model," considered a best practice for gas

<sup>45</sup> PD, p. 89.

<sup>46</sup> PD, p. 99.

 $<sup>^{47}</sup>$  PG&E does not contest the proposed disallowance of strength testing costs for post-1955 pipelines operating above 30% SMYS where we must test or replace because we lack traceable, verifiable and complete records and where we did not meet the test or records requirements applicable at the time of installation (*i.e.* B31.8 from January 1, 1956 to July 1, 1961).

<sup>48</sup> See, e.g., Ex. 21, PG&E Rebuttal, Chapter 10.

#### I.11-02-016

## PG&E'S REQUEST FOR OFFICIAL NOTICE

## **EXHIBIT 8**

Exhibit No. 3 to Xcel Energy Advice Letter No. 809-Gas, No. 11AL-809G, Col. Pub. Util. Comm'n (October 3, 2011)

#### SUMMARY OF TRANSMISSION INTEGRITY MANAGEMENT PROGRAM

#### I. BACKGROUND

The Transmission Integrity Management Program ("TIMP") was developed pursuant to the Pipeline Safety Improvement Act of 2002 and the regulations promulgated thereunder by the United States Office of Pipeline Safety. The program is now administered by the Pipeline and Hazardous Materials Safety Administration ("PHMSA"). The rules specify how pipeline operators must identify, assess, prioritize, evaluate, repair and validate the integrity of gas transmission pipelines. The rules focus on the potential impacts of pipeline failures or leaks on heavily populated or occupied areas, referred to as High Consequence Areas ("HCAs"). All pipeline operators must assess all of its pipelines in HCAs by December 17, 2012, and reassess the lines on a periodic cycle no longer than every seven years. While the program is prescriptive and extensive, its direction to pipeline operators can be summarized as follows:

- Know your assets, i.e., understand their history, maintenance, construction methodology, location, soil condition, etc.
- Understand the threats against your assets, e.g., corrosion, manufacturing, third-party damage, construction methods, etc.
- Assess the pipelines using one or more methods.
- Be proactive in addressing threats against assets, i.e., develop and implement preventive and mitigation measures for the threats, monitor the results, and change programs as needed.
- Record data and report.

The Company began the required assessments in 2004 primarily using direct assessments or pressure tests. As the program and technology evolved, the Company elected to use In-Line Inspection ("ILI") as the preferred inspection method, as this tool yields the most complete and high-quality information necessary to address the threats on our system. The devices used for such inspection are commonly referred to as Pipeline Inspection Gadgets ("PIG"), also referred to as a "smart PIG." When using a PIG is impractical due to the configuration of the pipeline or other code-related reasons, the Company utilizes pressure tests to assess the lines. Such testing provides operating pressure tolerances of the pipeline, and can identify problems if the pipeline segment fails the test, but usually requires follow-up excavation to identify the exact location of and reason for the failure. The Company might also perform ILI inspections prior to conducting a pressure test to identify with more specific ity potential failure points on the line. This is particularly useful when much of the pipeline is under asphalt and finding a pressure test failure point is difficult.

This reliance on ILI must be implemented carefully. Not every pipeline is configured to allow for smooth passage of a PIG. It can be very expensive to extricate the PIG and repair facilities when a PIG becomes stuck in a pipeline. Consequently, the Company must carefully evaluate pipe sections before attempting an ILI procedure. Specifically, the Company researches legacy records, maps and test results to supplement or validate data in the Company's Pipeline Data Management System ("PDMS"). The PDMS is the Geographic Information System ("GIS") of record for our pipeline assets. To the extent available, the locations, materials, manufacturers and vintages of the Company's pipelines are stored in PDMS, which is also designed to house

detailed data on each pipeline's integrity transmitted by the ILI. The Company also "potholes" or excavates pipes to determine pipeline configuration when insufficient information is available, and replaces fittings or other impediments to the PIG's smooth passage through the pipe.

Regardless of which inspection method is used, the purpose of a pipeline inspection is the same - to identify corrosion on the internal or ex ternal pipeline walls, dents, cracks, weaknesses around fittings or welds, and other factors impairing the integrity of the pipeline. Essentially, the goal is to identify potential points of failure and perform repairs.

To date, the Company has assessed 280 miles of the 360 miles of pipeline in HCAs that must be assessed under TIMP regulations by December 17, 2012. The Company anticipates de-rating about 25 miles of the remaining 80 miles to be inspected, which will reduce the operating pressures of these lines and consequently remove them from the scope of the December 2012 TIMP assessment mandate. The Company is on target for completing the remaining required inspections before the deadline.

Public Service has embraced the goals of both TIMP and the companion Distribution Integrity Management Program ("DIMP"), and has adopted a strategy of going beyond minimal compliance. In other words, the Company is integrating the TIMP and DIMP programs as part of its overall comprehensive strategy for ensuring a reliable and safe distribution system. Two examples are the Accelerated Main Replacement Program ("AMRP") and Cellulose Acetate Butyrate ("CAB") Services Replacement program, which effectively supplement our DIMP activities and reduce the level of work and associated costs we would otherwise incur as part of the DIMP. Because the Company initiated the AMRP and CAB programs well before any DIMP-related work was required by formal regulation, we are now better positioned to execute our overall integrity management strategy in an effective and efficient manner.

To this point, the Company has assessed 500 miles of additional transmission pipeline that are not specifically earmarked for inspection under TIMP. These segments are often interspersed with, or located in very close proximity with, targeted pipelines in HCAs; therefore, the Company can inspect the additional lines at a modest cost premium over inspecting only the required lines in HCA. In addition, the lessons learned from assessments in HCAs (and those pipelines in close proximity thereto) is providing valuable information to the Company in inspecting and maintaining all of our pipeline assets and, particularly, pipelines in similarly-situated areas.

#### II. LESSONS FROM TIMP EFFORTS TO DATE

The TIMP assessments conducted to date have yielded some important insights. Specifically, we have discovered the following:

- Some of the lines were more difficult to perform an ILI than we anticipated, due to the construction methods used at the time of their installation as well as maintenance activity over the ensuing years.
- The number of anomalies and failure rates on pressure tests conducted on pipelines located in the Front Range have exceeded anticipated levels.
- Existing Company data on pipeline locations and materials are less complete and of a lower quality than previously believed.
- Routine, historical, and reliable maintenance practices are not always as sufficient for ensuring pipeline safety as originally thought for parts of the Colorado operating system.

While the insights resulting from our TIMP activities have been invaluable, they have sometimes necessitated significant departures from our planned or budgeted work. Some examples are provided below:

- The difficulties encountered with performing ILI have required the Company to visually inspect pipelines (which requires digging through earth or pavement to reach the mains) and to conduct more pressure or hydrostatic tests. Moreover, some of the pipelines that could eventually be assessed using ILI required more preparatory work than anticipated.
- Occasionally, the Company assessed a pipeline segment using a method that met TIMP criteria, but did not yield data of sufficient quality to satisfy the Company. In those situations, the Company had to re-assess the line using a better method or performed additional excavations and examinations to obtain sufficient information regarding the integrity of the line.
- The higher-than-anticipated failure rates referenced above have required additional excavations, inspections and repairs of failure points. The additional O&M and capital costs associated with these efforts have been recorded as part of TIMP. Salient examples include the Parker Lateral and Littleton Lateral and the West Main line. The expenses incurred to maintain the reliability and safety of the pipelines, and to ensure continued service while the lines are being repaired, have been recorded as TIMP O&M or capital. Of course, the costs of renewing the West Main line are assigned to the West Main project.

