PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298

March 13, 2015



TO PARTIES OF RECORD IN INVESTIGATION (I.) 12-01-007, I.11-02-016, and I.11-11-009:

Investigation 12-01-007 was filed on January 12, 2012 and is assigned to Commissioner Michael Picker and Administrative Law Judge (ALJ) Mark Wetzell. Investigation 11-02-016 was filed on February 24, 2011 and is assigned to Commissioner Michael Picker and ALJ Amy Yip-Kikugawa. Investigation 11-11-009 was filed on November 10, 2011 and is assigned to Commissioner Picker and ALJ Amy Yip-Kikugawa.

Enclosed is the Modified Presiding Officer's Decision (MOD-POD) of Administrative Law Judges (ALJs) Yip-Kikugawa and Wetzell addressing fines and remedies in these non-consolidated proceedings. Previously, the ALJs' Presiding Officer's Decision (POD) was mailed on September 2, 2014. Because parties have already had an opportunity to file appeals of the POD, and respond to other parties' appeals, no comments are permitted on the ALJs' MOD-POD.

The MOD-POD will appear on a future Commission Agenda. To confirm when the item will be heard, please see the Business Meeting Agenda, which is published on the Commission Website 10 days before each Commission Business Meeting.

When the Commission considers the MOD-POD and any decision different from the POD, the Commission may act by adopting all or part of the decisions as written, amend or modify the decisions, or set aside and prepare its own decision, so long as the Commission's decision is based on the record developed in the investigation, and if the decision differs from the POD, has a written explanation of the differences. (See Public Utilities Code Section 1701.2(a).) Only when the Commission acts does the decision become binding on the parties.

<u>/s/ KAREN V. CLOPTON</u> Karen V. Clopton, Chief Administrative Law Judge

KVC:lil

Attachment

ALJ/MOD-POD-AYK/MSW/lil **DRAFT**

Agenda ID # 13815 Adjudicatory

Decision MODIFIED PRESIDING OFFICER'S DECISION OF ALJ YIP-KIKUGAWA AND ALJ WETZELL (Mailed 3/13/2015)

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Investigation on the Commission's Own Motion into the Operations and Practices of Pacific Gas and Electric Company to Determine Violations of Pub. Util. Code § 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.	Investigation 12-01-007 (Filed January 12, 2012) (Not Consolidated)
Order Instituting Investigation on the Commission's Own Motion into the Operations and Practices of Pacific Gas and Electric Company with Respect to Facilities Records for its Natural Gas Transmission System Pipelines.	Investigation 11-02-016 (Filed February 24, 2011) (Not Consolidated)
Order Instituting Investigation on the Commission's Own Motion into the Operations and Practices of Pacific Gas and Electric Company's Natural Gas Transmission Pipeline System in Locations with High Population	Investigation 11-11-009 (Filed November 10, 2011)
Density.	(Not Consolidated)

MODIFIED PRESIDING OFFICERS' DECISION ON FINES AND REMEDIES TO BE IMPOSED ON PACIFIC GAS AND ELECTRIC COMPANY FOR SPECIFIC VIOLATIONS IN CONNECTION WITH THE OPERATION AND PRACTICES OF ITS NATURAL GAS TRANSMISSION SYSTEM PIPELINES

<u>Title</u>

MC	DIFI	ED PRE	ESIDING OFFICERS' DECISION ON FINES AND REMEDIES	
ТО	BE IN	APOSE	D ON PACIFIC GAS AND ELECTRIC COMPANY FOR	
SPI	ECIFIC	C VIOL	ATIONS IN CONNECTION WITH THE OPERATION AND	
PR.	ACTI	CES OF	FITS NATURAL GAS TRANSMISSION SYSTEM PIPELINES.	1
1.	Summary2			
2.	Back	ground		4
3.	Sum	nary of	f Violations	.10
	3.1.	San Br	uno Violations Decision (I.12-01-007)	.10
	3.2.	Record	lkeeping Violations Decision (I.11-02-016)	.15
	3.3.	Class I	Location Violations Decision (I.11-11-009)	.19
	3.4.		d Duplication of Violations	
4.	Legal		ework for Fines and Remedies	
	4.1.	Comm	nission Authority to Impose Fines	. 25
	4.2.		nission Authority to Impose Other Remedies	
	4.3.	Propo	rtionality and the Excessive Fines Clause	.32
5.	Facto	rs to C	onsider in Setting Penalty Amount	.42
	5.1.	Severi	ty of the Offense	.42
			CPSD and Intervenors' Positions	
		5.1.2.	PG&E's Position	.45
			Discussion	
	5.2.		act of the Utility Before, During and After the Offense	
		5.2.1.	CPSD and Intervenors' Positions	.51
		5.2.2.	PG&E's Position	.53
			Discussion	
	5.3.		cial Resources of the Utility	
		5.3.1.	CPSD and Intervenors' Positions	.60
		5.3.2.	PG&E's Position	.63
		5.3.3.	Discussion	.65
	5.4.	The To	otality of the Circumstances in Furtherance of the	
		Public	Interest	.70
		5.4.1.	CPSD and Intervenors' Positions	.71
		5.4.2.	PG&E's Position	.72
		5.4.3.	Discussion	.72
	5.5.	The Ro	ole of Precedent	.73

(Cont'd)

<u>Title</u>

<u>Page</u>

		5.5.1.	CPSD ar	d Intervenors' Positions	73
		5.5.2.	PG&E's	Position	74
		5.5.3.	Discussi	on	75
6.	Pena	alty to B	e Impose	d	77
7.		-			
	7.1.	CPSD	Proposed	Remedies	. 88
		7.1.1.	CPSD Re	ecommended Remedies in all three OIIs	. 89
		7.1.2.	CPSD Re	ecommended Remedies in I.12-01-007	
			(San Bru	no OII)	.91
			7.1.2.1.	Construction Standards	. 94
			7.1.2.2.	Data Gathering Requirements	. 95
			7.1.2.3.	Documentation of Assessments	. 96
			7.1.2.4.	Threat Identification and Assessment Procedures	. 97
			7.1.2.5.	Equipment Retention Policy	. 97
			7.1.2.6.	Redundant Pressure Sensors	. 98
			7.1.2.7.	Additional Pressure Sensors	. 99
			7.1.2.8.	Negative Pressure Values	100
			7.1.2.9.	Replacement of Pressure Controllers	102
			7.1.2.10.	Abnormal Operating Conditions	103
			7.1.2.11.	Work Clearance Procedures	103
			7.1.2.12.	Gas Service Representative Training	104
			7.1.2.13.	PG&E's Business Strategies	106
			7.1.2.14.	Retained Earnings	107
			7.1.2.15.	Incentive Plan	108
			7.1.2.16.	Joint Board Meetings	109
			7.1.2.17.	Safety as Core Mission	110
			7.1.2.18.	Pipeline 2020 Program	111
			7.1.2.19.	NTSB Recommendations	112
		7.1.3.	Recomm	ended Remedies in I.11-02-016	
			(Record)	keeping OII)	112
			7.1.3.1.	ISO Certification	113
			7.1.3.2.	Corporate Record and Information Management	
				Policy	114

(Cont'd)

<u>Title</u>

8. 9. 10. 11.

<u>Page</u>

		7.1.3.3.	Records Management Education and Training	116
		7.1.3.4.	Records	
		7.1.3.5.	Responsibility for Information Governance Strat	egies 119
		7.1.3.6.	Mandated Retention Period	•
		7.1.3.7.	Records Management Processes	
		7.1.3.8.	Data Discrepancies	
		7.1.3.9.	Job Files	
		7.1.3.10.	Missing or Destroyed Information	
		7.1.3.11.	Changes in Gas Transmission Policies and	
			Standard Practices	
		7.1.3.12.	Salvaged and Reused Pipe	
			Pricewaterhouse Coopers Audit Report	
			Recommendations	
		7.1.3.14.	Audits	
	7.1.4.	Recomm	ended Remedies in I.11-11-009	
		(Class Lo	ocation OII)	
		7.1.4.1.	Patrol Standards	
		7.1.4.2.	Patrolling Exams	
		7.1.4.3.	Aerial Patrol Pilot Training	
7.2.	Interve	enors' Pro	posed Remedies	
	7.2.1.	Californi	a Pipeline Safety Trust	
	7.2.2.		lent Monitor	
	7.2.3.	Peninsul	a Emergency Response Fund	146
	7.2.4.	Training	for Emergencies	147
	7.2.5.	Formal A	Agreement with Agencies in PG&E's Territory .	148
	7.2.7.	Incentive	e Program Modifications	
	7.2.8.	Impleme	ntation of NTSB Recommendations	154
	7.2.9.	Reimbur	sement of Litigation Expenses	154
Com	pliance			
Trans	script C	Correction	s	
	Rulings on Motions			
Appe	Appeals and Requests for Review of POD162			
11.1.	11.1. Number of Violations			

(Cont'd)

<u>Title</u>

<u>Page</u>

11.1.1. Duplicative and Overlapping Violations	.162
11.1.1.1. Alleged Duplication Among Proceedings	
11.1.1.2. Alleged Duplication Within Proceedings	. 166
11.1.1.3. "Other" Alleged Duplication	. 170
11.1.2. Hindsight	.170
11.1.3. Alleged New Charges	.172
11.2. Penalties Imposed	.176
11.2.1. Violations under Pub. Util. Code § 451	
11.2.2. Level of Penalties	. 180
11.2.3. Allocation of Penalties	. 183
11.2.4. Proportionality of Penalties	. 187
11.2.5. Extension of Time to Pay Penalties	
11.3. Rule 1.1 of the Commission's Rules of Practice and Procedure	. 192
11.4. Continuing Violations	
11.5. Spoliation	
11.6. California Pipeline Safety Trust	
11.7. Independent Monitor	
11.8. Reimbursement of Litigation Expenses	. 204
11.8.1. Legal Authority to Order Shareholders to Reimburse	
Intervenors' Litigation Expenses	
11.8.2. Additional Guidance for Reimbursement	
11.8.3. Reimbursement of PG&E's Litigation Expenses	
11.9. Revisions to Remedies	
11.10. Other Revisions	
12. Assignment of Proceeding	
Findings of Fact	.216
Conclusions of Law	. 219
ORDER	. 225
Appendix A – List of Appearances	
Appendix B – Table of Violations for I.12-01-007 (San Bruno OII)	
Appendix C – Table of Violations for I.11-02-016 (Recordkeeping OII)	
Appendix D – Table of Violations for I.11-11-009 (Class Location OII)	
Appendix E – Adopted Remedies	

MODIFIED PRESIDING OFFICERS' DECISION ON FINES AND REMEDIES TO BE IMPOSED ON PACIFIC GAS AND ELECTRIC COMPANY FOR SPECIFIC VIOLATIONS IN CONNECTION WITH THE OPERATION AND PRACTICES OF ITS NATURAL GAS TRANSMISSION SYSTEM PIPELINES

1. Summary

This decision adopts penalties to be imposed on Pacific Gas and Electric Company (PG&E) for violations arising from: (1) the September 9, 2010 San Bruno explosion and fire; (2) PG&E's recordkeeping practices for its gas transmission pipeline system and; (3) PG&E's failure to maintain the proper class designation for pipeline in areas of higher population density. In our companion decisions issued today – Decision (D). 15-XX-XXX, D. 15-XX-XXX and D.15-XX-XXX – we found that PG&E committed 2,425 violations of various provisions of Part 192 of Title 49 of the Code of Federal Regulations, Pub. Util. Code § 451, the 1955 American Society of Mechanical Engineers Standard B.31.8 (and its subsequent revisions), General Order 112 (and its subsequent revisions), and Rule 1.1 of the Commission's Rules of Practice and Procedure. Many of these violations occurred over a number of years, for a total of 18,447,803 days in violation.

In light of the gravity and severity of the offenses, PG&E's statutory obligation to provide safe and reliable gas service, PG&E's own acknowledgement that it had failed to comply with federal and state regulations and PG&E's own procedures in multiple instances, the resulting deaths, other injuries and property damage, PG&E's violation of Rule 1.1 of the Commission's Rules of Practice and Procedure, and the Commission's and the public's interest in ensuring safe and reliable natural gas service, a significant penalty is warranted. In setting the penalty, we have considered a variety of factors,

- 2 -

including the need to deter PG&E from committing future violations without adversely impacting PG&E's ratepayers. We also take into consideration that PG&E has already been ordered to make pipeline safety improvements at shareholder expense. In light of these considerations, this decision imposes a fine of \$950,000,000, payable to the State General Fund, a \$400,000,000 disallowance in the form of a one-time bill credit, and approximately \$50,000,000 to implement over 75 remedies proposed by the Commission's Safety and Enforcement Division and other intervenors to enhance pipeline safety. The total amount of fines and disallowances adopted in this decision is \$1,400,000,000 which, when added to the disallowances adopted in Rulemaking (R.) 11-02-019, 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, would exceed \$2,000,000,000.1 The penalties adopted in today's decision send a strong message to PG&E, and all other pipeline operators, that they must comply with mandated federal and state pipeline safety requirements or face severe consequences.

This decision recognizes that some of the remedies adopted here may have already been mandated by the National Transportation Safety Board, the Pipeline and Hazardous Materials Safety Administration, the Blue Ribbon Panel or decisions issued in Rulemaking 11-02-019. Therefore, PG&E shall file a Compliance Filing in these dockets, which:

1. Identifies the remedies ordered in this decision that have already been ordered elsewhere, where that remedy (decision, report,

¹ CPSD estimates that the disallowances adopted in D.12-12-030 in R.11-02-019 to be \$635,000,000. (*CPSD Amended Reply Brief* at 3-4.) This amount, combined with the penalties adopted in this decision would equal \$2,035,000,000.

etc.) was ordered, and PG&E's progress to date in complying with that remedy.

2. Identifies any remedy ordered in this decision that modifies or eliminates any remedies ordered elsewhere.

The Compliance Filing shall also include a timeframe for completion of each of the remedies adopted in Appendix E of this decision. This Compliance Filing shall be filed within 60 days of the date this decision is issued.

Investigation (I.) 12-01-007, I.11-02-016 and I.11-11-009 remain open.

2. Background

On September 9, 2010, a 30-inch diameter segment of a natural gas transmission pipeline owned and operated by Pacific Gas and Electric Company (PG&E) ruptured in a residential area in San Bruno, California. In the months following the explosion, the Commission opened the following investigations into PG&E operations and practices:

- Investigation (I.) 11-02-016 (Recordkeeping OII) The Commission's investigation into whether PG&E violated any provision or provisions of the California Public Utilities Code, Commission general orders or decisions, or other applicable rules or requirements pertaining to safety recordkeeping for its gas service and facilities.
- I.11-11-009 (Class Location OII) The Commission's investigation into whether any of PG&E's operations and practices of its natural gas transmission pipeline system in locations with higher population density were in violation of state or federal statutes and regulations or Commission rules, general orders or decisions.

 I.12-01-007 (San Bruno OII) – The Commission's investigation into whether PG&E violated any state or federal statutes or Commission orders in connection with the San Bruno explosion.²

Due to the overlap of witnesses and issues among the Pipeline OIIs, the assigned Administrative Law Judges (ALJs) coordinated hearing and briefing schedules as needed. On September 7, 2012, the Safety and Enforcement Division (CPSD)³ filed two coordinated motions in the Pipeline OIIs seeking leave to serve additional prepared testimony regarding PG&E's financial resources and permission to file a single coordinated brief regarding fines and remedies. The two motions were granted on September 25, 2012. As noted in that ruling, a coordinated brief on fines and remedies would benefit the decisionmaking process, as the Commission could then consider CPSD's recommendations in a comprehensive manner.⁴

CPSD served *Financial Analysis of PG&E Corporation (Overland Report)* on September 7, 2012.⁵ The date for intervenors to serve financial testimony was December 17, 2012. No intervenor testimony was served. PG&E served its

² Together, the three OIIs are referred to as the "Pipeline OIIs". In addition to the Pipeline OIIs, the Commission also opened Rulemaking (R.) 11-02-019 to adopt new safety and reliability programs for natural gas transmission and distribution pipelines.

³ Prior to January 1, 2013, the Safety and Enforcement Division had been called the Consumer Protection and Safety Division (CPSD). However, for consistency and to avoid confusion, this Decision continues to refer to the Safety and Enforcement Division by its former name, CPSD.

⁴ Administrative Law Judges' Ruling Granting Motions of Consumer Protection and Safety Division for Leave to Serve Additional Prepared Testimony and for Permission to File a Single Coordinated Brief Regarding Fines and Remedies and Notice of Hearing, filed September 25, 2012, at 2-3.

⁵ The confidential version of the *Overland Report* is Exh. JOINT-50; the public version of the *Overland Report* is Exh. JOINT-51.

rebuttal testimony, *Wells Fargo Report*, on January 11, 2013.⁶ CPSD served *Rebuttal by Overland Consulting to Report by Wells Fargo Securities (Overland Rebuttal*) on February 8, 2013.⁷

Evidentiary hearings on fines and remedies were held on March 4 and 5, 2013. Opening briefs were filed on May 6, 2013 by CPSD, the Division of Ratepayer Advocates (DRA);⁸ the City of San Bruno (CSB); The Utility Reform Network (TURN); and the City and County of San Francisco (CCSF).⁹ PG&E filed its response on May 24, 2013.¹⁰ On June 5, 2013, CPSD filed its reply brief; DRA, TURN, CCSF and CSB filed their reply briefs on June 7, 2013.

On July 8, 2013, CPSD filed a motion for permission to file an amended reply brief. CPSD's motion was granted on July 12, 2013 in an electronic ruling, which also provided for a round of response/rebuttal briefs. CPSD filed its amended reply brief (*CPSD Amended Reply*) on July 16, 2013. PG&E filed its response to the *CPSD Amended Reply* on August 21, 2013. Rebuttal briefs to PG&E's August 21st response were filed on August 28, 2013 by CPSD, TURN,

⁶ The confidential version of the *Wells Fargo Report* is Exh. JOINT-66; the public version is JOINT-67.

⁷ The confidential version of the *Overland Rebuttal* is Exh. JOINT-53; the public version is JOINT-54.

⁸ The Division of Ratepayer Advocates (DRA) was renamed the Office of Ratepayer Advocates (ORA) effective September 26, 2013, pursuant to Senate Bill 96. However, for consistency and to avoid confusion, this Decision continues to refer to ORA by its former name, DRA.

⁹ DRA, TURN, CSB and CCSF are jointly referred to as "Intervenors."

¹⁰ Pursuant to an ALJ Ruling issued on June 3, 2013, PG&E filed an amended brief on June 5, 2013.

DRA, CCSF, CSB and the Californians for Renewable Energy (CARE).¹¹ Table 1 below summarizes the penalty proposals.

TABLE 1

Party	Fine to be Paid to General Fund	Other Disallowances/Remedies
CPSD ¹²	Minimum \$300 million	- \$635 million disallowance for shareholders from D.12-12-030
		 \$1.515 billion for payment of ratepayers' share of Pipeline Safety Enhancement Plan (PSEP) Phase I costs, with any remaining amounts to pay for the ratepayers' share of PSEP Phase II costs.¹³ Specific remedies to address violations in each proceeding
DRA ¹⁴	\$550 million	- Shareholders responsible for all approved costs of Phase I of the PSEP, including the \$1.169 billion approved in D.12-12-030
		 Hire independent monitor Implement NTSB recommendation regarding comprehensive audit of all aspects of PG&E's operations

Penalty Proposals

¹¹ CARE is a party in only the Recordkeeping OII.

¹² Amended Reply Brief of the Consumer Protection and Safety Division on Fines and Remedies (CPSD Amended Reply), filed July 16, 2013, at 4.

¹³ The PSEP was adopted in Decision (D.) 12-12-030, Decision Mandating Pipeline Safety Implementation Plan, Disallowing Costs, Allocating Risk of Inefficient Construction Management to Shareholders, and Requiring Ongoing Improvement in Safety Engineering.

¹⁴ Opening Brief of the Division of Ratepayer Advocates Regarding Fines and Remedies (DRA Opening Brief), filed May 6, 2013, at 4-5.

TURN ¹⁵	\$670 million	- \$785 million already or to be paid by PG&E shareholders for PSIP work ordered in D.12-12-030 (consisting of disallowances and cost overruns fur PSIP work in 2011-2012)
		 \$1.0 billion of PSIP costs apportioned to PG&E's ratepayers in D.12-12-030 (after-tax cost = \$740 million)
		- \$50 million associated with proposed remedies
		- Centralized database on reused pipeline
		- PG&E should pay costs for independent auditor
CSB ¹⁶	\$900 million	- Require \$2.333 billion in PSEP investments be made at shareholder expense
		- Appoint Independent Monitor
		- \$100 million to establish and fund California Pipeline Safety Trust
		- \$150 million to establish and fund Peninsula Emergency Response Fund

¹⁵ *Opening Brief of The Utility Reform Network on Fines and Remedies (TURN Opening Brief),* filed May 6, 2013, at viii – x.

¹⁶ Rebuttal Brief of the City of San Bruno Concerning the Fines and Remedies to be Imposed on Pacific Gas and Electric Company (CSB Rebuttal Brief), filed June 7, 2013, at 7-8. In its opening brief, CSB had proposed a fine amount of \$1.25 billion fine to be paid to the State's General Fund and various remedies. (Opening Brief of the City of San Bruno Concerning the Fines and Remedies to be Imposed on Pacific Gas and Electric Company (CSB Opening Brief), filed May 6 2014, at 7.) In its rebuttal brief, CSB updated its penalty proposal to "support, oppose or respond to specific proposals" advanced by CPSD, TURN, DRA, CCSF and PG&E in their opening briefs on fines and remedies, and by CPSD in its rebuttal brief. (CSB Rebuttal Brief at 6.)

		 Require memorandum of understanding (MOU) with city, county and fire districts regarding emergency response role Direct PG&E to undertake automated safety value pilot program Direct PG&E to modify incentive etweature
CCSF ¹⁷	Total amount of at least \$2.25 billion. No allocation between fines and disallowances, but advocates that a large portion should be directed to remedial measures proposed by CSB, DRA and TURN.	structure.

On July 30, 2013, the ALJs issued a ruling requesting additional comment in the following areas:

- PG&E was asked to respond to various questions concerning how it would treat any fines or disallowances. (Section 3 Questions)
- 2. All parties were asked to respond to various questions concerning "the impact that fines and disallowances would have on PG&E's ability to raise capital and otherwise remain financially viable, including the tax treatment of amounts disallowed."¹⁸ (Section 4 Questions)

¹⁷ Opening Brief of the City and County of San Francisco on Penalties (CCSF Opening Brief), filed May 6, 2013, at 15-17 & 47-50.

¹⁸ Administrative Law Judges' Ruling Requesting Additional Comment, filed July 30, 2013, at 4.

PG&E filed its response to the Section 3 Questions on August 21, 2013.¹⁹ Responses to the Section 4 Questions were filed on September 20, 2013 by CPSD, PG&E, TURN and CSB.²⁰ Replies to those responses were filed on October 15, 2013 by CPSD, PG&E, and TURN.

On _____, the Commission issued decisions on violations associated with the three investigations – Decision (D.) 15-XX-XXX (*San Bruno Violations Decision*), D.15-XX-XXX (*Recordkeeping Violations Decision*) and D.15-XX-XXX (*Class Location Violations Decision*). The violations found in these three decisions form the basis for our consideration of the penalties to be imposed.

3. Summary of Violations

In the decisions on violations, we found that PG&E committed a total of 2,425 violations of various provisions of Part 192 of Title 49 of the Code of Federal Regulations (CFR), Pub. Util. Code § 451, American Society of Mechanical Engineers Standard B.31.8 (ASME B.31.8) (and its subsequent revisions), General Order (GO) 112 (and its subsequent revisions), and Rule 1.1 of the Commission's Rules of Practice and Procedure (Rules). These violations are summarized below.

3.1. San Bruno Violations Decision (I.12-01-007)

In the *San Bruno Violations Decision*, we found PG&E had committed 32 violations, many of them continuing for years, and a total of 59,255 separate offenses. These violations are:

¹⁹ Pursuant to an ALJ Ruling issued on September 16, 2013, PG&E filed an amended response on September 17, 2013.

²⁰ Pursuant to an ALJ Ruling issued on October 9, 2013, PG&E and CSB filed amended responses on October 11, 2013.

- PG&E violated Section 841.412(c) of ASME B31.1.8-1955 by not conducting a hydrostatic test on Segment 180 post-installation, creating an unsafe system in violation of Pub. Util. Code § 451. This violation began in 1956 and, because PG&E did not subsequently conduct a hydrostatic test, continued to September 9, 2010.
- By failing to visually inspect for and discover the defects in Segment 180, PG&E violated Section 811.27(A) of ASME B31.1.8-1955, creating an unsafe system in violation of Pub. Util. Code § 451. This violation occurred in 1956.
- 3. By installing pipe sections in Segment 180 that were less than 5 feet in length, PG&E violated API 5LX Section VI, creating an unsafe system in violation of Pub. Util. Code § 451. This violation occurred in 1956.
- 4. By assigning a yield strength value for Segment 180 above 24,000 psi when the yield strength was actually unknown, PG&E violated Section 811.27(G) of ASME B31.1.8-1955, creating an unsafe system in violation of Pub. Util. Code § 451. This violation occurred in 1956.
- 5. By not completely welding the inside of the longitudinal seams on pups 1, 2, and 3 of Segment 180 and failing to measure the wall thickness to ensure compliance with the procurement orders which required 0.375-inch wall thickness, PG&E violated Section 811.27(C) of ASME B31.1.8-1955, creating an unsafe system in violation of Pub. Util. Code § 451. This violation occurred in 1956.
- 6. By welding the pups in a deficient manner such that the girth welds contained incomplete fusion, burnthrough, slag inclusions, cracks, undercuts, excess reinforcement, porosity defects, and lack of penetration, PG&E violated Section 1.7 of API standard 1104 (4th edition, 1956), creating an unsafe system in violation of Pub. Util. Code § 451. This violation occurred in 1956.
- 7. By failing to properly account for the actual conditions, characteristics, and specifications of the Segment 180 pups when it established the MAOP of 400 psig for Segment 180, PG&E failed to comply with the maximum allowable operating pressure (MAOP) determination requirements in Section 845.22 of ASME

B31.1.8-1955. PG&E therefore created an unsafe system condition in violation of Pub. Util. Code § 451. This violation occurred in 1956.

- 8. By installing pipeline sections in Segment 180 out of compliance with industry standards and transmission pipe specifications, and not suitable or safe for the conditions under which they were used, contrary to Section 810.1 of ASME B31.1.8-1955, PG&E created an unreasonably unsafe system in violation of Pub. Util. Code § 451. Because the unsafe condition remained uncorrected, this violation continued from 1956 to September 9, 2010.
- 9. PG&E violated ASME-B31.8S Appendix A, Section 4.2, and 49 CFR 192.917(b), by failing to use conservative assumptions where PG&E was missing important pipeline data such as pipe material, manufacturing process, and seam type. This violation continued from December 17, 2004 to September 9, 2010.
- 10. PG&E violated 49 CFR 192.917(b), by not adequately gathering and integrating required pipeline data, thereby not having an adequate understanding of the threats on Line 132. This violation continued from December 17, 2004 to September 9, 2010.
- 11. PG&E's failure to analyze the data on pipeline weld defects resulted in an incomplete understanding of the manufacturing threats to Line 132, in violation of 49 CFR 192.917(a) and ASME-B31.8S Section 2.2. This violation continued from December 17, 2004 to September 9, 2010.
- 12. PG&E violated 49 CFR 192.917(e)(2), by failing to consider and test for the threat of cyclic fatigue on Segment 180. This violation continued from December 17, 2004 to September 9, 2010.
- 13. As a result of ignoring the category of Double Submerged Arc Welded (DSAW) as one of the weld types potentially subject to manufacturing defects, PG&E failed to determine the risk of failure from this defect in violation of 49 CFR 192.917(e)(3). This violation continued from December 17, 2004 to September 9, 2010.
- 14. PG&E violated 49 CFR 192.917(e)(3) by not considering manufacturing and construction defects on Line 132 unstable and

prioritizing the covered segments as high risk for the baseline assessment or a subsequent reassessment, and thereby failing to determine the risk of failure from manufacturing and construction defects of Line 132 after operating pressure increased above the maximum operating pressure experienced during the preceding five years. This violation continued from December 17, 2004 to September 9, 2010.