As part of TIMP, the Company has continued to address its data deficiencies. The Company has developed a comprehensive initiative to remedy the PDMS deficiencies mentioned above. The primary objectives of this initiative are to improve data quality, eliminate data gaps, improve the functionality of the system, and facilitate the storage of the extensive data generated through ILI and pressure tests. For example, with these improvements, the Company will be able to cross-reference maintenance records with the Company's pipeline database and review the history of a particular pipeline. We are currently undertaking a quality assurance program to improve the data, with a projected completion date of December 2013.

A related effort is the Maximum Allowable Operating Pressure ("MAOP") initiative, which focuses more narrowly on the need to gather and validate records supporting the MAOP for the Company's transmissions pipelines. The Company will gather data from existing paper documents and other sources to populate missing or inaccurate fields within PDMS. Improving this data will facilitate better planning, enhance public and worker safety, and reduce the number of system outages. The MAOP initiative is a proactive response to anticipated future legislation and regulations, which is expected to include more rigorous data collection and storage requirements.

Due to the activities summarized above, the Company's knowledge of our transmission system has improved significantly – and will continue to improve. We have also completed numerous repairs based on our assessments and have authorized replacements when necessary. Because the scope and composition of our TIMP-related work has change d from what we originally anticipated, our TIMP-related O&M and capital expenditures have correspondingly increased. A discussion of the more significant cost variances is provided below.

#### III. BREAKDOWN OF TIMP COSTS AND COST CHANGES

A. Criteria for Booking Costs as O&M or Capital

The breakdown of TIMP costs between O&M expenses and capital costs is provided below:

#### In-Line Inspections to Comply with TIMP Regulations

In most cases, the costs of assessments using ILI are booked as O&M expenses. But there are a few exceptions. First, the costs of permanent inspection equipment are capitalized. Such equipment can include entry and exit point facilities (launchers and receivers), and minor pipe extensions or modifications needed to ensure the PIG's unimpeded progress through the pipe. Second, the costs of preparing a pipeline to accommodate the ILI assessment are capitalized if the work is undertaken at the same time the permanent entry/exit equipment is installed. Third, the costs of testing whether the PIG can travel from the entry point to the egress point without issue is capitalized during the initial baseline assessment as acceptance testing.

#### Hydrostatic / Pressure Testing to Comply With TIMP Regulations

The costs of using this alternative assessment method are predominantly booked as O&M expenses. The exceptions noted above for ILI assessments generally apply to pressure or hydrostatic testing as well.

#### **Direct Assessments**

This assessment method requires the Company to excavate the pipeline and test the line for internal or external corrosion. Since this method does not entail the same pipeline modifications required for ILI or pressure tests (such as the installation of launchers and receivers), there are virtually no scenarios under which a cost would be capitalized.

#### Repairs Resulting From Assessments

The costs of repairs necessitating the replacement of assets that qualify as "units of property" are capitalized. Fittings for pipe diameters greater than 6 inches and sections of pipeline exceeding 50 feet in length meet this criterion. Repairs involving minor materials and pipe replacement are booked as O&M expenses. The Company is in the process of reviewing its current capitalization policy in conjunction with generally accepted accounting practices and FERC rules to determine if further modifications need to be made relative to booking repairs on segments less than 50 feet in length.

#### Data Gathering and Management Costs

The costs of the PDMS and MAOP initiatives are capitalized if the task of interpreting and analyzing the data requires engineering or other specialized expertise. The costs of routine data entry or updating that do not require such expertise are booked as O&M expenses. The majority of the costs of the PDMS and MAOP initiatives are capitalized.

#### B. 2011 O&M Costs

In our Direct Testimony in the most recent Phase I gas proceeding (Docket No. 10AL-963G), the Company estimated 2011 TIMP O&M expenses of about \$7.1 million. The Company now projects expenses of about \$13.8 million. The major drivers of the \$6.7 million increase are listed below:

 The assessments of the Littleton Lateral and Parker Lateral revealed more anomalies and failures than anticipated. The costs of excavations to validate the ILI data and subsequent repair costs exceeded our previous estimates by about \$2.5 million

- Assessing the West Main line required more expensive pressure testing and line preparation than anticipated. Moreover, the condition of the line was worse than anticipated, which ultimately led us to a decision to systematically replace the entire line over multiple years. While the replacement costs are assigned directly to the West Main project, the cost of repairs and upgrades to ensure the safety and reliability of the line pending its replacement are booked to TIMP. The O&M costs associated with these efforts exceeded our estimates by about \$3.0 million.
- The assessments revealed more anomalies per mile than anticipated. Consequently, the Company's repair costs were also higher than anticipated.

#### C. 2012 O&M Costs

The Company's primary objective in 2012 is to complete the required TIMP assessments by December 17, 2012. The Company will continue to undertake repairs or renewals depending on the results of the assessment. The Company will also continue to improve its data systems and data quality. These activities are described in more detail above, and the costs of these activities are included in the 2012 budget.

In our Direct Testimony in the most recent Phase I gas proceeding (Docket No. 10AL-963G), the Company estimated 2012 TIMP O&M expenses of about \$6.0 million. The Company now projects expenses of about \$9.7 million. The major drivers of the \$3.7 million increase are listed below:

- As described above, the need to address data issues has become more pressing.
   The 2012 budget includes \$1.1 million of additional O&M expenses earmarked for the PDMS and MAOP.
- Six projects previously slated for ILI will now be subject to Direct Assessments.
   The Company adopted this modification to ensure compliance with the December 17, 2012 deadline. Since the total cost of Direct Assessment projects consist of a greater percentage of O&M expenses as compared to ILI projects, projected 2012 O&M expenses increased by about \$2 million.
- A small component of the O&M budget increase is attributable to the reassessment of lines previously assessed and additional preventative or mitigation measures on previously assessed lines.
- The Company has budgeted a small increment of O&M expenses for the anticipated work required under new federal regulations as a result of the National Transportation Safety Board's investigation of the San Bruno incident.

#### D. 2012 Capital Costs

In our Direct Testimony in the most recent Phase I gas proceeding, the Company estimated 2012 TIMP capital costs (revenue requirement) of about \$4.1 million. This revenue requirement was based on projected 2012 gross plant of \$35.0 million and rate base of about \$29.0 million. Both estimates were based on 13-month averages. The Company now projects a 2012 capital cost of \$7.2 million, based on 2012 gross plant of \$70.7 million and rate base of \$48.3 million. This \$3.0 million increase is attributable to capital expenditures in 2011 and 2012 that were not anticipated when the Company filed its rate case estimates. The major drivers of the plant increases are provided below:

- In 2011 the Company incurred about \$9.0 million of capital expenditures to reinforce the distribution system to ensure the reliability and safety of the system while conducting TIMP assessments. These reinforcements were necessary in order to provide continued service to our customers and consisted of new regulator stations and distribution mains. We projected no such expenditures in our rate case filing.
- In the rate case filing the Company projected \$1.5 million of capital expenditures for ILI projects. This estimate was based on very high-level estimates of anticipated activities and associated costs. Based on our actual expenditures to date in 2011, as well as our more refined estimates of the costs of the remaining work to be conducted in 2011, the Company now projects 2011 capital expenditures of \$7.0 million for ILI projects.
- In our rate case filing, the Company anticipated 2012 capital expenditures of about \$11 million for ILI and pressure tests. The Company has now refined its projections of the actual work it will need to conduct in 2012 and the likely costs of this work. We now project 2012 capital expenditures of about \$19.7 million.