- 15. By not performing pipeline inspections using a method capable of detecting seam issues, PG&E violated 49 CFR 192.921(a). This violation continued from December 17, 2004 to September 9, 2010.
- 16. PG&E violated 49 CFR 192.917(c) and ASME-B31.8S Section 5, by using risk ranking algorithms that did not: (1) properly weigh the threats to Line 132, because PG&E did not include its actual operating experience; (2) properly identify the Potential Impact Radius of a rupture, by using a value of 300 feet where the PIR is less than that; (3) identify the proper Consequence of Failure formula, by not accounting for higher population densities; (4) use conservative values for electrical interference on Line 132, which created an external corrosion threat; (5) include any consideration of one –call tickets, which indicates third party damage threats; (6) include any consideration of historic problems with the type of pipe used on Segment 180. This violation continued from December 17, 2004 to September 9, 2010.
- 17. PG&E violated Pub. Util. Code § 451 by engaging in the practice of increasing the pressure on Line 132 every 5 years to set the MAOP for the purpose of eliminating the need to deem manufacturing and construction threats unstable, thereby avoiding the need to conduct hydrostatic testing or in-line inspections on Line 132. This violation continued from December 17, 2004 to September 9, 2010.
- PG&E violated 49 CFR 192.13(c), by failing to follow its internal work procedures that are required to be established under 49 CFR 192. This violation occurred on September 9, 2010.
- 19. By failing to follow its work procedures on September 9, 2010, PG&E created an unreasonably dangerous condition in violation

of Pub. Util. Code § 451. This violation occurred on September 9, 2010.

- 20. PG&E violated 49 CFR 192.605(c), by failing to establish adequate written procedures for maintenance and operations activities under abnormal conditions. This violation occurred on September 9, 2010.
- 21. PG&E created an unreasonably unsafe system in violation of Pub. Util. Code § 451, by poorly maintaining a system at Milpitas that had defective electrical connections, improperly labeled circuits, missing wire identification labels, aging and obsolete equipment, and inaccurate documentation. This violation continued from February 28, 2010 to September 9, 2010.
- 22. PG&E's slow and uncoordinated response to the explosion violates the requirement of 49 CFR 192.615(a)(3) for an operator to respond promptly and effectively to an emergency. This violation occurred on September 9, 2010.
- 23. PG&E did not adequately receive, identify, and classify notices of the emergency, in violation of 49 CFR 192.615(a)(1). This violation occurred on September 9, 2010.
- 24. PG&E did not provide for the proper personnel, equipment, tools and materials at the scene of an emergency, in violation of 49 CFR 192.615(a)(4). This violation occurred on September 9, 2010.
- 25. PG&E's efforts to perform an emergency shutdown of its pipeline were inadequate to minimize hazards to life or property, in violation of 49 CFR 192.615(a)(6). This violation occurred on September 9, 2010.
- 26. Rather than make safe any actual or potential hazards to life or property, PG&E's response made the hazards worse, in violation of 49 CFR 192.615(a)(7). This violation occurred on September 9, 2010.
- 27. PG&E's failure to notify the appropriate first responders of an emergency and coordinate with them violated 49 CFR 192.615(a)(8). It is clear that PG&E's emergency plans were ineffective, and were not followed. This violation occurred on September 9, 2010.

- 28. PG&E violated 49 CFR 192.605(c)(1) and (3) by failing to have an emergency manual that properly directed its employees to respond to and correct the cause of Line 132's decrease in pressure, and its malfunction which resulted in hazards to persons and property, and notify the responsible personnel when notice of an abnormal operation is received. This violation occurred on September 9, 2010.
- 29. PG&E failed to establish and maintain adequate means of communication with the appropriate fire, police and other public officials, in violation of 49 CFR 192.615(a)(2). This violation occurred on September 9, 2010.
- 30. PG&E violated 49 CFR 199.225(a), by failing to perform alcohol tests on the employees involved within 2 hours of the incident, and failing to record the reasons for not administering the test in a timely fashion. This violation occurred on September 9, 2010.
- PG&E's failure to create and follow good emergency plans created an unreasonably unsafe system in violation of Pub. Util. Code § 451. This violation occurred on September 9, 2010.
- 32. PG&E created an unreasonably unsafe system in violation of Pub. Util. Code § 451, by continuously cutting its safety-related budgets for its Gas Transmission and Storage (GT&S). This violation continued from January 1, 2008 to September 9, 2010.

3.2. Recordkeeping Violations Decision (I.11-02-016)

In the Recordkeeping Violations Decision, we found that PG&E committed

33 violations, many of them continuing for years, for a total of 350,189 days in

violation. These violations are:

- 1. PG&E's lack of accurate and sufficient records to determine whether it had used salvaged pipe in Segment 180 impacted its ability to safely maintain and operate this segment in violation of Pub. Util. Code § 451. (Felts Violation 1) This violation ran from 1956 to September 9, 2010.
- 2. PG&E violated Pub. Util. Code § 451 for failing to retain the necessary design and construction records in Job File GM 136471 for the construction of Segment 180. (Felts Violation 2) This violation ran from 1956 to September 9, 2010.

- PG&E violated ASME B.31.8 § 841 and Pub. Util. Code § 451 for failing to perform a post-installation pressure test on Segment 180 and retaining the record of that test for the life of the facility. (Felts Violation 3) This violation ran from 1956 to September 9, 2010.
- PG&E violated Pub. Util. Code § 451 by increasing the MAOP of Line 132 from 390 psi to 400 psi without conducting a hydrostatic test. (Felts Violation 4) This violation ran from December 10, 2003 to September 9, 2010.
- 5. PG&E violated Pub. Util. Code § 451 by operating Line 132 above 390 psi on December 11, 2003, December 9, 2008 and September 9, 2010 without having records to substantiate the higher operating pressure. (Felts Violation 11) These constitute three separate violations. The first violation ran from December 11, 2003 to September 9, 2010; the second violation ran from December 9, 2008 to September 9, 2010; and the final violation occurred on September 9, 2010.
- 6. PG&E violated Pub. Util. Code § 451 by failing to provide the proper clearance procedures for work performed at the Milpitas Terminal on September 9, 2010. (Felts Violation 5) This violation ran from August 27, 2010 to September 9, 2010.
- PG&E violated Pub. Util. Code § 451 by failing to have accurate drawings and computer diagrams of the Milpitas Terminal. (Felts Violation 7) This violation ran from December 2, 2009 to July 2011.
- 8. PG&E violated Pub. Util. Code § 451 by failing to have accurate Supervisory Control and Data Acquisition System (SCADA) diagrams. (Felts Violation 7 and 9) This violation ran from December 2, 2009 to October 27, 2010.
- 9. PG&E violated Pub. Util. Code § 451 by failing to have the necessary backup software readily available at the Milpitas Terminal on September 9, 2010. (Felts Violation 8) This violation occurred on September 9, 2010.
- 10. PG&E's October 10, 2011 data response about the video recording for Camera 6 misled Commission staff and impeded their investigation into the San Bruno explosion. (Felts

Violation 13) This is a violation of Rule 1.1 of the Commission's Rules of Practice and Procedure.

- 11. PG&E violated Rule 1.1 by misleading CPSD in two separate data responses regarding personnel present at the Milpitas Terminal who were working on the pressure problem on September 9, 2010. (Felts Violation 14) The first violation occurred on October 10, 2011, PG&E's response to DR 30, Q 8.d; the second violation occurred on December 17, 2011, PG&E's response to DR 30, Q 2. Both violations ran until January 15, 2012.
- PG&E's recordkeeping practices with respect to Job Files adversely impacts its ability to operate its gas transmission pipeline system in a safe manner and violates Pub. Util. Code § 451. (Felts Violation 16) This violation ran from 1987 to December 12, 2012.
- 13. PG&E has failed to retain pressure test records for all segments of its gas transmission pipeline system as required by Pub. Util. Code § 451, ASME B.31.8, GO 112 through 112-B and PG&E's internal records retention policies. (Felts Violation 18) This violation ran from 1956 through December 20, 2012.
- 14. PG&E violated ASME B.31.8 § 828.2, GO 112 through 112-B § 206.1, 49 CFR 192.241 and 192.243 and PG&E's Standard Practice 1605 by failing to retain weld inspection reports. (Felts Violation 19) This violation ran from 1955 through December 20, 2012.
- 15. PG&E violated Pub. Util. Code § 451 for failing to maintain records necessary to ensure the safe operations of its gas transmission pipeline system by failing to create and retain operating pressure records over the life of the pipe. (Felts Violation 20) This violation ran from 1955 to December 17, 2004.
- Starting in 1955, inaccurate and incomplete data in PG&E's leak reports would prevent PG&E from operating its gas transmission pipeline system safely, as required by Pub. Util. Code § 451. (Felts Violations 21 and 22) This violation ran from 1955 to December 20, 2012.

- 17. PG&E violated Pub. Util. Code § 451 by failing to retain records of reconditioned and reused pipe in its transmission pipeline system. (Felts Violation 23) This violation ran from 1940 to December 20, 2012.
- 18. PG&E violated Pub. Util. Code § 451 by failing to ensure the accuracy of data in its Geographic Information System (GIS) system and assuming values for missing data that were not conservative. (Felts Violation 24) This violation ran from 1995 to December 20, 2012.
- 19. PG&E violated Pub. Util. Code § 451 because its ability to assess the integrity of its pipeline system and effectively manage risk is compromised by the availability and accuracy of its pipeline data. (Felts Violation 25) This Violation ran from December 17, 2004 to December 20, 2012.
- PG&E violated Pub. Util. Code § 451 for failing to retain a metallurgist report concerning a 1963 fire and explosion on Line 109 caused by a failure in a circumferential weld. (Felts Violation 27) This violation ran from 1963 to December 20, 2012.
- 21. The shortcomings in PG&E's records management activities has resulted in PG&E's inability to operate and maintain PG&E's gas transmission line in a safe manner and violate Pub. Util. Code § 451; GO 112 through 112-B, Section 107; ASME B.31.8. (Duller/North Violation A.1) This violation ran from 1955 to December 20, 2012.
- 22. PG&E violated ASME B.31.8 § 851.5 by failing to retain records of Leak Survey Maps for as long as the line remains in service. (Duller/North Violation B.1) This violation ran from April 16, 2010 to December 20, 2012.
- 23. PG&E violated ASME B.31.8 § 851.5 by failing to retain records of Line Patrol Reports for as long as the line remains in service. (Duller/North Violation B.2) This violation ran from September 1, 1964 to December 20, 2012.
- 24. PG&E violated ASME B.31.8 § 851.5 by failing to retain records of Line Inspection Reports as long as the line remains in service. (Duller/North Violation B.3) This violation ran from December 17, 1991 to December 20, 2012.

- 25. PG&E violated ASME B.31.8 § 851.417 by failing to retain pressure test records for the useful life of the pipeline. (Duller/North Violation B.4) This violation ran from September 1, 1964 to December 20, 2012.
- 26. PG&E violated ASME B.31.8 § 851.5 by failing to retain records of transmission line inspections for as long as the line remains in service. (Duller/North Violation B.5) This violation ran from September 1, 1964 to December 20, 2012.
- 27. PG&E violated 49 CFR 192.13(c) for failing to comply with its internal records retention policies. (Duller/North Violation B.6) This violation ran from 1955 to December 20, 2012.
- PG&E violated Pub. Util. Code § 451 by failing to identify and include in the Gas Pipeline Replacement Plan (GPRP) all pipe segments with unusual longitudinal seams and joints. (Duller/North Violation C.1) This violation ran from June 1988 to December 20, 2012.
- 29. PG&E violated Pub. Util. Code § 451 because missing and inaccurate pipeline records prevented PG&E from properly identifying and replacing those pipelines that were prone to damage during severe earthquakes. (Duller/North Violation C.2) This violation ran from June 1992 to December 20, 2012.
- 30. PG&E violated Pub. Util. Code § 451 for failing to maintain a definitive, complete and readily accessible database of all gas leaks for their pipeline system. (Duller/North Violation C.3) This violation ran from 1957 to December 20, 2012.

3.3. Class Location Violations Decision (I.11-11-009)

In the Class Location Violations Decision, we found that PG&E committed

2,360 violations that continued for years, for a total of 18,038,359 days in

violation. These violations are:

1. PG&E failed to maintain or operate all segments of its transmission pipeline system at the proper class location. Based on PG&E's acknowledgement that it is responsible for maintaining complete, up-to-date class locations for its entire gas transmission system, and that that it has failed to do so, we find that PG&E has violated the following Federal Regulations:

- a. PG&E violated its own internal rules by failing to identify 843 segments with increased population density. This constitutes a violation of 49 CFR 192.13(c).
- b. PG&E failed to identify changes in population density and misclassified 224 pipeline segments. As a result, PG&E failed to conduct a study to determine the actual class location of these pipeline segments in violation of 49 CFR 192.609.
- c. Due to misclassification of 224 pipeline segments, PG&E did not confirm or revise the MAOP of segments with changed class designations within 24 months of the change in class location. This failure is a violation of 49 CFR 192.611.
- d. PG&E violated 49 CFR 192.613 by not having a procedure for continuing surveillance of its facilities to determine and take appropriate action concerning, among other things, changes in class location, for 677 segments.
- e. PG&E violated 49 CFR 192.619 by operating 63 pipe segments at pressures greater than allowed for the current class location.
- 2. PG&E violated 49 CFR 192.107 by using an assumed Specified Minimum Yield Strength (SMYS) value above 24,000 psi for 133 segments of pipe that moved to a higher class designation when those segments did not have sufficient known pipe attributes to support an assumed value over 24,000 psi.
- 3. By operating 63 pipe segments at pressures greater than allowed for the current class designation and 133 segments with an assumed SMYS value above 24,000 psi, PG&E subjected pipelines to higher stresses and lower safety margins than allowed by federal and state safety regulations. PG&E's operation of these pipeline segments at excessive MAOPs constitute unsafe operations and is a violation of Pub. Util. Code § 451.

3.4. Alleged Duplication of Violations

In its briefs on violations in the San Bruno OII and the Recordkeeping OII, PG&E contends that there is substantial overlap of violations.²¹ PG&E raises this same argument again, contending that in the Pipeline OIIs, CPSD has alleged the same violation or violations arising out of the same conduct.²² Among other things, PG&E contends that CPSD alleged the same violation in both the San Bruno OII and the Recordkeeping OII concerning PG&E's SCADA system, emergency response plans and GIS data, and that CPSD alleged in all three OIIs that PG&E had improperly used assumed SMYS values above 24,000 psi. PG&E asserts that since these alleged violations concern the same conduct, they cannot be considered separate violations.

We agree with PG&E that to the extent the three OIIs allege the same violations, these violations should not be counted multiple times. However, the fact that PG&E's actions resulted in violations of multiple regulations and statutes does not constitute duplicative or overlapping violations. Failure to comply with each of these regulations would constitute a separate violation. In the Pipeline OIIs, CPSD has explained the applicable statute that serves as the basis of each violation and the acts supporting the alleged violation.