#### IV. CONCLUSION

Public Service has embraced TIMP and leveraged its requirements to implement a comprehensive strategy for maintaining the integrity of our transmission system. It would be difficult to overstate the value of this initiative. We are gaining – and will continue to gain – a markedly better understanding of the integrity of our transmission system. We have implemented programs to plug data gaps and rectify data quality issues. We have also identified a variety of anomalies and repaired line segments when necessary. Moreover, we have discovered two pipelines (West Main and Edwards to Meadow Mountain) that require replacement.

We have frankly been surprised at the extent of the data and integrity issues revealed by our initial TIMP assessments. As a result, we have incurred higher program costs than anticipated. Most of these surprises and the concomitant cost consequences are directly related to our lack of historic experience with implementing a fundamentally different assessment approach. There are lessons learned with any new initiative — particularly an initiative as far-reaching as TIMP. We now have much better data on our lines and are much better positioned to conduct future assessments with less preparatory work. (The TIMP regulations require reassessments on a cycle no longer than every seven years.) Moreover, given that we have already completed significant repairs and are renewing two major pipelines as a result of the first round of assessments, the need for repairs and renewals based on subsequent rounds of assessments should be significantly diminished.

Finally, while the 2011 and 2012 costs are significantly higher than originally anticipated, we believe the activities we have undertaken to date and plan to undertake in the future will provide significant long-term value to our customers and the public. The Company has worked diligently to ensure that we have the necessary data and information to determine the best course of action to ensure service reliability for our customers and a safe pipeline system in Colorado. The Company acknowledges that this critical task entails significant expenditures. We have also not hesitated to repair lines quickly when warranted. By the same token, we needlessly engaged in gratuitous inspections, repairs and renewals. If, based on sound information, we conclude there is no reasonable basis for believing there is a problem with a given segment, then we do not devote any more time and money to that segment until the next round of assessments. In fact, we have concluded that some relatively older segments of pipeline can continue to provide safe and reliable service without repairs or renewals.

#### I.11-02-016

## PG&E'S REQUEST FOR OFFICIAL NOTICE

## **EXHIBIT 9**

Grubb v. Dep't of Real Estate, No. RG08 364823 (Cal. Super. May 29, 2009)

The Court has considered all of the papers filed in connection with the matter, the arguments of counsel, and, good cause appearing, HEREBY DENIES the "Petition", on the grounds set forth below.

#### I. Factual and Procedural Background

Petitioners seek review of the Commissioner's decision to impose suspension and a monetary penalty on Petitioner pursuant to Business & Professions Code section 10177.5, which states:

When a final judgment is obtained in a civil action against any real estate licensee upon grounds of fraud, misrepresentation, or deceit with reference to any transaction for which a license is required under this division, the commissioner may, after hearing in accordance with the provisions of this part relating to hearings, suspend or revoke the license of such real estate licensee.

(Bus. & Prof. C. § 10177.5.)

The underlying judgment arose out of a dispute between sellers and purchasers of real estate; the sellers were found to have made knowing and negligent misrepresentations and concealed facts from purchasers with the intent to deceive and held liable for punitive damages for failing to release the purchasers' deposit. Petitioner was adjudged liable to the purchaser for (1) intentional misrepresentation (making a false representation, knowing it was false or with reckless disregard for its falsity); (2) negligent mispresentation (making a false representation without reasonable grounds for believing its truth); (3) intentional concealment (intentionally failing to disclose an important fact with intent to

deceive); and (4) breach of a real estate professional's fiduciary duty. (See Administrative Record (hereafter "AR") at 70-76. See also AR at 904-08 [the Nov. 20, 2007 Decision after Rejection, hereinafter the "Decision"].) For the purposes of punitive damages, the jury did not find that Petitioner or its agents acted with malice, oppression or fraud. (See id. at 75-76, 69.)

Before judgment was entered, sellers settled with the purchasers, and took an assignment of the purchasers' claims against Petitioner and broker Suzanne Paul. (AR 855). The sellers, as assignees, obtained a judgment (the "Judgment") against, *inter alia*, Petitioner for interest on the deposit that the purchasers themselves had withheld from sellers. (AR 58-59, 855, 904).

The DRE filed an accusation against Ms. Paul and Petitioner. As amended, the accusation relied solely on the Judgment, alleging that the underlying misrepresentations constituted cause for disciplinary action under Business & Professions Code section 10177.5. (AR 32-35). After a seven-day hearing before an administrative law judge (the "ALJ") in which the ALJ took testimony and considered evidence related both to the underlying judgment and mitigating circumstances, the ALJ issued his February 2007 Proposed Decision, finding that the Judgment was vague and, in many respects, unsupported and that the circumstances did not warrant discipline against Petitioner or Ms. Paul; the ALJ recommended terminations of the proceeding "without imposition of discipline." (See AR 847-862.)

The Commissioner declined to adopt the Proposed Decision. (See AR 845-846, 901-917.) After considering written argument, the Commissioner issued the Decision, finding that (1) the ALJ had impermissibly questioned the factual findings in the jury verdicts and (2) in light of the circumstances underlying the judgments, including extensive evidence in mitigation, some discipline was in warranted. (AR 901-917.) Petitioner's license was suspended for thirty days, which suspension could be permanently stayed on condition of payment of a \$3000 penalty and no further cause for disciplinary action for one year. (AR at 914-16.)

#### II. Standard of Review

The inquiry of the Court extends to the following questions: "...whether the respondent has proceeded without, or in excess of jurisdiction; whether there was a fair trial; and whether there was any prejudicial abuse of discretion." (CCP § 1094.5(b)). "Abuse of discretion" is established if Respondent has not proceeded in the manner required by law, the order of decision is not supported by the findings, or the findings are not supported by the evidence. (*Id.*)

Concerning Respondent's contention that the findings are not supported by the evidence, the parties do not dispute that the instant dispute concerns a vested right, and thus the "independent judgment" standard of review applies. Under this standard, the agency has abused its discretion if its findings are not supported by the weight of the evidence. (See CCP § 1094.5(c); Calif. Admin. Mandamus (3d ed. 2008) § 6.132.) The findings of the administrative agency come to the trial

court with a "strong presumption of correctness," which Petitioner bears the burden of rebutting. (See Calif. Admin. Mandamus § 6.163; *Fukuda v. City of Angels* (1999) 20 Cal.4<sup>th</sup> 805, 817, 820-22 [on review with the trial court, petitioner must overcome the presumption that the agency's factual findings are supported by "the weight of the evidence" – i.e. a preponderance].)

#### III. Petitioner's Challenges

The Amended Petition and Petitioner's Opening Brief in support of the Petition assert that (1) Respondent did not apply the correct legal standard, that the evidence did not support Respondent's findings that Petitioner committed fraud, misrepresentation or deceit or that discipline was warranted; and (2) Respondent violated procedural due process and under CCP sections 1094.5(b) and (c), denied Petitioner a fair trial and failed to proceed in the manner required by law. (See Amended and Supplemental Petition for Writ of Mandate ¶¶ 18-20, 25-27; MPA ISO Motion for Peremptory Writ of Mandate at pp. 12-20.)

#### 1. The Commissioner Applied the Proper Legal Standard

First, Petitioners argue that Respondent applied the wrong legal standard.