PG&E has alleged the following duplicative and overlapping alleged violations among the three OIIs:²³

²¹ The *Reply Brief of Pacific Gas and Electric Company*, filed April 25, 2013 in I.12-01-007, discussed duplication and/or overlap of alleged violations at 2, 6, 83, 89, 90, 98, 159, and Appendixes D and E; *Reply Brief of Pacific Gas and Electric Company*, filed August 24, 2013 in I.11-02-016, at 29-30.

²² Coordinated Remedies Brief of Pacific Gas and Electric Company (PG&E Remedies Brief), filed May 24, 2013 and amended June 5, 2013, at 39.

²³ *PG&E Remedies Brief* at 39.

- 1. Assumed SMYS values greater than 24,000 psi (alleged San Bruno violations 8 & 14, alleged Recordkeeping violation 24 (Felts Violation 24) and alleged Class Location violation 1) – Alleged San Bruno violation 8 concerns the assumed SMYS value for Segment 180, while alleged Class Location violation 1 concerns the assumed SMYS value for 133 pipeline segments of pipe that moved to a higher class designation when those segments did not have sufficient known pipe attributes. Since the segments identified in the Class Location OII do not include Segment 180, there is no duplication or overlap. Similarly, Felts Violation 24 concerns incorrect data in survey sheets and GIS, which is not a factor in alleged San Bruno violation 8 or Class Location violation 1. Finally, alleged San Bruno violation 14 was not adopted. For the reasons discussed here, there was no duplication in alleged violations regarding assumed SMYS values.
- 2. Hydrostatic Testing on Segment 180 (alleged San Bruno violation 4 and Recordkeeping violation 3 (Felts Violation 3) Alleged San Bruno violation 4 concerns a continuing violation of Pub. Util. Code § 451 from 1956 to 2010 for not conducting a hydrostatic test on Segment 180, while Felts Violation 3 concerns failure to retain records. However, we believe there is substantial similarity between these two violations, with the major difference being that alleged San Bruno violation 4 does not address recordkeeping violations. As Felts Violation 3 is more inclusive for the purpose of determining fines and remedies, we will exclude the number of violations contained in alleged San Bruno violation 4 (adopted as San Bruno violation 1) from the total number of violations.
- 3. Accounting for Segment 180 Pups in establishing MAOP (alleged San Bruno violations 12 and 13 and alleged Recordkeeping violation 4 (Felts Violation 4)) – The San Bruno Violations Decision agrees that alleged San Bruno violations 12 and 13 were duplicative, and adopted a single violation (adopted violation 7). Adopted San Bruno violation 7 found that PG&E violated ASME B.31.8 § 845.22, and therefore Pub. Util. Code § 451, by failing to account for the conditions, characteristics and specifications for the pups when it established an MAOP of

400 psi. This was a one-time violation in 1956. In contrast, Felts Violation 4 concerns PG&E increasing the MAOP for Line 132 from 390 psi to 400 psi in 2004 without first performing a hydrostatic test. Felts

Violation 4 was a continuing violation running from 2004 to 2010. Given the different timeframes and focus of the two violations, there is no duplication.

- 4. Clearance documentation (alleged San Bruno violations 29 and 30 and alleged Recordkeeping violation 5 (Felts Violation 5)) Alleged San Bruno violations 29 and 30 deal with PG&E's clearance procedures for the Milpitas Terminal work. The first is a violation of 49 CFR § 192.13(c), which PG&E does not contest. The second is the same facts, and resulted in a violation of Pub. Util. Code § 451. Felts Violation 5 concerns PG&E's failure to properly follow its clearance procedures, resulting in a violation of Pub. Util. Code § 451. Based on the facts presented, it appears that alleged San Bruno Violation 30 is included in Felts Violation 5. Therefore, we will exclude the number of violations contained in alleged San Bruno violation 30 (adopted as San Bruno violation 19) from the total number of violations.
- 5. SCADA Inadequacy (alleged San Bruno violation 33 and alleged Recordkeeping violations 7 & 9 (Felts Violations 7 & 9))
 Alleged San Bruno violation 33 was not upheld in the San Bruno Violations Decision. Further, while the Recordkeeping Violations Decision had upheld Felts Violation 7, it had determined that Felts Violation 9 was not a separate violation. Accordingly, PG&E's assertions of duplication among these violations are moot.
- 6. Emergency Procedures (alleged San Bruno violations 33-51 and alleged Recordkeeping violation 10 (Felts Violation 10)) PG&E has not specified which of the alleged San Bruno violations are duplicative, nor the manner in which there is duplication. In any event, the San Bruno Violations Decision has rejected several of CPSD's alleged emergency response violations. Additionally, the Recordkeeping Violations Decision rejected Felts Violation 10. Accordingly, PG&E's assertions of duplication among these violations are moot.

- 7. GIS Data (alleged San Bruno violations 15 & 16 and alleged Recordkeeping violations 24 & 25 (Felts Violations 24 & 25)) – Alleged San Bruno violation 15 concerns a violation of 49 CFR 192.917(b), while Felts Violations 24 and 25 concern violations of Pub. Util. Code § 451. Additionally, the *San Bruno Violations Decision* rejected alleged violation 16. As such, there is no duplication.
- 8. Patrol Records (alleged Recordkeeping violation 30 (Duller/North Violation B.2) and alleged Class Location violation 6) – Alleged Class Location violation 6 concern violations of 49 CFR 192.605 and 192.709(c) for failing to adequately maintain pipeline patrol records. However, the Class Location Violations Decision specifically notes that the recordkeeping violations alleged in that proceeding were considered in the Recordkeeping OII.²⁴ Accordingly, PG&E's assertions of duplication among these violations are moot.

4. Legal Framework for Fines and Remedies

The Commission adopted GO 112 pursuant to state law to establish certain

state pipeline safety standards during the 1960's.25 Subsequently, the

Commission has been certificated pursuant to 49 U.S.C. § 60105 to enforce the

Department of Transportation's minimum federal safety standards for gas

pipeline facilities. In 1971, the Commission revised GO 112 to adopt the federal

²⁴ Class Location Violations Decision, Section 6.

²⁵ The jurisdictional basis pursuant to which the Commission adopted GO 112 is Pub. Util. Code § 768, which states in relevant part: "The commission may, after a hearing, require every public utility to construct, maintain, and operate its line, plant, system, equipment, apparatus, tracks, and premises in a manner so as to promote and safeguard the health and safety of its employees, passengers, customers, and the public. The commission may prescribe, among other things, the installation, use, maintenance, and operation of appropriate safety or other devices or appliances, including interlocking and other protective devices at grade crossings or junctions and block or other systems of signaling. The commission may establish uniform or other standards of construction and equipment, and require the performance of any other act which the health or safety of its employees, passengers, customers, or the public may demand."

pipeline safety rules in 49 CFR 192.²⁶ The current revision of this general order, GO 112-E, automatically incorporates all revisions to the Federal Pipeline Safety Regulations, 49 CFR 190, 191, 192, 193 and 199.²⁷ Consequently, the Commission may enforce violations of 49 CFR 192 pursuant to its constitutional and statutory authority.

4.1. Commission Authority to Impose Fines

The Commission's authority to impose fines for violation of laws and regulations are established by Pub. Util. Code §§ 2107 and 2108. The Commission's authority to impose fines pursuant to Pub. Util. Code § 2107 has also been affirmed by the California Courts.²⁸

Section 2107 states:

Any public utility that violates or fails to comply with any provision of the Constitution of this state or of this part, or that fails or neglects to comply with any part or provision of any order, decision, decree, rule, direction, demand, or requirement of the commission, in a case in which a penalty has not otherwise been provided, is subject to a penalty of not less than five hundred dollars (\$500), nor more than fifty thousand dollars (\$50,000) for each offense.²⁹

Section 2108 states:

Every violation of the provisions of this part or of any part of any order, decision, decree, rule, direction, demand, or requirement

²⁶ See Recordkeeping Exh. PG&E-5 (D.78513, with GO 112-C attached).

²⁷ See Recordkeeping Exh. PG&E-7 (D.95-08-053, as modified by D.95-12-065, with GO 112-E attached).

 ²⁸ See, e.g., Pacific Bell Wireless, LLC v. Public Utilities Com. (Cingular) (2006) 140 Cal. App. 4th
 718.

²⁹ Between 1994 and 2012, the maximum fine was \$20,000 per offense. Prior to 1994, the maximum fine was \$2,000 per offense.

of the commission, by any corporation or person is a separate and distinct offense, and in case of a continuing violation each day's continuance thereof shall be a separate and distinct offense.

There is disagreement between CPSD/Intervenors and PG&E over the use of fines or penalties imposed pursuant to these Code sections. CPSD and Intervenors all maintain that fines and penalties imposed under Pub. Util. Code §§ 2107 and 2108 must be paid to the General Fund.³⁰ PG&E, on the other hand, argues that "[t]here is no requirement that [Public Utilities Code] Section 2107 penalties be paid to the General Fund and the Commission has authority under [Public Utilities Code] Section 701 to order that they be invested in pipeline safety."^{31 32}

PG&E contends that CPSD and Intervenors incorrectly rely on Pub. Util. Code § 2104.5 and *Assembly v. Public Utilities Com.* (1995) 12 Cal. 4th 87 to support their assertion. PG&E states that although Pub. Util. Code § 2104.5 expressly requires payment of penalties to the General Fund, this requirement is the result of "a civil action in the name of the People of the State of California in the

³⁰ CPSD Amended Reply at 5; *Opening Brief of the City of San Bruno concerning the Fines and Remedies to be Imposed on Pacific Gas and Electric Company (CSB Opening Brief), filed May 6, 2013,* at 8-9; *Opening Brief of the City and County of San Francisco on Penalties (CCSF Opening Brief), filed* May 6, 2013, at 1; *Opening Brief of The Utility Reform Network on Fines and Remedies (TURN Opening Brief), filed May 6, 2013 at 3; Opening Brief of the Division of Ratepayer Advocates Regarding Fines and Remedies (DRA Opening Brief), filed May 6, 2013, at 4.*

³¹ *PG&E Remedies Brief* at 19.

³² Pub. Util. Code § 701 states:

The commission may supervise and regulate every public utility in the State and may do all things, whether specifically designated in this part or in addition thereto, which are necessary and convenient in the exercise of such power and jurisdiction.

superior court."³³ It contends that since this is not "a case in which the state has recovered fines and penalties through an action in superior court in the name of the People," Pub. Util. Code § 2104.5 does not apply.³⁴ PG&E further states that the *Assembly* court had referred to Pub. Util. Code § 2107 as "one of a number of penalty provisions that do not specify the use of the penalty funds "³⁵

We agree with PG&E that the California Constitution, along with Pub. Util. Code § 701, confer broad authority on the Commission to regulate public utilities. However, contrary to PG&E's arguments, we do not have discretion to direct how monies paid by a utility under Pub. Util. Code § 2107 are to be used. As articulated by the California Supreme Court: "Existing statutory requirements authorize such a penalty proceeding, but require that any penalty must be deposited in the General Fund."³⁶

The *Cingular* Court held that the Commission has authority to impose fines and penalties on its own, without invoking the state's judicial process. However, the Commission may invoke the judicial process pursuant to Pub. Util. Code § 2104³⁷ to recover unpaid fines and penalties.³⁸ Thus, as explained by the *Cingular* Court, Pub. Util. Code §§ 2104 and 2104.5 are collection statutes.³⁹

³³ *PG&E Remedies Brief* at 20 (citing Pub. Util. Code § 2104.5, emphasis omitted).

³⁴ *PG&E Remedies Brief* at 20.

³⁵ $PG\mathcal{E}E$ Remedies Brief at 20.

³⁶ Assembly v. Public Utilities Com., 12 Cal. 4th at 102-103. The California Supreme Court further notes in footnote 10 of this decision: "The Commission on occasion has recognized that in accordance with the legislative policy expressed in sections 2100 and 2104, the penalties assessed under these provisions must be deposited in the General Fund."

³⁷ Pub. Util. Code § 2104 is similar to Pub. Util. Code § 2104.5 in that both sections provide that the Commission may bring an action in Superior Court to collect fines or penalties for violations of statutory provisions, regulations or orders of the Commission, which shall than be paid to the

PG&E's interpretation is not only contrary to our long-standing interpretation of Pub. Util. Code § 2107 but also flies in the face of the purpose of the penalties and fines. As we noted in *Standards of Conduct Governing Relationships Between Energy Utilities and Their Affiliates* (D.98-12-075) (1998) 84 Cal. P.U.C. 2d 155, 188:

The purpose of a fine is to go beyond restitution to the victim and to effectively deter further violations by this perpetrator or others. For this reason, fines are paid to the State of California, rather than to victims.

However, PG&E's proposal that all penalties be invested in pipeline safety, while creating a windfall for ratepayers by allowing them to receive new pipeline at no cost, would not effectively deter it from committing further violations. Indeed, such an outcome would not even be considered an appropriate penalty, since PG&E has always been required to invest in pipeline safety. Under PG&E's argument, the only way such a "penalty" would be paid to the General Fund would be if PG&E failed to comply and the Commission initiated an action under Pub. Util. Code § 2104.5. Our conclusion is echoed by CSB, which states:

[F]ines are meant to punish and penalize, not reward the utility by increasing the rate base or reward ratepayers with a windfall. Anyone who violates the law and pays a fine pays it to the courts, and ultimately to the state. Why should this be any different?⁴⁰

credit of the General Fund. Section 2104.5 applies specifically to violations that involve safety standards for pipeline facilities or transportation of natural gas in California.

³⁸ Pacific Bell Wireless, LLC v. Public Utilities Com., 140 Cal. App. 4th at 737.

³⁹ Pacific Bell Wireless, LLC v. Public Utilities Com., 140 Cal. App. 4th at 737.

⁴⁰ CSB Opening Brief at 9.

Accordingly, we find PG&E's arguments without merit. We affirm our historical interpretation of Pub. Util. Code § 2107 that all penalties imposed under this code section are payable to the General Fund. We note, however, parties use the term "penalty" to refer to monies paid to the General Fund, as well as to refer to the combination of fines, disallowances and other remedies. To avoid further confusion in this decision, we refer to monies imposed under Pub. Util. Code § 2107 and paid to the General Fund as "fines", whereas the term "penalties" in this decision refers to the combination of fines, disallowances and remedies.