Specifically, Petitioners contend that the Commissioner refused to apply the "clear and convincing" evidence standard to both his finding that there was a judgment for fraud, concealment or misrepresentation, and to his finding that suspension or

<sup>&</sup>lt;sup>1</sup> Petitioner also challenged Respondent's showing of a nexus between the transaction and licensed activity. However, Petitioner did not raise this challenge it its opening brief or at

revocation was warranted. (See Bus. & Prof. C. § 10177.5.) The parties have not cited, and the Court is not aware of, any authority directly on point; generally, however, relevant authority supports the Petitioner's contention that the constitutionally-mandated "clear and convincing evidence" standard applies to both findings. (See Kapelus v. State Bar (1987) 44 Cal.3d 179, 184, n.1 ["clear and convincing evidence" standard applies to all license revocation proceedings]; Ettinger v. Board of Medical Quality Assurance (1982) 135 Cal.App.3d 853, 856 [same]; Guzzetta v. State Bar (1987) 43 Cal.3d 962, 968, fn. 2 [in state bar disciplinary proceedings, "the burden ... is on the State Bar to establish by clear and convincing evidence that discipline is warranted"]. Cf. Deas v. Knapp (1981) 29 Cal.3d 69, 79 ["Suspension or revocation under section 10177.5 is discretionary, and the licensee must be given a chance to show that discipline should be withheld or imposed for only a short period."].)

Indeed, in this case, the Commissioner, in discussing the applicable standard, stated as follows:

4. Section 10177.5 does require a finding by clear and convincing evidence. However, such finding is as to whether there is a final judgment based upon fraud, misrepresentation or deceit in reference to a transaction for which a real estate license is required. It is not required that the facts to establish the fraud, misrepresentation or deceit be established in the administrative hearing to find a violation of Section 10177.5....

the hearing, and in any event the evidence that the judgment was related to licensed activity is clear and convincing.

Respondents, in this case, were clearly found by the jury to have committed fraud, misrepresentation or deceit with reference to a transaction for which a real estate license is required.

5. Just as clear is the fact that the intentional and negligent misrepresentation by Respondent PAUL and the intentional and negligent misrepresentation, as well as concealment and breach of fiduciary duty by Respondent THE GRUBB COMPANY, which resulted in the rescission of the Tiaos' purchase contract for 107 Estates Drive, and award of prejudgment interest and costs, provide sufficient cause to impose discipline against both Respondents' real estate licenses.

(See AR 913-14, emphasis added.)

The Commissioner correctly concluded that the DRE was not required to prove the facts underlying the judgment by clear and convincing evidence; rather, the DRE was required to prove by clear and convincing evidence facts showing (1) the existence of a judgment for fraud, misrepresentation and concealment against Petitioner, and (2) sufficient cause to impose discipline. While concluding, as a legal matter, that the facts underlying the judgment were irrelevant to the first prong, the Commissioner stated that he did in fact consider such evidence with respect to the second prong. Specifically, the Decision states: "I have reviewed the transcript [of the administrative hearing regarding the specifics of the transaction that gave rise to the underlying lawsuit] and have considered all such testimony, as appropriate, in making my findings of fact, conclusions and the order." (See AR at 908.) In other words, it appears from the record that the Commissioner considered all of the evidence introduced at the hearing before the

ALJ, and determined not only that there was clear and convincing evidence of a final judgment of fraud, misrepresentation or deceit in reference to a transaction for which a real estate license is required, but also that the evidence of Petitioner's conduct in the underlying transaction "just as clearly" merited discipline (notwithstanding evidence in mitigation). Petitioners' argument that the Commissioner applied the wrong legal standard is thus without merit.

#### B. The Factual Findings Are Supported by the Evidence

Petitioner contends that the evidence does not support Respondent's findings that Petitioner committed fraud, misrepresentation or deceit or that discipline was warranted. Petitioner bears the burden of showing that the findings are contrary to the weight of the evidence. (See *Fukuda*, 20 Cal. 4<sup>th</sup> at 817 [stating that "the party challenging the administrative decision bears the burden of convincing the court that the administrative findings are contrary to the weight of the evidence"].))

#### 1. Existence of a Judgment for Fraud, Misrepresentation or Deceit

Petitioner argues that the ALJ found that the judgment was "based on misrepresentation" but concluded that it must have been negligent misrepresentation, as opposed to fraud or deceit. Petitioner further argues that the jury affirmatively found an absence of clear and convincing evidence of "fraud" (as required to assess punitive damages).

These arguments are without merit. First, discipline under Business & Professions Code section 10177.5 is not limited to judgments for *intentional* misrepresentation. For Section 10177.5 to be triggered, there must exist a judgment for "fraud, misrepresentation, or deceit." Negligent misrepresentation is a species of "actual fraud" or deceit. (See *Norman I. Krug Real Estate Investments, Inc. v. Praszker* (1994) 22 Cal.App.4<sup>th</sup> 1814, 1821, citing 1 Miller & Starr, Cal.Real Estate (2d ed. 1989) §§ 1:103, 1:104.) Thus, even assuming arguendo that the ALJ properly and correctly re-interpreted the jury verdicts,<sup>2</sup> and further assuming the jury did not award punitive damages because it did not find clear and convincing evidence of Petitioner's "malice, oppression or fraud," there is no question that there exists the requisite judgment against Petitioner.<sup>3</sup>

Further, the Commissioner's finding that Petitioner was adjudged liable for misrepresentation, in connection with licensed activity, is properly based upon both the judgment itself and the jury verdicts, which found that Petitioner (and its

<sup>&</sup>lt;sup>2</sup> The ALJ's finding that the jury verdict was based on a single instance of negligent misrepresentation constitutes an attack on the merits of the underlying jury verdict, which the Commissioner properly determined is not permitted. (See *Deas*, 29 Cal.3d at 79, citing *Richards v. Gordon* (1967) 254 Cal.App.2d 735; see also *People v. Leong Fook*, 206 Cal. 64, 68.)

<sup>&</sup>lt;sup>3</sup> Furthermore, it should be pointed out that a jury's determination of the evidence supporting punitive damages is wholly separate from, and irrelevant to, the inquiry required of the Commissioner under section 10177.5.

agent Paul)<sup>4</sup> committed intentional and negligent misrepresentation(s) and intentional concealment. (AR 70-76, 906-07.)

#### 2. Facts Warranting Imposition of Discipline

If the agency proves the existence of a final judgment, the agency may, after hearing in accordance with the administrative procedures act, wherein the licensee is permitted to provide evidence relevant to mitigation or rehabilitation, suspend or revoke the license. (See Bus. & Prof. C. § 10177.5; *Deas*, 29 Cal.3d at 79 [requiring that the "licensee ... be given a chance to show that discipline should be withheld or imposed for only a short period"].) Again, Petitioner bears the burden of showing that the Commissioner's factual findings are not supported by the weight of the evidence.

Petitioner did not sustain its burden of proof on this issue. First, Petitioner argues that the ALJ found that no *intentional* misrepresentations occurred; however, this finding is a legal conclusion constituting an impermissible attack on the merits of the underlying jury verdict, which is not permitted. (See *Deas*, 29 Cal.3d at 79, citing *Richards v. Gordon* (1967) 254 Cal.App.2d 735.) Moreover, the ALJ's conclusion appears to have been based on his interpretation of court documents (the complaint and jury verdicts), not on direct evidence of Petitioner's scienter offered at the administrative hearing.

<sup>&</sup>lt;sup>4</sup> As pointed out by Respondent, Petitioner Grubb may also be disciplined under section 10177.5 based upon vicarious liability for the judgment against its agent Paul. (See California Real Estate Loans, Inc. v. Wallace (1993) 18 Cal.App.4<sup>th</sup> 1575, 1582-1584).

Second, Petitioner argues that the ALJ concluded that (1) the sellers were found "more culpable" than Ms. Paul, and (2) Respondent was merely vicariously liable, and thus likewise not as morally culpable as the sellers. Based upon his own review of the record, the Commissioner could properly conclude that the ALJ's conclusion was speculative, illogical or irrelevant, or outweighed by other relevant evidence.

More importantly, Petitioner has not pointed to any facts demonstrating that any of the Commissioner's factual findings (which are set forth in the Decision) are not supported by the weight of the evidence. Nor has Petitioner shown that important facts were ignored, such that the preponderance of evidence tips in favor of Petitioner. The record indicates that the Commissioner considered extensive evidence in mitigation, including Respondent's unblemished disciplinary record, contributions to the community, and post-litigation changes in policy and protocols. (See AR 908-11, 914-17.) The Commissioner also expressly recited mitigating facts that were also facts underlying the judgment, for example, the fact that broker Paul and Petitioner fulfilled all due diligence policies in place at the time of the alleged misconduct. (AR at 909-11.)

In reviewing whether the agency has imposed an appropriate penalty, the trial court is not free to substitute its own judgment for that of the agency, nor may it fix the penalty to be imposed; it can only remand to the agency in the event that the punishment is grossly excessive or constituted a manifest abuse of discretion.

(See Calif. Admin. Mandamus § 6.103, and authorities cited therein.) Petitioner has not demonstrated that the imposition of a suspension, with the option for a monetary penalty and permanent stay of the suspension, was grossly excessive or constituted a manifest abuse of discretion. (*Id.*)

C. Respondent Did Not Fail to Provide a "Fair Trial" or Fail to "Proceed in Manner Required by Law"

#### 1. The Charging Document

Petitioner contends that Respondent did not proceed in a manner required by law because the "charging document" (accusation) was so vague that it did not give sufficient notice to Petitioner of the allegations.

Charging documents are to be liberally construed. The charging document need only be adequate to permit the accused to prepare his defense and avoid disadvantage by surprise at the hearing. (See, e.g. Calif. Administrative Mandamus § 6.90, citing *Cooper v. Board of Med. Exam'rs* (1975) 49 Cal.App.3d 931, 942.) Thus, Petitioner must show that the pleadings actually misled Petitioner to its prejudice in maintaining defense on the merits. (*Id.*) Likewise, under the Administrative Procedures Act, the accusation need only set forth the acts or omissions being charged in ordinary and concise language so that the accused will be able to prepare his defense. (*Id.*, citing Gov. C. § 11504.) Nothing in the record suggests that Petitioner was misled as to the basis for the accusation — which was the Judgment, the facts of which were fully tried below.

### 2. Sequence of Briefing - Burden of Proof

Petitioner also contends that the Commissioner's request for written argument, first, from the Petitioner (rather than the DRE) constituted an impermissible reversal of the "burden of proof." Petitioner's authorities only discusses the burden of proof in terms of *production of evidence* -- not the order in which legal memoranda are submitted. (See, e.g. *Martin v. State Personnel Bd.* (1972) 26 Cal.App.3d 573, 582-83 [reciting the rule that the "burden of proving the charges rests upon the party making the charges" and discussing this rule in the context of introduction of evidence].) The record reflects that evidence was submitted in the order expressly *agreed upon* by the parties. (See AR 908 ¶ 15; Reporter's hearing transcript Vol. 1, at 8.). In connection with the accusation, evidence was submitted solely in the hearing before the ALJ. No additional evidence was taken by the Commissioner. Nothing the Commissioner did, then, could have "reversed" the burden of proof.

The Court notes that under the Administrative Procedure Act, neither the manner in which argument is provided nor the order in which the parties provide it is specified. Government Code section 11517(c)(2)(E)(ii) simply requires the Commissioner to "afford[] the parties the opportunity to present either oral or written argument" before ruling on the ALJ's proposed decision. Petitioner has not pointed to any authority requiring more. Even assuming that Commissioner's decision to require Petitioner to provide the opening brief was somehow improper,

Also, Petitioner was afforded a second chance to submit additional argument, when it filed a post-hearing brief requesting reconsideration. (See AR 956-57.)

Any prejudice Petitioner might have suffered was almost certainly mitigated.

For the foregoing reasons, Petitioners have not shown that reversing the order of briefing, on the review procedure before the Commissioner, violated Petitioner's due process rights.

### 3. Opportunity to Request a Stay

Finally, Petitioner contends that it was deprived of the opportunity to seek a stay of the discipline, while it sought further relief, because the Commissioner made his decision effective in less than the standard thirty days. The Administrative Procedure Act expressly permits this. (See Gov't C. § 11519(a).) Assuming, however, that the Commissioner's decision was improper, Petitioner has not shown that it was prejudicial. In the event that Petitioner ultimately prevailed in these proceedings, the imposed discipline could be vacated, and Petitioner's name cleared.

WHERFORE, for the reasons stated above, Petition for Peremptory Writ of Mandate is DENIED.

7/29/04 DATE

Hon, Jo-Lynne Q.

Judge of the Superior Court, Alameda County

## Superior Court of California, County of Alameda Department 22, Administration Building

Case Number: RG08364823

Order

#### **DECLARATION OF SERVICE BY MAIL**

I certify that I am not a party to this cause and that a true and correct copy of the foregoing document was mailed first class, postage prepaid, in a sealed envelope, addressed as shown at the bottom of this document, and that the mailing of the foregoing and execution of this certificate occurred at 1221 Oak Street, Oakland, California.

Executed on May 29, 2009

Executive Officer/Clerk of the Superior Court

By <u>Lynette Rushing</u> Deputy Clerk

Gary S. Garfinkle 1205 Via Gabarda Lafayette, CA 94549

Marguerite Stricklin Attorney General, State of California 1515 Clay Street, Suite 2000 Oakland, CA 94612

## I.11-02-016

# PG&E'S REQUEST FOR OFFICIAL NOTICE

# **EXHIBIT 10**

NTSB January 3, 2011 Safety Recommendations



## **National Transportation Safety Board**

# Washington, D.C. 20594 **Safety Recommendation**

Date: January 3, 2011

In reply refer to: P-10-1 (Urgent)

The Honorable Cynthia L. Quarterman Administrator U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration East Building, 2nd Floor 1200 New Jersey Ave., SE Washington, D.C. 20590

On September 9, 2010, about 6:11 p.m. Pacific daylight time, <sup>1</sup> a 30-inch-diameter natural gas transmission pipeline (Line 132) owned and operated by Pacific Gas and Electric Company (PG&E) ruptured in a residential area in the city of San Bruno, California. The accident killed eight people, injured many more, and caused substantial property damage. The rupture on Line 132 occurred near milepost 39.33, at the intersection of Earl Avenue and Glenview Drive in San Bruno. About 47.6 million standard cubic feet of natural gas were released as a result of the rupture. The rupture created a crater about 72 feet long by 26 feet wide. A ruptured pipe segment about 28 feet long was found about 100 feet away from the crater. The released natural gas was ignited sometime after the rupture; the resulting fire destroyed 37 homes and damaged 18.

When the National Transportation Safety Board (NTSB) arrived on scene on September 10, the investigation began with a visual examination of the pipe and the surrounding area. The investigators measured, photographed, and secured the ruptured pipe segment. On September 13, the ruptured pipe segment and two shorter segments of pipe, cut from the north and south sides of the ruptured segment, were crated for transport to an NTSB facility in Ashburn, Virginia, for examination.

According to PG&E as-built drawings and alignment sheets, Line 132 was constructed using 30-inch-diameter seamless steel pipe (API 5L Grade X42) with a 0.375-inch-thick wall. The pipeline was coated with hot applied asphalt and was cathodically protected. The ruptured pipeline segment was installed circa 1956. According to PG&E, the maximum allowable operating pressure (MAOP) for the line was 400 pounds per square inch, gauge.

The NTSB's examination of the ruptured pipe segment and review of PG&E records revealed that although the as-built drawings and alignment sheets mark the pipe as seamless API

<sup>&</sup>lt;sup>1</sup> All times mentioned in this letter refer to Pacific daylight time, unless otherwise specified.