4.2. Commission Authority to Impose Other Remedies

In addition to specific authority to impose fines pursuant to Pub. Util. Code §§ 2107 and 2108, the Commission has authority to fashion other equitable remedies. As applicable here, these remedies include exercising our ratemaking authority to disallow expenditures to correct deficiencies resulting from PG&E's failure to maintain its gas transmission pipeline system and records in accordance with applicable statutes, regulations and orders.

As applicable here, Pub. Util. Code § 451 confers ratemaking authority⁴¹ upon the Commission and states:

All charges demanded or received by any public utility, or by any two or more public utilities, for any product or commodity furnished or to be furnished or any service rendered or to be rendered shall be just and reasonable. Every unjust or

⁴¹ The Commission's general ratemaking authority comes from Section XII, Article 6 of the California Constitution, which states: "The commission may fix rates, establish rules, examine records, issue subpoenas, administer oaths, take testimony, punish for contempt, and prescribe a uniform system of accounts for all public utilities subject to its jurisdiction."

unreasonable charge demanded or received for such product or commodity or service is unlawful.

Every public utility shall furnish and maintain such adequate, efficient, just, and reasonable service, instrumentalities, equipment, and facilities ... as are necessary to promote the safety, health, comfort, and convenience of its patrons, employees and the public.

All rules made by public utility affecting or pertaining to its charges or service to the public shall be just and reasonable.

In Decision Mandating Pipeline Safety Implementation Plan, Disallowing Costs, Allocating Risk of Inefficient Construction Management to Shareholders, and Requiring Ongoing Improvement in Safety Engineering (PSEP Decision) [D.12-12-030], the Commission adopted a PSEP for PG&E and authorized PG&E to increase its revenue requirements in 2012, 2013 and 2014 for these projects. However, the decision further noted:

Our upcoming decisions in Investigation (I.) 11-02-016, I.11-11-009 and I.12-01-007 will address potential penalties for PG&E's actions under investigation. We do not foreclose the possibility that further ratemaking adjustment may be adopted in those investigations; thus all ratemaking recovery authorized in today's decision is subject to refund.⁴²

This determination is reiterated in Ordering Paragraph 3 of the *PSEP Decision*.⁴³ Thus, pursuant to our ratemaking authority under Pub. Util. Code § 451, along with the provision in the *PSEP Decision*, CPSD and Intervenors have urged that some or all of the PSEP costs authorized to be recovered from

⁴² *PSEP Decision* at 4 (slip op.).

⁴³ *PSEP Decision* at 126 (slip op.) ("All increases in revenue requirement authorized in Ordering Paragraph 2 are subject to refund pending further Commission decisions in Investigation (I.) 11-02-016, 1.11-11-009, and 1.12-01-007.").

ratepayers be disallowed.⁴⁴ DRA further argues, that even without these provisions "the Commission has equitable authority to exercise its ratemaking powers to disallow all further PSEP costs to the extent those costs fund activities that will redress the violations in these proceedings."⁴⁵

Additionally, TURN argues that PG&E's conduct should be considered imprudent because PG&E is "unable to foreclose the possibility that other dangerously defective segments are present in its system without testing or replacing all segments that lack a valid pressure test record."⁴⁶ It therefore contends that since the cost to test or replace pipeline is the result of this imprudence, they should be disallowed from recovery under Pub. Util. Code §§ 451 and 463.⁴⁷

Finally, the Commission has broad authority under Pub. Util. Code § 701 to "do all things, whether specifically designated in this part or in addition thereto, which are necessary and convenient" in the supervision and regulation of public utilities.⁴⁸ However, the Commission's exercise of these additional powers and jurisdiction "must be cognate and germane to the regulation of

⁴⁸ See, e.g., Pacific Bell Wireless, LLC v. Public Utilities Com., 140 Cal. App. 4th at 736; Consumers Lobby Against Monopolies v. Public Utilities Com. (CLAM) (1979) 25 Cal. 3d 891, 905.

⁴⁴ CPSD Amended Reply at 4; DRA Opening Brief at 4; TURN Opening Brief at viii; CSB Opening Brief at 8; CCSF Opening Brief at 16-17.

⁴⁵ DRA Opening Brief at 16.

⁴⁶ TURN Opening Brief at 9.

⁴⁷ Pub. Util. Code § 463 requires the Commission to disallow direct and indirect expenses "reflecting the direct or indirect costs resulting from any unreasonable error or omission relating to the planning, construction, or operation of any portion of the corporation's plant which cost, or is estimated to have cost, more than fifty million dollars (\$50,000,000), including any expenses resulting from delays caused by any unreasonable error or omission."
public utilities. . . "⁴⁹ In this instance, the remedies considered below are to ensure that PG&E's gas transmission pipeline system will be maintained and operated safely. Accordingly, they lie squarely within our jurisdiction. For example, pursuant to the subject-to-refund language of the *PSEP Decision* and Pub Util. Code § 701, we have authority to require PG&E's shareholders to absorb costs that the *PSEP Decision* initially allocated to ratepayers. Since we may order such an equitable remedy, we do not need to reach the issue of disallowance due to imprudence under Pub. Util. Code § 463.

4.3. Proportionality and the Excessive Fines Clause

CPSD and Intervenors, with the exception of CARE, propose a combination of fines and disallowances and other remedies that would equal approximately \$2.25 billion after tax. Their proposals are summarized in Table 1 above.

CARE states that no portion of the penalty should be in the form of a fine. Rather, it believes that the entire \$2.25 billion penalty should be directed to improve PG&E's pipeline system.⁵⁰ CARE further argues that "a penalty would not change PG&E's operations without an incentive to reduce the penalty, because there is nothing that PG&E can do to reduce the likelihood of new pipeline leaks except by replacing the old natural gas pipelines now in service."⁵¹

We disagree with CARE's proposal that no fine be imposed under Pub. Util. Code §§ 2107 and 2108. As we note above, the purpose of a fine goes

⁴⁹ CLAM 25 Cal. 3d at 905-906 (citations omitted).

⁵⁰ Californians for Renewable Energy Rebuttal to the Amended Reply Brief of the Consumer Protection and Safety Division, filed August 26, 2013, at 6.

⁵¹ CARE Rebuttal to Amended Reply at 5.

beyond restitution, as it is to deter PG&E and others from future violations. CARE's proposal appears to reward PG&E if it now performs the needed safety improvements that had been deferred. We do not see how such a penalty would serve to deter future violations.

PG&E notes that, in determining the level of penalties to be assessed, the Commission's ability to impose a fine is limited by the state and federal Excessive Fines Clauses.⁵² Consequently, according to PG&E, the Commission must consider the penalties assessed in other fatal pipeline accidents, not just penalties previously assessed by the Commission.⁵³ PG&E identifies eight pipeline accidents resulting in fatalities between 1999 and 2011 and contends that the amount proposed by CPSD and Intervenors is disproportionate to the penalties assessed in these prior accidents.⁵⁴ Moreover, PG&E states that CPSD's proposal ignores the fact that other jurisdictions cap the level of penalties and argues that "other legislatures' determinations should weigh heavily" in analyzing whether the proposed penalty amount violates the Excessive Fines Clauses.⁵⁵

The Eighth Amendment to the United States Constitution states: "Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted." Similarly, Article 1, § 17 of the California Constitution prohibits "cruel or unusual punishment" and "excessive fines." In

⁵² PG&E Remedies Brief at 24; Pacific Gas and Electric Company's Response to Consumer Protection and Safety Division's Amended Reply Brief on Fines and Remedies (PG&E Response to Amended Reply), filed August 21, 2013, at 8.

⁵³ *PG&E Remedies Brief* at 24-25.

⁵⁴ *PG&E Remedies Brief* at 22 - 24.

⁵⁵ *PG&E Response to Amended Reply* at 9.

evaluating whether there is a violation of the Eighth Amendment, the U.S. Supreme Court stated:

The touchstone of the constitutional inquiry under the Excessive Fines Clause is the principle of proportionality: The amount of the forfeiture must bear some relationship to the gravity of the offense that it is designed to punish.⁵⁶

In *People ex rel. Lockyer v. R.J Reynolds Tobacco Company* (2005) 37 Cal. 4th 707), the California Supreme Court noted four factors that are relevant to determining whether a fine is grossly disproportional to the gravity of the offense. As summarized by *Lockyer*, these factors are: "(1) the defendant's culpability; (2) the relationship between the harm and the penalty; (3) the penalties imposed in similar statutes; and (4) the defendant's ability to pay."⁵⁷ These considerations are similar to those articulated in D.98-12-075, although there we said we would look at our own precedents, not other statutes. PG&E argues that CPSD and Intervenors fail to consider comparable cases and statutes from other jurisdictions when setting the proposed penalty amount.⁵⁸ "Given that CPSD and Intervenors assert there has been no prior Commission enforcement action of comparable magnitude to these three OII proceedings, it is particularly important for the Commission to consider penalties imposed by

⁵⁶ United States v. Bajakajian (1998) 524 U.S. 321, 334.

⁵⁷ *People ex rel. Lockyer v. R.J Reynolds Tobacco Company, supra,* 37 Cal. 4th at 728. The four factors noted by *Lockyer were used by the U.S. Supreme Court in United States v. Bajakajian* (1998) 524 U.S. 321, 334, where the Court determined that the forfeiture of more than \$500,000 for failure to report taking more than \$10,000 cash out of the country was an excessive fine.

⁵⁸ *PG&E Remedies Brief* at 24.

court and other enforcement agencies in connection with natural gas pipeline accidents in other jurisdictions."⁵⁹

PG&E asserts that the two most comparable fatal natural gas pipeline accidents are the natural gas pipeline rupture near Carlsbad, New Mexico in August 2000 and the gas line rupture and explosion in Allentown, Pennsylvania in February 2011. PG&E argues that the Carlsbad accident is comparable to San Bruno in size, scope and severity in the following areas: (1) twelve people died as a direct result of the rupture and resulting fire; (2) the National Transportation Safety Board (NTSB) had concluded that the failure was the result of the operator's failure to prevent, detect, or control internal corrosion within the company's pipeline; (3) the accident involved a large diameter transmission pipe installed in 1950, and there were concerns regarding the design and construction of the pipe; (4) as a result of the Carlsbad accident, there were changes to federal safety regulations that impacted the entire natural gas industry; and (5) the NTSB had determined that a contributing factor of the Carlsbad accident was the operator's failure to monitor, investigate and mitigate internal corrosion in two of its pipelines transporting corrosive gas.⁶⁰ PG&E notes that "a U.S. District Court entered a consent decree in which El Paso Natural Gas Company agreed to pay \$101.5 million – consisting of a \$15.5 million civil penalty and \$86 million to implement program improvements."⁶¹ PG&E states that despite the parallels between the Carlsbad accident and the San Bruno explosion, CPSD's proposed penalty is

⁵⁹ *PG&E Remedies Brief* at 26.

⁶⁰ *PG&E Remedies Brief* at 27-29.

⁶¹ *PG&E Remedies Brief* at 29.

"approximately 20 times the penalty and other relief imposed for the Carlsbad accident."⁶²

PG&E further contends that the February 2011 natural gas explosion in Allentown, Pennsylvania is "[a]nother case of reasonable comparable 'size, scope and severity'⁶³ There, PG&E states: (1) there were five fatalities, three injuries and destruction of eight homes; (2) the cast-iron natural gas main was circumferentially fractured; (3) the utility had experienced numerous safety problems with its cast-iron gas mains in the past four years, yet had taken no remedial action; and (4) the Pennsylvania PUC enforcement staff had alleged numerous ongoing violations.⁶⁴ The Pennsylvania PUC ultimately approved a settlement motion for a \$500,000 civil penalty and the utility agreed to not seek rate recovery for remedial measures estimated to cost \$24.75 million.⁶⁵ PG&E states that CPSD's proposed \$2.25 billion penalty is about 90 times larger than what had been imposed on UGI Corporation.⁶⁶ PG&E contends that in light of the similarities between the Carlsbad and Allentown accidents to San Bruno, the disproportionate penalty proposed by CPSD and Intervenors raises constitutional concerns.⁶⁷

Finally, PG&E notes that CPSD's proposed recommendation not only exceeds the "largest penalty ever imposed", but also exceeds the statutory cap on

⁶² *PG&E Remedies Brief* at 29.

⁶³ *PG&E Remedies Brief* at 30.

⁶⁴ *PG&E Remedies Brief* at 30.

⁶⁵ *PG&E Remedies Brief* at 30.

⁶⁶ *PG&E Remedies Brief* at 31.

⁶⁷ *PG&E Remedies Brief* at 32.

penalties fixed by 48 other states and the District of Columbia.⁶⁸ As support, PG&E cites to *BMW of N. Am., Inc. v. Gore* (1996) 517 U.S. 559, 583-84 and *Hale v. Morgan* (1978) 22 Cal. 3d 388, 403 for its contention that the constitutionality of a penalty must be considered in light of sanctions authorized in other states. It further notes that the proposed penalty "is almost five times the equity investment in PG&E's GT&S business in 2010 and almost as much as the total GT&S revenues for the nine years prior to the San Bruno accident."⁶⁹

We do not find PG&E's arguments that the Carlsbad and Allentown accidents are comparable to San Bruno to be convincing. Although we do not deny that there are some similarities between these two accidents and San Bruno, they fall well short of being comparable in size, scope and severity. Unlike Carlsbad and Allentown, the ruptured transmission pipeline in San Bruno caused "an explosion and lengthy fire in a major metropolitan area" and resulted in significantly more physical harm (eight fatalities, injuries to 58 others, destruction of 38 homes and damage to 70 other homes).⁷⁰ Additionally, the penalties imposed here are the result of three separate proceedings. While the San Bruno OII pertained to violations associated with the explosion of a portion of a transmission pipeline in a single neighborhood, the Recordkeeping OII and Class Location OII pertained to violations that affected thousands of segments (and hundreds of miles) of PG&E's gas transmission pipeline system. As we have found in the *Recordkeeping Violations Decision* and the *Class Location Violations Decision*, PG&E committed "numerous violations of pipeline safety

⁶⁸ PG&E Remedies Brief at 31; PG&E Response to Amended Reply at 9.

⁶⁹ *PG&E Response to Amended Reply* at 8-9.

⁷⁰ CPSD Amended Reply at 8.

regulations ... which were very lengthy in time and endangered many other high consequence areas in PG&E's service territory."⁷¹ Moreover, PG&E chooses to ignore the fact that the penalties imposed on El Paso Natural Gas Company for the Carlsbad accident were the result of a consent decree. Similarly, UGI Corporation had settled the enforcement actions brought against it for the Allentown accident.⁷² In contrast, PG&E has not settled any of the violations brought against it in the Pipeline OIIs. Considering these facts, there is nothing inappropriate or disproportionate about any penalties imposed on PG&E in connection with the violations arising from the Pipeline OIIs being significantly greater than those imposed on El Paso Natural Gas Company or UGI Corporation.