5L Grade X42 pipe, the pipeline in the area of the rupture was constructed with longitudinal seam-welded pipe. Labora tory examinations have revealed that the ruptured pipe segment was constructed of five sections of pipe, some of which were short pieces measuring about 4 feet long. These short pieces of pipe contain different longitudinal short pieces of various type s, including single- and double- sided welds. Consequently, the short pieces of pipe of unknown specifications in the ruptured pipe segment may not be as strong as the seamless API 5L Grade X42 steel pipe listed in PG&E's records. It is possible that there are other discrepancies between installed pipe and as-built drawings in PG&E's gas transmission system. It is critical to know all the characteristics of a pipeline in order to establish a valid MAOP below which the pipeline can be safely operated. The NTSB is concerned that these inaccurate records may lead to incorrect MAOPs.

The MAOP for a pipeline can be e stablished by conducting a hydrostatic pressure test that stresses the pipe to 125 percent of the de sired MAOP without fa ilure. In a hyd rostatic pressure test, a pipe segment is typically filled with water at a spec ific pressure for a specific period of time to test the strength of the pipe. Hyd rostatic testing requirements and restrictions for natural gas pipelines a re specified in Title 49 Code of Federal Regulations (CFR) Part 192, Subpart J. The spike test is a variation of the hydrostatic pressure test in which a higher hydrostatic pressure, usually 139 percent of the MAOP, is applied for a short period of time (typically about 30 minutes). The spike test is intended to eliminate flaws that may otherwise grow and cause failure during pre ssure reduction a fter the hydr ostatic test or resulting from normal operational pressure cycles. It is advantageous to include a spike test because it limits the time the line is at the higher pre ssure to reduce the potential amount of crack g rowth. Although hydrostatic testing is recognized to be a direct and eff ective methodology for validating an MAOP, its implementation requires that operating lines be shut down, which may adve rsely affect customers dependent on the natural gas supplied by the pipeline, par rticularly if the pipe fails during the test, which could necess itate a protracted shutdown. Consequently, it is preferable to use available design, construction, inspection, testing, and other related records<sup>3</sup> to calculate the valid MAOP.

The NTSB is concerned that other pipeline operators, including interstate operators regulated by the Pipeline and Hazardous Materials Safety Administration, may have discrepancies in their records as well. Therefore, the NTSB makes the following safety recommendation to the Pipeline and Hazardous Materials Safety Administration:

<sup>&</sup>lt;sup>2</sup> PG&E's records identify Consolidated Western Steel Corporation as the manufacturer of the accident segment of Line 132. However, after physical inspection of the ruptu red section, investigators were unable to confirm the manufacturing source of some of the pieces of ruptured pipe. Determining the identity of the manufacturer of these pieces of pipe is an ongoing part of the investigation.

<sup>&</sup>lt;sup>3</sup> Some relevant records may not currently be in PG&E's possession, such as those that may reside with the city of San Bruno, San Mateo County, the state of California, or former employees or contractors of PG&E. During the investigation of the collapse of the I-35W Highway Bridge in Minneapolis, Minnesota, on August 1, 2007, NTSB investigators in terviewed retired engin eers and oth er technical personnel who had worked on the design of the bridge in the early 1960s. In the course of their interviews, NTSB investigators were provided with critical engineering records related to the bridge design that had been personally retained by one of the retired employees of the company that had designed the bridge. See *Collapse of I- 35W Highway Br idge, Minneapolis, Minnesota, August 1, 2007*, Highway Ac cident Re port NT SB/HAR-08/03 (Washington, DC: National Transportation Safety Board, 2008), pp. 78, 103, on the NTSB website at <a href="http://www.ntsb.gov/publictn/2008/HAR0803.pdf">http://www.ntsb.gov/publictn/2008/HAR0803.pdf</a>.

Through appropriate and expeditious means such as advisory bulletins and posting on your website, immediately inform the pipeline industry of the circumstances leading up to and the consequen ces of the Se ptember 9, 2010, pipeline rupture in San Bruno, California, and the National Transportation Safety Board's urgent safety recommendations to Pacific Gas and Electric Company so that pipeline operators can proactively implement corrective measures as appropriate for their pipeline systems. (P-10-1) (Urgent)

The NTSB also issued safety recommendations to the California Public Utilities Commission:

Develop an implementation schedule for the requirements of Safety Recommendation P-10-2 (Urgent) to Pacific Gas and Electric Company (PG&E) and ensure, through adequate oversight, that PG&E has aggressively and diligently searched documents and records relating to pipeline system components, such as pipe seg ments, valves, fittings, and weld seams, for PG&E natural gas transmission lines in class 3 and class 4 docations and class 1 and class 2 high consequence areas that have not had a maximum allowable operating pre ssure e stablished through prior hydr ostatic testing as outlined in Safety R ecommendation (P-10-2) (Urgent) to PG&E. The ser ecords should be traceable, verifiable, and complete; should meet your regulatory intent and requirements; and should have been considered in determining maximum allowable operating pressures for PG&E pipelines. (P-10-5) (Urgent)

If such a document and records search cannot be satisfactorily completed, provide oversight to any spike and hydrostatic tests that Pacific Gas and Electric Company is required to perform according to Safety R ecommendation (P-10-4). (P-10-6) (Urgent)

Through appropriate and expe ditious means, including posting on your website, immediately inform California intrastate natural gas transmission operators of the circumstances leading up to and the consequen ces of the Se ptember 9, 2010, pipeline rupture in San Bruno, California, and the Na tional Transportation Safety Board's urgent safety recommendations to Pacific Gas and Electric Company so that pipeline operators can proactively implement corrective measures as appropriate for their pipeline systems. (P-10-7) (Urgent)

The NTSB also issued safety recommendations to the Pacific Gas and Electric Company:

<sup>&</sup>lt;sup>4</sup> Class 3 refers to any location unit that has 46 or more buildings intended for human occupancy. Class 4 refers to any class location unit where buildings with four or more stories above ground are prevalent.

<sup>&</sup>lt;sup>5</sup> Class 1 refers to an offshore area or any class location unit that has 10 or fewer buildings intended for human occupancy. A class 2 location is any class location unit that has more than 10 but fewer than 46 buildings intended for human occupancy.

<sup>&</sup>lt;sup>6</sup> A high consequence area is any class 3 or 4 location or any area where a potential impact radius of 660 feet would contain more than 20 buildings intended for human occupancy.

Aggressively and diligently search for all as-built drawings, alignment sheets, and specifications, and all design, construction, inspection, testing, maintenance, and other related records, including those records in locations controlled by personnel or firms other than Pacific Gas and Electric Company, relating to pipeline system components such as pipe segments, valves, fittings, and weld seams for Pacific Gas and Electric Company natural gas transmission lines in class 3 and class 4 locations and class 1 and class 2 high consequence are as that have not had a maximum allowable operating pressure established through prior hydrostatic testing. These records should be traceable, veri fiable, and complete. (P-10-2) (Urgent)

Use the traceable, verifiable, and complete records located by implementation of Safety Recommendation P-10-2 (Urgent) to determine the valid maximum allowable operating pressure, based on the weakest section of the pipe line or component to ensure safe operation, of Pacific Gas and Electric Company natural gas transmission lines in class 3 and class 4 locations and class 1 and class 2 high consequence a reas that have not had a maximum a llowable operating pressure established through prior hydrostatic testing. (P-10-3) (Urgent)

If you are unable to comply with Safety R ecommendations P-10-2 (Urgent) and P-10-3 (Urgent) to accurately determine the maximum allowable operating pressure of Pac ific Gas and Electric Company natural gas transmission lines in class 3 and c lass 4 locations and c lass 1 and c lass 2 high consequence are as that have not had a maximum allowable operating pressure established through prior hydrostatic testing, determine the maximum allowable operating pressure with a spike test followed by a hydrostatic pressure test. (P-10-4)

In response to the recommendation in this letter, please refer to Safety Recommendation P-10-1 (Urgent). If you would like to submit your response electroni cally rather than in hard copy, you may send it to the following e-mail address: correspondence@ntsb.gov. If your response includes attachments that exceed 5 megabytes, please e-mail us asking for instructions on how to use our secure mailbox procedures. To avoid confusion, please use only one method of submission (that is, do not submit both an electronic copy and a hard copy of the same response letter).