PG&E's arguments that CPSD's proposed penalty amount exceeds the statutory cap on fines in most other jurisdictions is similarly not persuasive. We agree with CPSD that the fact that other states have capped the amounts allowed for violations "simply reflect other legislatures' prerogatives."⁷³ In *Gore*, the U.S. Supreme Court noted that in comparing penalties for comparable misconduct, a reviewing court should defer to "legislative judgments concerning appropriate sanctions for the conduct at issue."⁷⁴ As a result, the Supreme Court disallowed punitive damages imposed on BMW by an Alabama court that were substantially greater than the statutory fines available in Alabama and elsewhere

⁷¹ CPSD Amended Reply at 8.

⁷² Moreover, as noted by PG&E and CPSD, at the time of the Allentown accident, Pennsylvania law capped the civil penalty for accidents at \$500,000. Thus, the civil penalty imposed on UGI Corporation was limited to a maximum of \$500,000.

⁷³ CPSD Amended Reply at 9.

⁷⁴ *Gore*, 517 U.S. at 583.

for similar misconduct.⁷⁵ In this case, Pub. Util. Code §§ 2107 and 2108 authorize the Commission to impose a fine of "not less than five hundred dollars (\$500) nor more than fifty thousand dollars (\$50,000) for each offense"⁷⁶ and provides that for continuing violations, each day "shall be a separate and distinct offense." Accordingly, unlike other jurisdictions, the California legislature has given the Commission broad discretion to determine the appropriate level of fines, rather than establish the maximum amount of fines that may be imposed on a continuing violation or a related series of violations.

PG&E's reliance on *Hale* is also unpersuasive. In that case, the California Supreme Court found that a penalty, pursuant to Civ. Code § 789.3, imposed on the landlord of a small mobile home park for willfully depriving his tenant of utility services for the purpose of exicting the tenant was excessive under the circumstances. Although the Court found it significant that no other jurisdiction appeared to have a mandatory daily penalty for a similar violation, it went on to state:

The imposition of the \$100 daily penalty over a limited period may indeed, in a given case, be a perfectly legitimate means of encouraging compliance with law. Furthermore, there are doubtless some situations in which very large punitive assessments are both proportioned to the landlord's misconduct and necessary to achieve the penalty's deterrent purposes.⁷⁷

⁷⁵ Gore, 517 U.S. at 584.

⁷⁶ The maximum penalty of \$50,000 for each offense was effective January 1, 2012. Prior to January 1, 1994, the maximum penalty for each offense was \$2,000. Between January 1, 1994 and December 31, 2011, the maximum penalty for each offense was \$20,000.

⁷⁷ *Hale*, 22 Cal. 3d at 404.

The Court then concluded that where "a penal statute may be subject to both constitutional and unconstitutional applications, courts evaluate the propriety of the sanction on a case-by-case basis."⁷⁸ Based on the violations presented in the Pipeline OIIs (e.g., the magnitude of the physical harm resulting from the San Bruno explosion, the potential risk to millions of residents from operating gas transmission pipelines at non-commensurate SMYS in areas of high population density, and PG&E's failure to have proper records to ensure safe operations of its natural gas transmission pipeline system), CPSD's proposed amount would not be excessive and may be necessary to deter future violations. The thrust of *Hale* is that where a mechanical imposition of a mandatory penalty would result in an excessive penalty, the entity imposing the fine must reduce the fine to a reasonable level. As explained below, we have done so here.

While we consider penalties imposed in other fatal pipeline accidents and the level of penalties set by other jurisdictions, this factor does not control our analysis under the federal and state Excessive Fines Clauses. In *People ex rel. State Air Res. Bd. v. Wilmshurst* (1999) 68 Cal. App. 4th 1332, the State Attorney General had brought an action against defendants for violations of Cal. Health & Safety Code §§ 43150-43156, which resulted in a fine of \$45,000 against each defendant. In rejecting the defendants' arguments that the amount of the penalty imposed violated the Excessive Fines Clause, the California Court of Appeal, Third Appellate District, noted

[a]lthough a number of *forfeiture* cases have articulated a multifactor analysis of proportionality to be allowed by a trial court (e.g., *United Stes v. Bajakajian* (1998) 524 U.S. 321 ...), the

⁷⁸ *Hale*, 22 Cal. 3d at 404.

constitutionality of a *fine* is determined by a simpler test. "Proportionality is likely to be the most important issue in a forfeiture case, since the claimant-defendant is able to pay by forfeiting the disputed asset. In imposing a fine, on the other hand, ability to pay becomes a critical factor."⁷⁹

Consequently, the *Wilmshurst* Court concluded "The defendants' concern with the relationship between the amount of the fines and nature of their offenses or the amounts of fines imposed in other cases is consequently irrelevant; it is their ability to pay which is the constitutional lodestar."⁸⁰ As we discuss in Section 5.3 below, we find that PG&E is financially able to bear the \$2.25 billion penalty proposed by CPSD.

Moreover, as noted by CCSF, any proportionality assessment must consider "the extent to which a sanction is punitive in nature and 'whether a penalty is grossly disproportional to the gravity of a defendant's offense'…"⁸¹ In this instance, CPSD is proposing a \$2.25 billion penalty for over *18.4 million* violations. This would equate to approximately \$122 per violation, well below the statutory minimum fine specified in Pub. Util. Code § 2107. Consequently, while we do not dispute that CPSD's proposed \$2.25 billion penalty is significant, we do not find that it violates the Excessive Fines Clause.

⁷⁹ Wilmshurst, 68 Cal. App. 4th at 1350 (citing U.S. v. Hines (8th Cir. 1996) 88 F.3d 661, 664).

⁸⁰ *Wilmhurst*, 68 Cal. App. 4th at 1350. See also, *City and County of San Francisco v. Sainez* (2000) 77 Cal. App. 4th 1302, 1321 ("Other authority has since held, and we agree, that 'in the case of fines, as opposed to forfeitures, the defendant's ability to pay is a factor under the Excessive Fines Clause. [Citations.]'."

⁸¹ *Reply Brief of the City and County of San Francisco on Penalties (CCSF Reply),* filed June 6, 2013, at 8.

5. Factors to Consider in Setting Penalty Amount

In determining the penalty to be imposed for violations found in the *San Bruno Violations Decision*, the *Recordkeeping Violations Decision* and the *Class Location Violations Decision*, we are guided by D.98-12-075, which identified the following factors:⁸²

- 1. Severity of the offense;
- 2. The conduct of the utility before, during, and after the offense;
- 3. The financial resources of the utility;
- 4. The totality of the circumstances in furtherance of the public interest; and
- 5. The amount of the fine in relationship to prior Commission decisions.

We have consistently applied the factors identified in D.98-12-075 to all enforcement proceedings, including, most recently, our investigation into the 2008 gas distribution pipeline explosion at Rancho Cordova.⁸³

5.1. Severity of the Offense

The severity of the offense includes consideration of economic harm, as well as physical harm to people or property. Further, "disregarding a statutory or Commission directive, regardless of the effects on the public, will be accorded a high level of severity."⁸⁴

⁸² Standards of Conduct Governing Relationships Between Energy Utilities and Their Affiliates (D.98-12-075), 84 Cal.P.U.C.2d at 186-190.

⁸³ See Presiding Officer's Decision Regarding Joint Motion to Approve the Stipulation of Pacific Gas And Electric Company and the Consumer Protection and Safety Division Concerning Rancho Cordova and Related Stipulation (Rancho Cordova Decision) (D.11-11-001), issued November 3, 2011, at 35.

⁸⁴ *Standards of Conduct Governing Relationships Between Energy Utilities and Their Affiliates,* 84 Cal. P.U.C.2d at 188.

5.1.1. CPSD and Intervenors' Positions

There is no dispute that the San Bruno explosion resulted in physical harm to persons and destruction or damage to property. From that standpoint alone, the violations associated with the San Bruno explosion and Segment 180 would be considered severe. Moreover, DRA contends the San Bruno explosion was the result of *"multiple continuing violations by PG&E committed over many years* . . . and that these violations compromised the integrity of PG&E's *entire* gas pipeline system."⁸⁵

In addition to this physical harm, CPSD and Intervenors argue that violations associated with PG&E's operations and recordkeeping practices should also be considered severe, as they have resulted in economic harm to ratepayers.

As an example, CPSD argues that PG&E's failure to maintain complete and accurate records, as well as cutting back on other safety-related activities, resulted in the company's GT&S revenues exceeding actual revenue requirements for a number of years.⁸⁶ Consequently, CPSD contends that many of the safety-related projects ordered in the *PSEP Decision* are to correct these deficiencies.⁸⁷ Moreover, CPSD asserts these violations relate to the safety of PG&E's entire system, not just Segment 180, and many of the violations began over 40 years ago.⁸⁸

⁸⁵ DRA Opening Brief at 20 (emphasis in original).

⁸⁶ CPSD Opening Brief at 42.

⁸⁷ CPSD Opening Brief at 43.

⁸⁸ CPSD Opening Brief at 44.

TURN echoes many of CPSD's comments and contends that, based on the evidence in these proceedings, "the testing and replacement that was approved in [the *PSEP Decision*] is made necessary by the fact that PG&E's violations prevent any reasonable assurance of the integrity of PG&E's underground pipelines."⁸⁹

Finally, CPSD and Intervenors note that these cases do not involve single, isolated violations. Rather these proceedings involve "a pervasive, systemic and long-standing failure on the part of PG&E to maintain its gas pipeline system safely."⁹⁰ As TURN points out, "the sheer number and scope of the ongoing violations is unprecedented."⁹¹ Moreover, PG&E had more than adequate prior notice of recordkeeping problems, yet failed to take any actions.⁹² Consequently, "PG&E will be doing remedial work *for decades*, much of it at the expense of ratepayers."⁹³ By way of example, CPSD refers to PG&E's response to a joint CPSD and TURN data request, which included a list of more than 23,700 pipe segments in the most heavily populated high consequence areas for which PG&E had not located a valid strength test record.⁹⁴

⁸⁹ TURN Opening Brief at 26.

⁹⁰ CCSF Opening Brief at 5.

⁹¹ TURN Opening Brief at 25.

⁹² TURN Opening Brief at 26; DRA Opening Brief at 20-21; CCSF Opening Brief at 5.

⁹³ CPSD Opening Brief at 44 (emphasis in original).

⁹⁴ CPSD Opening Brief at 45.

Based on these considerations, CPSD and Intervenors argue that the violations should be accorded a high level of severity, and the highest level of fines should be imposed.⁹⁵

5.1.2. PG&E's Position

PG&E does not dispute that the San Bruno explosion caused physical harm. However, it asserts "the fact that physical harm occurs does not mean that the harm was caused by the alleged violation."⁹⁶ Further, PG&E notes that many of the violations alleged in the Class Location OII and the Recordkeeping OII are unrelated to the San Bruno explosion and did not cause any physical harm.⁹⁷ PG&E therefore contends "the conduct underlying alleged violations was not intentional and is unrelated to the cause of the [Segment 180] rupture."⁹⁸ As such, PG&E argues that the violations do not merit a severe penalty.

PG&E further argues that CPSD "improperly transformed single categories or courses of conduct into numerous individual alleged violations" and then exponentially increased the violations by counting each as a "continuing violation."⁹⁹ PG&E argues that this methodology not only results in a total potential penalty that is unrealistic, but also is contrary to Commission precedent.

⁹⁹ *PG&E Remedies Brief* at 39 & 41.

⁹⁵ CPSD Opening Brief at 42-44; TURN Opening Brief at 4; CCSF Opening Brief at 2; DRA Opening Brief at 18; CSB Reply Brief at 4.

⁹⁶ *PG&E Remedies Brief* at 36.

⁹⁷ *PG&E Remedies Brief* at 36.

⁹⁸ PG&E Remedies Brief at 38.

Finally, PG&E contends that the Commission should group violations "by category for the purpose of finding violations and calculating any penalties."¹⁰⁰ It notes that in *Utility Consumers Action Network v. SBC Communications (AT&T)* [D.08-08-017], the Commission had determined that although AT&T had "violated two subsections of [Pub. Util. Code] § 2883, the company had pursued essentially one course of conduct: failure to comply with the warm line policies enacted by the legislature.¹⁰¹" On that basis, PG&E argues that the millions of violations alleged by CPSD in the Class Location OII be condensed into a "single course of conduct, failure to properly implement patrol, class location and continuing surveillance procedures."¹⁰²

5.1.3. Discussion

We do not agree with PG&E's arguments that violations that did not cause or result in physical harm should be considered less severe. In D.98-12-075, we noted that both economic harm and failure to comply with statutes or Commission directives were also considered when determining the severity of a violation. With respect to economic harm, we noted: "The fact that the economic harm may be difficult to quantify does not diminish severity or the need for sanctions." We further noted

Many potential penalty cases before the Commission do not involve any harm to consumers but are instead violations of reporting or compliance requirements. In these cases, the harm may not be to consumers but rather to the integrity of the regulatory process.

¹⁰⁰ *PG&E Remedies Brief* at 41.

¹⁰¹ *PG&E Remedies Brief* at 41 (citing D.08-08-017 at 37-38 (slip op.)).

¹⁰² PG & E Remedies Brief at 40.

•••

Such compliance is absolutely necessary to the proper functioning of the regulatory process. For this reason, disregarding a statutory or Commission directive, regardless of the effects on the public, will be accorded a high level of severity.¹⁰³

Therefore, contrary to PG&E's arguments, economic harm and failure to comply with statutes or Commission directives are considered severe violations.

We find that PG&E's violations have caused economic harm to ratepayers. As noted by TURN, the San Bruno explosion caused economic harm to the residents of San Bruno.¹⁰⁴ Moreover, PG&E has failed to comply with statutes and Commission directives. Many of the actions mandated in the *PSEP Decision* are due to PG&E's failure to comply with statutes – e.g., to maintain complete and accurate records and to comply with the applicable statutes and regulations concerning the proper surveillance, operation and maintenance of its transmission pipeline system.¹⁰⁵

We further disagree with PG&E's argument that those violations alleged in the Recordkeeping OII and the Class Location OII that do not directly relate to the San Bruno explosion should not be considered as severe. All of the violations raised in the Pipeline OIIs concern failure to comply with federal or state laws or regulations. Consistent with D.98-12-075, PG&E's violations in those OIIs will be accorded a high level of severity.

¹⁰³ Standards of Conduct Governing Relationships Between Energy Utilities and Their Affiliates, 84 Cal. P.U.C.2d at 188.

¹⁰⁴ TURN Opening Brief at 26.

¹⁰⁵ *PSEP Decision* at 87 (slip op.).

PG&E has acknowledged in the Class Location OII that it has not maintained nor operated all segments of its transmission pipeline system at the proper class location.¹⁰⁶ Although PG&E has argued that the failure to maintain the proper class location did not necessarily present a serious risk to public safety, failure to maintain the proper MAOP in light of the population density where the pipeline was located increases the potential physical and economic harm to the public in the event of a pipeline failure. Similarly, as we discussed in *Resolution ALJ-277 Affirming Citation No. ALJ-274 2012-01-001 Issued to Pacific Gas and Electric Company for Violations of General Order 112-E (Resolution ALJ-277),* issued on April 20, 2012, concerning PG&E's violations of leak survey requirements,

Leak surveys are the primary industry tool available to detect and correct gas leaks before they become serious. Moreover, leak survey data provides critical information that operators must consider in determining the need and schedule for necessary maintenance or replacement. ... The potential public harm from these violations was great. The violations were significant, with the capacity for serious injury to persons and property....¹⁰⁷

Additionally, we do not agree that CPSD has inappropriately inflated the number of violations to enhance their severity. PG&E's efforts to reduce the number of violations, and thus the severity of these violations, disregards the company's responsibility to ensure the safe operations of its pipeline system.

With respect to the Class Location OII, PG&E cannot credibly argue that maintaining the proper class location designation in response to changes in population density (49 CFR 192.609), confirming the maximum allowable

¹⁰⁶ See, e.g., Class Location Exh. PG&E-1 at 1-1 – 1-2 (PG&E/Yura); PG&E Remedies Brief at 1.
¹⁰⁷ Resolution ALJ-277 at 6-7.

operating pressure of pipelines in response to changes in class designation (49 CFR 192.611), or performing continuous surveillance over the maintenance and operations of its facilities (49 CFR 192.613) are not all, individually, important aspects of operating its pipeline system in a safe manner. Similarly, PG&E cannot reasonably believe that failure to maintain the proper class designation for a segment of pipe in San Francisco is the same violation as failing to maintain the proper class designation for a segment of pipe in the Mojave Desert. If these violations had occurred individually and/or on one or two segments of pipeline, they would have been charged separately. The fact that the violations are pervasive throughout PG&E's pipeline system and result in the violation of more than one regulation or law does not change the need to consider these as separate violations.

With respect to the San Bruno OII, PG&E cites two examples where, it contends, CPSD improperly expanded the number of violations.¹⁰⁸ First, PG&E contends that CPSD "doubled" a violation for Segment 180 girth welds by alleging violations of both Section 811.27(E) of ASME B31.1.8 – 1955 and API 1104.¹⁰⁹ However, CPSD had withdrawn the Section 811.27(E) violation and the *San Bruno Violations Decision* did not adopt it.¹¹⁰ Second, PG&E contends that CPSD improperly included specific violations within the scope of a "generic" violation.¹¹¹ The generic alleged violation referenced by PG&E is that "By installing pipeline sections that were not suitable and safe for the conditions

¹⁰⁸ $PG\mathcal{E}E$ Remedies Brief at 40.

¹⁰⁹ *PG&E Remedies Brief* at 40.

¹¹⁰ San Bruno Violations Decision, Section 5.1.8.

¹¹¹ *PG&E Remedies Brief* at 40.

under which they were used, PG&E violated the safe industry practices described in Section 810.1 of ASME B31.1.8 – 1955, creating an unsafe system in violation of Pub. Util. Code § 451." The *San Bruno Violations Decision* concurred with PG&E's contention that this violation significantly overlapped two other alleged violations and therefore combined them into a single adopted violation.¹¹² Accordingly, we do not find that the examples cited by PG&E support its argument that there has been an improper expansion of the number of violations in the San Bruno OII.

Finally, in addition to violations of federal and state statutes and regulations, we found that PG&E violated Rule 1.1 of the Commission's Rules of Practice and Procedure in the Recordkeeping OII.¹¹³ Rule 1.1 states:

Any person who signs a pleading or brief, enters an appearance, offers testimony at a hearing, or transacts business with the Commission, by such act represents that he or she is authorized to do so and agrees to comply with the laws of this State; to maintain the respect due to the Commission, members of the Commission and its Administrative Law Judges; and never to mislead the Commission or its staff by an artifice or false statement of fact or law.¹¹⁴

There is no dispute that misleading the Commission and impeding the staff's investigation in the Recordkeeping OII are severe offenses.

For the reasons discussed above, we find that the violations are severe.

¹¹² San Bruno Violations Decision, Section 5.1.10.

¹¹³ *Recordkeeping Violations Decision*, Section 7.4.

¹¹⁴ Rules of Practice and Procedure, Rule 1.1 (emphasis added).

5.2. Conduct of the Utility Before, During and After the Offense

This factor takes into consideration the utility's efforts to prevent a violation by ensuring compliance with applicable laws, regulations, and Commission directives. Additionally, the Commission will assess the utility's monitoring of activities to ensure compliance. Pursuant to Pub. Util. Code § 702,

Every public utility shall obey and comply with every order, decision, direction, or rule made or prescribed by the commission in the matters specified in this part, or any other matter in any way relating to or affecting its business as a public utility, and shall do everything necessary or proper to secure compliance therewith by all of its officers, agents, and employees.

Moreover, in considering utility culpability in violations, "the act, omission, or failure of any officer, agent, or employee of any public utility, acting within the scope of his official duties or employment, shall in every case be the act, omission, or failure of such public utility." Finally, the Commission will consider whether once the utility became aware of the violation, it promptly brought the violation to the attention of the Commission.¹¹⁵

5.2.1. CPSD and Intervenors' Positions

CPSD argues that PG&E failed to take action to prevent the violations from occurring. With respect to Segment 180, CPSD argues that PG&E failed to follow industry standards related to construction and installation of pipe, including visual examination of the pipe and its welds, pressure testing and retention of necessary records.¹¹⁶ Additionally, CPSD notes that PG&E's corporate culture

¹¹⁵ Standards of Conduct Governing Relationships Between Energy Utilities and Their Affiliates, 84 Cal. P.U.C.2d at 188-189.

¹¹⁶ CPSD Opening Brief at 45-46.

placed profits over safety by making significant cuts in its safety-related personnel and tasks.¹¹⁷ In particular, CPSD states that PG&E had discontinued its GPRP for a risk management program, resulting in significantly reducing the number of miles of high consequence areas (HCA) transmission pipeline replaced. However, as CPSD notes, "[r]egulations are not goals, they are absolute requirements. Systems should be engineered so that those requirements are met."¹¹⁸

CPSD further maintains that although PG&E was required to actively monitor all activities concerning its transmission pipeline system, it did not take any actions to detect violations.¹¹⁹ As such, CPSD argues that PG&E's claims that it was unaware of problems with its records for over 50 years are not credible. CPSD points to various occasions where it believes PG&E could have detected the flawed pup sections in Segment 180. Further, it notes that PG&E had been informed of errors in its risk assessment program in 1984, but failed to take any action. CPSD argues that if PG&E had done so, PG&E "could have avoided the San Bruno rupture and fire."¹²⁰

Finally, CPSD states "the violations came to light subsequent to the explosion in San Bruno. PG&E did nothing to disclose them to the Commission, or rectify them in advance."¹²¹ CPSD and TURN further note that all the actions PG&E has taken since the San Bruno explosion to rectify the disclosed violations

¹²¹ CPSD Opening Brief at 49.

¹¹⁷ CPSD Opening Brief at 46.

¹¹⁸ CPSD Opening Brief at 46.

¹¹⁹ CPSD Opening Brief at 47.

¹²⁰ CPSD Opening Brief at 48-49.

were mandated by PHMSA or the Commission, not initiated by the company.¹²² For example, CPSD notes that although PG&E knew its GIS system was missing data, it had taken no actions to "immediately correct and report" the violations.¹²³

Intervenors further argue that PG&E's conduct throughout the course of these proceedings demonstrate that it was not acting in good faith. Both CSB and CCSF point to PG&E's aggressive litigation strategy and efforts to delay providing records necessary for a thorough investigation.¹²⁴ CSB further states that while PG&E has admitted to two minor violations, it "cannot prove that [it] will fix the numerous and egregious deficiencies in its system."¹²⁵ Similarly, TURN notes that PG&E has only admitted to the most trivial violations and "made frivolous legal arguments, such as the argument that [Pub. Util. Code] § 451 does not impose any safety requirements."¹²⁶

5.2.2. PG&E's Position

PG&E contends that it has always acted in good faith. It notes that CPSD had conducted multiple audits of PG&E's gas transmission operations prior to the San Bruno explosion and its audit findings had approved PG&E's general practices.¹²⁷ Thus, PG&E argues that even if CPSD's audits were not thorough or

¹²² CPSD Opening Brief at 49; TURN Opening Brief at 27.

¹²³ CPSD Opening Brief at 50.

¹²⁴ CSB Opening Brief at 33; CCSF Opening Brief at 6.

¹²⁵ CSB Opening Brief at 36.

¹²⁶ TURN Opening Brief at 28.

¹²⁷ *PG&E Remedies Brief* at 43.

comprehensive, "that is not a valid aggravating factor in penalizing PG&E."¹²⁸ PG&E further states "while PG&E had room for improvement, its practices met regulatory requirements and were consistent with accepted industry practices."¹²⁹ In particular, PG&E notes that the shortfalls in its recordkeeping practices were not unique, and gaps in pipeline construction and maintenance records were common among natural gas pipeline operators.¹³⁰

PG&E adds that the Commission should take into account PG&E's efforts to improve the safety of its gas transmission system immediately after the San Bruno explosion. It lists the numerous actions it took to assist the residents and CSB immediately after the explosion.¹³¹

PG&E disputes CPSD's and Intervenors' assertions that it only took action after being ordered to do so by the Commission or PHMSA. It states that it undertook to verify pipeline specifications before ordered to do so by the Commission.¹³² Further, PG&E argues that it has "acted in good faith on the Commission's directives, and the recommendations issued by the CPSD and the NTSB."¹³³ It then discusses the various improvements it has undertaken since the San Bruno explosion, including corporate-level organization changes, creation of a new records management system and policy and improvements

- ¹³¹ PG&E Remedies Brief at 49 51.
- ¹³² *PG&E Remedies Brief* at 44.
- ¹³³ *PG&E Remedies Brief* at 51.

¹²⁸ *PG&E Remedies Brief* at 43.

¹²⁹ *PG&E Remedies Brief* at 47.

¹³⁰ *PG&E Remedies Brief* at 47-48.

and initiatives undertaken in its gas organization.¹³⁴ Moreover, PG&E contends that even if these improvements were mandated by the Commission,

[Pub. Util. Code] § 2104.5 presupposes that the improvements were required to achieve compliance with Commission rules and orders. The question is the good faith of the utility in attempting to achieve that compliance and whether the company embraced the spirit of change, rather than grudgingly accepting a mandate.¹³⁵

Thus, PG&E argues that it should be given credit for its good faith in implementing the changes mandated by the Commission in the *PSEP Decision*.¹³⁶

Finally, PG&E addresses CPSD's allegations that PG&E demonstrated bad faith because it had withheld evidence of errors in GIS (the audit change log). PG&E first states that CPSD incorrectly concluded that all changes made to pipeline attribute fields in GIS were to correct errors, when many of the changes were, in fact, "due to new pipe installation, hydro testing, changes made to more precisely reflect the location of the pipeline, and changes to pipe attribute information (including corrections to pipe attributes identified through normal course of business and records research)."¹³⁷ Further, PG&E asserts it had not withheld this information from CPSD, but rather had "provided a written description of the HCA audit change log and an excerpt of the log itself on September 29, 2011."¹³⁸ Finally, PG&E asserts that CPSD's allegations were made based on hindsight. "Prior to the [San Bruno explosion], there was no indication

¹³⁴ PG & E Remedies Brief at 54 – 62.

¹³⁵ *PG&E Remedies Brief* at 63.

¹³⁶ *PG&E Remedies Brief* at 51-53 & 63.

¹³⁷ *PG&E Remedies Brief* at 45.

¹³⁸ *PG&E Remedies Brief* at 46.

that Segment 180 was constructed from anything other than the properly manufactured DSAW transmission pipe requisitioned for the job, and the lack of pressure testing records, or even pressure testing, was permissible for Segment 180 under the grandfather clause."¹³⁹

For these reasons, PG&E argues that it had acted in good faith to discover, disclose and remedy violations.

5.2.3. Discussion

We find that PG&E did not take adequate steps to prevent the violations from occurring. PG&E appears to rely on CPSD's audits, which had approved PG&E's general practices, to determine that it was in compliance with the regulations.¹⁴⁰ However, as PG&E recognizes, CPSD's audits are not comprehensive. More importantly, as the pipeline operator, the onus to ensure that its gas transmission pipeline system is operated safely is on PG&E, not CPSD.

PG&E also did not take adequate steps to ensure compliance with applicable laws and regulations. Although PG&E recognizes its duty to maintain design, installation, testing, operating and maintenance records for all segments of its transmission pipeline system, it admits that it had lost or inadvertently destroyed records over the years. Despite knowing that it was missing records and the associated data that it was required to maintain, PG&E took no action to correct these violations.

¹³⁹ *PG&E Remedies Brief* at 47.

¹⁴⁰ *PG&E Remedies Brief* at 43.

As we discuss in the *Recordkeeping Violations Decision*, PG&E management

had been notified at various times of the impact of not having the necessary

records. Some examples include:

- In 1981, the NTSB investigated a gas pipeline leak in San Francisco and determined that PG&E's delay in stopping the flow of gas was because it could not locate one emergency valve due to inaccurate records.
- In 1984, PG&E hired Bechtel Petroleum, Inc. (Bechtel) to conduct a risk analysis to develop a methodology and database to prioritize replacement of transmission line segments and distribution mains. In its report to PG&E, Bechtel stated that due to the inaccuracy and lack of various data variables, the risk analysis was of limited use.
- Bechtel advised PG&E in 1986 of the risk to its integrity management program caused by missing pipeline data, and the need for additional research to resolve these "uncertainties."
- In 1992, PG&E's Records and Information Coordinator had written a memo concerning PG&E's document recordkeeping practices and expressing concern over the utility's inability to maintain essential pipeline data.