Chairman HERSMAN, Vice Chairman HART, and Members SUMWALT, ROSEKIND, and WEENER concurred in these recommendations.

[Original Signed]

By: Deborah A.P. Hersman Chairman



## **National Transportation Safety Board**

# Washington, D.C. 20594 **Safety Recommendation**

Date: January 3, 2011

In reply refer to: P-10-2 and -3 (Urgent) and

P-10-4

Mr. Christopher Johns President Pacific Gas and Electric Company P.O. Box 770000 Mail Code B32 San Francisco, California 94177

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating transportation accidents, determining their probable cause, and making recommendations to prevent similar accidents from occurring. The urgent safety recommendations in this letter are derived from the NTSB's ongoing investigation of the natural gas pipeline rupture and explosion that killed eight people in San Bruno, California, on September 9, 2010. The NTSB would appreciate a response from you within 30 days addressing the actions you have taken or intend to take to implement our recommendations.

On September 9, 2010, about 6:11 p.m. Pacific daylight time, <sup>1</sup> a 30-inch-diameter natural gas transmission pipeline (Line 132) owned and operated by Pacific Gas and Electric Company (PG&E) ruptured in a residential area in the city of San Bruno, California. The accident killed eight people, injured many more, and caused substantial property damage. The rupture on Line 132 occurred near milepost 39.33, at the intersection of Earl Avenue and Glenview Drive in San Bruno. About 47.6 million standard cubic feet of natural gas were released as a result of the rupture. The rupture created a crater about 72 feet long by 26 feet wide. A ruptured pipe segment about 28 feet long was found about 100 feet away from the crater. The released natural gas was ignited sometime after the rupture; the resulting fire destroyed 37 homes and damaged 18.

When the NTSB arrived on scene on September 10, the investigation began with a visual examination of the pipe and the surrounding area. The investigators measured, photographed, and secured the ruptured pipe segment. On September 13, the ruptured pipe segment and two shorter segments of pipe, cut from the north and south sides of the ruptured segment, were crated for transport to an NTSB facility in Ashburn, Virginia, for examination.

<sup>&</sup>lt;sup>1</sup> All times mentioned in this letter refer to Pacific daylight time, unless otherwise specified.

According to PG&E as-built dra wings and a lignment sheets, Line 132 was constructed using 30-inch-diameter seamless steel pipe (API 5L Grade X42) with a 0.375- inch-thick wall. The pipeline was coated with hot applied a sphalt and was cathodically protected. The rupture d pipeline segment was installed circa 1956. According to PG&E, the maximum allowable operating pressure (MAOP) for the line was 400 pounds per square inch, gauge.

The NTSB's examination of the ruptured pipe segment and review of PG&E records revealed that a lthough the as-built dra wings and a lignment sheets mark the pipe as seamless API 5L Grade X42 pipe, the pipeline in the area of the rupture was constructed with longitudinal seam-welded pipe. Labora tory examinations have revealed that the ruptured pipe segment was constructed of five sections of pipe, some of which were short pieces measuring about 4 feet long. These short pieces of pipe contain different longitudinals eam welds of various types, including single- and double- sided welds. Consequently, the short pieces of pipe of unknown specifications in the ruptured pipe segment may not be as strong as the seamless API 5L Grade X42 steel pipe listed in PG&E's records. It is possible that there are other discrepancies between installed pipe and as-built drawings in PG&E's gas transmission system. It is critical to know all the characteristics of a pipeline in order to establish a valid MAOP below which the pipeline can be safely operated. The NTSB is concerned that these inaccurate records may lead to incorrect MAOPs.

The MAOP for a pipeline can be e stablished by conducting a hydrostatic pressure test that stresses the pipe to 125 percent of the desired MAOP without failure. In a hydrostatic pressure test, a pipe segment is typically filled with water at a specific pressure for a specific period of time to test the strength of the pipe. Hydrostatic testing requirements and restrictions for natural gas pipelines a respecified in Title 49 Code of Federal Regulations (CFR) Part 192, Subpart J. The spike test is a variation of the hydrostatic pressure test in which a higher hydrostatic pressure, usually 139 percent of the MAOP, is applied for a short period of time (typically about 30 minutes). The spike test is intended to eliminate flaws that may otherwise grow and cause failure during pressure reduction after the hydrostatic test or resulting from normal operational pressure cycles. It is advantageous to include a spike test because it limits the time the line is at the higher pressure to reduce the potential amount of crack growth. Although hydrostatic testing is recognized to be a direct and effective methodology for validating an MAOP, its implementation requires that operating lines be shut down, which may adversely affect customers dependent on the natural gas supplied by the pipeline, particularly if the pipe fails during the test, which could necessitate a protracted shutdown. Consequently, it is

<sup>&</sup>lt;sup>2</sup> PG&E's records identify Consolidated Western Steel Corporation as the manufacturer of the accident segment of Line 132. However, after physical inspection of the ruptu red section, investigators were unable to confirm the manufacturing source of some of the pieces of ruptured pipe. Determining the identity of the manufacturer of these pieces of pipe is an ongoing part of the investigation.

preferable to use available design, construction, inspection, testing, and other related records<sup>3</sup> to calculate the valid MAOP.

Therefore, the National Transportation Safet y Board makes the following safet y recommendations to the Pacific Gas and Electric Company:

Aggressively and diligently search for all as-built drawings, alignment sheets, and specifications, and all design, construction, inspection, testing, maintenance, and other related records, including those records in locations controlled by personnel or firms other than Pacific Gas and Electric Company, relating to pipeline system components, such as pipe seg ments, valves, fittings, and weld seams for Pacific Gas and Electric Company natural gas transmission lines in class 3 and class 4 locations and class 1 and class 2 high consequence areas that have not had a maximum allowable operating pressure established through prior hydrostatic testing. These records should be traceable, verifiable, and complete. (P-10-2) (Urgent)

Use the traceable, verifiable, and complete records located by implementation of Safety Recommendation P-10-2 (Urgent) to determine the valid maximum allowable operating p ressure, based on the weakest s ection of the pipe line or component to ensure safe operation, of P acific Gas and Electric Company natural gas transmission lines in class 3 and class 4 locations and class 1 and class 2 high consequence a reas that have not had a maximum a llowable operating pre ssure established through prior hydrostatic testing. (P-10-3) (Urgent)

If you are unable to comply with Safety R ecommendations P-10-2 (Urgent) and P-10-3 (Urgent) to accurately determine the maximum allowable operating pressure of Pac ific Gas and Electric Company natural gas transmission lines in class 3 and c lass 4 locations and c lass 1 and c lass 2 high consequence are as that have not had a maximum allowable operating pressure established through prior hydrostatic testing, determine the maximum allowable operating pressure with a spike test followed by a hydrostatic pressure test. (P-10-4)

<sup>&</sup>lt;sup>3</sup> Some relevant records may not currently be in PG&E's possession, such as those that may reside with the city of San Bruno, San Mateo County, the state of California, or former employees or contractors of PG&E. During the investigation of the collapse of the I- 35W Highway Bridge in Minneapolis, Minnesota, on August 1, 2007, NTSB investigators in terviewed retired engin eers and oth er technical personnel who had worked on the design of the bridge in the early 1960s. In the course of their interviews, NTSB investigators were provided with critical engineering records related to the bridge design that had been personally retained by one of the retired employees of the company that had designed the bridge. See *Collapse of I- 35W Highway Br idge, Minneapolis, Minnesota, August 1, 2007*, Highway Ac cident Re port NT SB/HAR-08/03 (Washington, DC: National T ransportation Safety Board, 2008), pp. 78, 103, on the NTSB website at <a href="http://www.ntsb.gov/publictn/2008/HAR0803.pdf">http://www.ntsb.gov/publictn/2008/HAR0803.pdf</a>.

<sup>&</sup>lt;sup>4</sup> Class 3 refers to any location unit that has 46 or more buildings intended for human occupancy. Class 4 refers to any class location unit where buildings with four or more stories above ground are prevalent.

<sup>&</sup>lt;sup>5</sup> Class 1 refers to an offshore area or any class location unit that has 10 or fewer buildings intended for human occupancy. A class 2 location is any class location unit that has more than 10 but fewer than 46 buildings intended for human occupancy.

<sup>&</sup>lt;sup>6</sup> A high consequence area is any class 3 or 4 location or any area where a potential impact radius of 660 feet would contain more than 20 buildings intended for human occupancy.

The NTSB also issued a safety recommendation to the Pipeline and Hazardous Materials Safety Administration:

Through appropriate and expeditious means such as advisory bulletins and posting on your website, immediately inform the pipeline industry of the circumstances leading up to and the consequen ces of the Se ptember 9, 2010, pipeline rupture in San Bruno, Cali fornia, and the Na tional Transportation Safety Board's urgent safety recommendations to Pacific Gas and Electric Company so that pipeline operators can proactively implement corrective measures as appropriate for their pipeline systems. (P-10-1) (Urgent)

The NTSB also issued safety recommendations to the California Public Utilities Commission:

Develop an implementation schedule for the requirements of Safety Recommendation P-10-2 (Urgent) to Pacific Gas and Electric Company (PG&E) and ensure, through adequate oversight, that PG&E has aggressively and diligently searched documents and records relating to pipeline system components, such as pipe seg ments, valves, fittings, and weld seams, for PG&E natural gas transmission lines in class 3 and class 4 locations and class 1 and class 2 high consequence a reas that have not had a maximum allowable operating pressure established through prior hydrostatic testing as outlined in Safety Recommendation P-10-2 (Urgent) to PG&E. These records should be traceable, verifiable, and complete; should meet your regulatory intent and requirements; and should have been considered in determining maximum allowable operating pressures for PG&E pipelines. (P-10-5) (Urgent).

If such a document and records search cannot be satisfactorily completed, provide oversight to any spike and hydrostatic tests that Pacific Gas and Electric Company is required to perform according to Safety Recommenda tion P-10-4. (P-10-6) (Urgent)

Through appropriate and expe ditious means, including posting on your website, immediately inform California intrastate natural gas transmission operators of the circumstances leading up to and the consequen ces of the Se ptember 9, 2010, pipeline rupture in San Bruno, California, and the Na tional Transportation Safety Board's urgent safety recommendations to Pacific Gas and Electric Company so that pipeline operators can proactively implement corrective measures as appropriate for their pipeline systems. (P-10-7) (Urgent)

In response to the recommendations in this letter, please refer to Safety Recommendations P-10-2 and -3 (Urgent) and P-10-4. If you would like to submit your response electronically rather than in hard copy, you may send it to the following e-mail address: correspondence@ntsb.gov. If your response includes a ttachments that ex ceed 5 megabyte s, please e-mail us asking for inst ructions on how to use our s ecure mailbox procedures. To avoid confusion, please use only one method of submission (that is, do not submit both an electronic copy and a hard copy of the same response letter).

Chairman HERSMAN, Vice Chairman HART, and Members SUMWALT, ROSEKIND, and WEENER concurred in these recommendations.

[Original Signed]

By: Deborah A.P. Hersman Chairman

## I.11-02-016

## PG&E'S REQUEST FOR OFFICIAL NOTICE

## **EXHIBIT 11**

Letter from NTSB to Christopher P. Johns, President of Pacific Gas and Electric Company (March 14, 2013)

## **National Transportation Safety Board**



Washington, D.C. 20594

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RECEIVED

MAR 1.9 2013

CHRISTOPHER P. JOHNS

Mr. Christopher P. Johns President Pacific Gas and Electric Company 77 Beale St. San Francisco, CA 94105

Dear Mr. Johns:

Thank you for your January 31, 2013, letter to the National Transportation Safety Board (NTSB) regarding Safety Recommendations P-10-3 and P-11-24 and -31, stated below. We issued these recommendations to the Pacific Gas and Electric Company (PG&E) on January 3, 2011, and September 26, 2011, as a result of our investigation of the September 9, 2010, natural gas pipeline rupture that occurred in a residential area in San Bruno, California. Safety Recommendation P-10-3 is an urgent recommendation.

#### P-10-3

Use the traceable, verifiable, and complete records located by implementation of Safety Recommendation P-10-2 (Urgent) to determine the valid maximum allowable operating pressure [MAOP], based on the weakest section of the pipeline or component to ensure safe operation, of Pacific Gas and Electric Company natural gas transmission lines in class 3 and class 4 locations and class 1 and class 2 high consequence areas [HCA] that have not had a maximum allowable operating pressure established through prior hydrostatic testing.

n Maria Arian Tan Shirin Linding Andrew Shirin Shiring and Arian

Because PG&E validated the MAOP of its pipeline system, as requested, Safety Recommendation P-10-3 is classified "Closed—Acceptable Action." The NTSB recognizes that this was a major undertaking, as it entailed validation of the MAOP of 2,088 miles of these transmission pipelines. We are pleased that PGE also is validating an additional 4,199 miles of non-HCA pipelines.

#### P-11-24

Revise your work clearance procedures to include requirements for identifying the likelihood and consequence of failure associated with the planned work and for developing contingency plans.

Marie de la companya

The revisions that PG&E has made to its work clearance procedures and other PG&E actions discussed in your letter satisfy the intent of Safety Recommendation P-11-24. Accordingly, this recommendation is classified "Closed—Acceptable Action."

201300081

#### P-11-31

Develop, and incorporate into your public awareness program, written performance measurements and guidelines for evaluating the plan and for continuous program improvement.

The performance measurements and guidelines you described that have been included in PG&E's *Public Awareness Plan* satisfy the intent of Safety Recommendation P-11-31. Accordingly, this recommendation is classified "Closed—Acceptable Action."

Thank you for your commitment to pipeline safety. We encourage you to electronically submit periodic updates on progress being made to implement the remaining recommendations from the San Bruno accident (Safety Recommendations P-10-4; P-11-26, -27, -29 and -30) at the following e-mail address: <u>correspondence@ntsb.gov</u>. Please do not submit both an electronic copy and a hard copy of the same response.

Sincerely,

Deborah A.P. Hersman

Chairman

NATIONAL TRANSPORTATION SAFETY BOARD OFFICE OF THE CHAIRMAN WASHINGTON, D.C. 20594

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Mr. Christopher P. Johns President Pacific Gas and Electric Company 77 Beale St. San Francisco, CA 94105

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