Despite repeatedly being notified of these recordkeeping shortfalls, PG&E did not take any action to obtain the missing data. Further, as we determined in the *PSEP Decision*, PG&E's actions since the 1980's has been a shift away from safety:

The decision-making and priorities driving PG&E's pipeline safety actions in 1985 and 1992 show a different PG&E than the PG&E of the early 2000's. The 1985 plan showed PG&E thinking ahead, coordinating with local authorities planning similar trenching work, updating meters and associated system components as part of a comprehensively planned, orderly approach to making economically sound upgrades as part of an overall system improvement plan. PG&E included "manpower and training" among its considerations, showing that it was planning to use its own employees and not outside consultants. In this way, PG&E staff would study its system and actually

perform pipeline tests and replacements, thus retaining the knowledge within the organization for long-term operations and planning.

In contrast, as the Independent Review Panel pointed out, more recently PG&E's field operations and integrity management efforts were not coordinated.¹⁴¹

We also do not agree with PG&E's arguments that it should be found to have acted in good faith because its practices were consistent with accepted industry practices. As we have discussed in our decisions on violations, PG&E's attempts to equate its conduct with that of other gas utilities is unpersuasive.¹⁴² Those other utilities are not subject to our jurisdiction, GO 112 and its successors, or California law. Moreover, the fact that other gas utilities may also be violating statutes and regulations is not an excuse for PG&E to not be in compliance. PG&E has not provided any authority that states that compliance with gas safety requirements is optional or can be waived.

We further disagree that PG&E should be considered to have demonstrated good faith and given "credit" because it "embraced" the directives contained in the *PSEP Decision* and did not "grudgingly" accept them. All utilities under the Commission's jurisdiction are expected to comply with Commission directives and orders. Failure to do so subjects the utility to sanctions under Pub. Util. Code § 2107. The fact that PG&E has complied with the *PSEP Decision* without complaining does not demonstrate good faith. Moreover, the *PSEP Decision* directs PG&E to take corrective action for failing to have the records necessary to ensure safe operations of its transmission system.

¹⁴¹ *PSEP Decision* at 47 (slip op.).

¹⁴² See, e.g., Recordkeeping Violations Decision, Section 9.1.

PG&E should not be considered to be acting in good faith simply because it is now maintaining and operating its gas transmission pipeline system in accordance with governing laws and regulations. We find that PG&E's conduct demonstrated bad faith – PG&E was aware it was not in compliance with various state and federal regulations regarding the maintenance of pipeline records, yet took no corrective action.

Nonetheless, we acknowledge PG&E's effort immediately after the San Bruno explosion when it provided assistance to the CSB and its residents affected by the explosion. These actions, along with PG&E's corporate-level reorganization to improve operations and implementation of new practices and activities in its gas transmission business reflect PG&E's renewed commitments to ensuring the safe operation of its transmission system.

Finally, while we do not agree with Intervenors that PG&E's aggressive litigation strategy in these proceedings reflects bad faith, we do agree that some of the actions taken by PG&E's counsel in the course of these proceedings reflect bad faith. In the *Recordkeeping Violations Decision*, we found that PG&E violated Rule 1.1 on two occasions with respect to its responses to CPSD's data requests¹⁴³ and that it potentially violated Rule 1.1 in another.¹⁴⁴ Finally, we note that in all three OIIs, CPSD and Intervenors have alleged that PG&E has delayed and failed to completely respond to data requests. PG&E's delay and failure to provide complete responses impeded CPSD's ability to conduct its investigation and prepare its reports in the OIIs.

¹⁴³ *Recordkeeping Violations Decision*, Section 7.4.

¹⁴⁴ See *Recordkeeping Violations Decision*, Section 9.3.

In light of the above, we do not find that PG&E has acted in good faith to discover, disclose and remedy the violations.

5.3. Financial Resources of the Utility

In setting the level of the fine, the Commission needs to balance "the need for deterrence with the constitutional limitations on excessive fines."¹⁴⁵ Consequently, the Commission must "adjust fine levels to achieve the objective of deterrence, without becoming excessive, based on each utility's financial resources."¹⁴⁶ We have addressed the Excessive Fines Clause and the issue of proportionality in Section 4.3 above. In this section, we address the extent to which PG&E's financial resources would limit the amount of the penalty to be imposed.

5.3.1. CPSD and Intervenors' Positions

CPSD asserts that in setting the penalty level, the Commission must take into account that PG&E is one of the largest utilities in the nation and that between 1999 and 2010, actual revenues from GT&S services exceeded revenue requirements by at least \$435 million.¹⁴⁷ Based on testimony from CPSD witnesses Lubow and Malko of Overland Consulting (Overland), CPSD contends that PG&E could sustain fines and remedies up to \$2.25 billion.¹⁴⁸ CPSD states

¹⁴⁵ *Standards of Conduct Governing Relationships Between Energy Utilities and Their Affiliates*, 84 Cal. P.U.C. 2d at 189.

¹⁴⁶ Standards of Conduct Governing Relationships Between Energy Utilities and Their Affiliates, 84 Cal. P.U.C. 2d at 189.

¹⁴⁷ CPSD Opening Brief at 51.

¹⁴⁸ *CPSD Opening Brief* at 51-53. The Overland Report evaluates the financial strength of PG&E's parent company, PG&E Corporation (PCG). It explains "Although Pacific Gas & Electric is the utility subsidiary regulated by the CPUC, we mainly focused on the holding

that this recommended penalty amount "while harsh enough to have a deterrent effect, is not so harsh that PG&E's credit worthiness would suffer to the point where ratepayers would be negatively impacted."¹⁴⁹

Intervenors support the proposed level of fines and remedies proposed by CPSD. CSB notes that PG&E reported operating revenues of \$13.841 billion in 2010, and PG&E Corporation's net income after dividends on preferred stock for the first quarter of 2012 was \$239 million.¹⁵⁰ CSB cites to various PG&E reports and concludes that PG&E has conveyed increasing confidence in the company's financial outlook to investors.¹⁵¹ CSB further notes that PG&E's own witness had conceded that while it would be a challenge to issue equity or raise capital sufficient to pay a \$2 billion fine, PG&E had the capacity to do so.¹⁵² As such, CSB maintains a \$1.25 billion fine (excluding other proposed remedies and disallowances) would be appropriate in light of PG&E's size, 2010 operating revenues and 2013 profits.¹⁵³

CCSF echoes CSB's arguments, noting that PG&E is the biggest public utility in California, with ample resources. Additionally, CCSF argues that it is important for the Commission "to devise a penalty high enough to deter a large,

¹⁵² CSB Opening Brief at 29-31.

company, PCG, in our analysis because the financial strength of the holding company ultimately determines the amount of capital that can be raised." (Exh. Joint-52 at 1, fn. 3.)

¹⁴⁹ CPSD Opening Brief at 53.

¹⁵⁰ CSB Opening Brief at 29.

¹⁵¹ CSB Opening Brief at 29.

¹⁵³ *CSB Opening Brief* at 28. CSB subsequently lowered its proposed fine amount to \$900 million in its reply brief.

well-resourced corporation like PG&E from undervaluing safety in the future" while still allowing PG&E to survive.¹⁵⁴

TURN further notes that given the extent of the harm resulting from the San Bruno explosion and the scope of the violations at issue in the Pipeline OIIs, fines imposed in other proceedings do not provide much guidance.¹⁵⁵ It notes that the penalties imposed in six incidents identified by PG&E that involved natural gas pipeline explosions and fatalities in other jurisdictions are not comparable to the San Bruno explosions, as three of the incidents were caused by third-parties and one had a statutory cap on the penalty amount.¹⁵⁶ In contrast, TURN argues that the scope and number of the violations and the extent of harm in the Pipeline OIIs means that the fines in these proceedings would likely exceed PG&E's market value. Therefore, TURN states "[t]he ability to pay should be limited not by total available assets, but by the amount the company can pay without impacting the utility's ability to provide service (for example, by raising capital for investment) or increasing rates."157 At the same time, TURN cautions that the penalty level should not be set based on analysts' expectations, as that perspective "creates a Catch-22 that would circumvent the Commission's statutory and legal responsibilities."¹⁵⁸ Finally, TURN notes that the \$2.25 billion penalty estimated by Overland included both fines and other potential

- ¹⁵⁷ TURN Opening Brief at 31.
- ¹⁵⁸ TURN Opening Brief at 38.

¹⁵⁴ CCSF Opening Brief at 7.

¹⁵⁵ TURN Opening Brief at 29.

¹⁵⁶ TURN Opening Brief at 30.

disallowances.¹⁵⁹ It asserts "[t]his number is absolutely within the range of forecasts by equity analysts of the total 'fines and penalties.'"¹⁶⁰

5.3.2. PG&E's Position

PG&E disputes Overland's analysis, stating that the \$2.25 billion threshold is "essentially a made-up number based on two financial metrics that have nothing to do with market capacity for equity to be used to fund a penalty."¹⁶¹ It states that a \$2 billion penalty would be larger than any penalty ever imposed on a utility and "there is no evidence that a utility has ever issued stock for the specific purpose of paying *any* fine or penalty, much less one of that magnitude."¹⁶²

PG&E argues that Overland's analysis fails to take into account PG&E's planned equity issuances to fund capital expenditures.¹⁶³ PG&E states that the company has already projected significant capital expenditures through 2016 and that any equity issuances to fund a penalty would be incremental to planned equity issuances. PG&E believes that such an equity issuance would be met with heightened investor scrutiny and may require PG&E to postpone some of its planned infrastructure improvements.¹⁶⁴ Further, it argues that an equity offering to fund a penalty would likely be less well-received by investors.¹⁶⁵

- ¹⁶² *PG&E Remedies Brief* at 71 (emphasis in original).
- ¹⁶³ *PG&E Remedies Brief* at 65.

¹⁶⁵ *PG&E Remedies Brief* at 69.

¹⁵⁹ TURN Opening Brief at 40 (referencing Exh. Joint-52 at 6).

¹⁶⁰ TURN Opening Brief at 40.

¹⁶¹ *PG&E Remedies Brief* at 64. The two metrics used are the price to book and dividend payout ratios.

¹⁶⁴ *PG&E Remedies Brief* at 66 – 67.

Among other things, PG&E contends that an equity offering to pay a fine or penalty would not provide any of the benefits that investors view favorably, such as "reduce financial risk, increase future investment flexibility and reduce interest expense."¹⁶⁶ PG&E goes on to warn that if CPSD's or Intervenors' proposed penalties are approved, it may result in "a less favorable perception of the regulatory climate in California."¹⁶⁷

PG&E next criticizes Overland's methodology to calculate the \$2.24 billion threshold level. It contends that neither of the metrics used by Overland to calculate this threshold amount – the price to book ratio nor the dividend payout ratio – is "typically used by investment banks to determine the market's capacity for an equity offering."¹⁶⁸ PG&E discusses Overland's methodology and concludes that "Overland's conclusion that PG&E could absorb a penalty of \$2.25 billion lacks any meaningful support in the record."¹⁶⁹

Finally, PG&E maintains that CPSD and Intervenors have proposed remedies that "do not recognize the full extent of PG&E's unrecovered and unrecoverable costs that should be counted against the [\$2.25 billion] threshold level."¹⁷⁰ PG&E asserts that PG&E has already incurred unrecovered and unrecoverable costs as a result of disallowances in the *PSEP Decision*, spending above rate case amounts in gas transmission and other lines of business, right of

¹⁶⁶ *PG&E Remedies Brief* at 69.

¹⁶⁷ PG&E Remedies Brief at 68.

¹⁶⁸ *PG&E Remedies Brief* at 75.

¹⁶⁹ *PG&E Remedies Brief* at 75.

¹⁷⁰ *PG&E Remedies Brief* at 81.

way management costs and contributions to the City of San Bruno.¹⁷¹ Further, PG&E argues that investors do not distinguish between equity to fund an explicit disallowance or utility expenditures that exceeded the amounts adopted in its rate case.¹⁷² Therefore, PG&E argues that based on the amount of "unrecovered and unrecoverable operating costs since the San Bruno accident – most of which went to the gas transmission system . . . PG&E should not be penalized beyond the costs that its shareholders are already bearing."¹⁷³

5.3.3. Discussion

There is no dispute that the Commission must consider PG&E's financial resources in setting the penalty amount. PG&E's market value as of January 10, 2012 was \$16.439 billion, and an aggregate value of \$29.117 billion.¹⁷⁴ These values are significantly higher than the mean (\$2.494 billion and \$2.766, billion) and median (\$2.215 billion and \$3.060 billion) for comparable companies.¹⁷⁵ Additionally, even if one were to only consider PG&E's gas transmission and distribution business on a standalone basis, it would have an aggregate value of approximately \$6.4 billion, and an equity value of approximately \$4.3 billion.¹⁷⁶

Despite PG&E's disagreement with Overland's methodology for arriving at the \$2.25 billion "threshold level," we find that the record supports a

¹⁷¹ *PG&E Remedies Brief* at 82.

¹⁷² *PG&E Remedies Brief* at 84.

¹⁷³ *PG&E Remedies Brief* at 84.

¹⁷⁴ Exh. Joint-70, PG&E Corporation Discussion Materials, dated January 24, 2012, at 13.
"Aggregate Value" is defined as "Market Value + Long-term Debt + Short-term Debt + Leases + Preferred Stock + Minority Interest – Cash". (Exh. Joint-70 at 13, fn 1.)

¹⁷⁵ Exh. Joint-70 at 13.

¹⁷⁶ Exh. Joint-70, PG&E Corporation Discussion Materials, dated January 24, 2012, at 2.

conclusion that PG&E has the financial resources to support a \$2.25 billion penalty. A review of projected penalties estimated by various equity analysts, listed in Table 2 below, finds that the total projected fines, disallowances and other remedies range from \$500 million to \$3.65 billion (pre-tax):

Table 2

Estimated Level of Penalties¹⁷⁷

Equity Analyst	Date of Report	Projected Fine	Other unrecoverable expenses
Bank of America Merrill Lynch	Oct. 31, 2012	\$300 million	\$1.039 billion ¹⁷⁸
Barclays	Jan. 4, 2013	\$500 million	
BernsteinResearch	Nov. 29, 2012	\$400 million - \$500 million	\$3.1 billion ¹⁷⁹
BGC	Jan. 2, 2013	\$600 million	
Citi Research	Oct. 24, 2012	\$400 million	\$625 million ¹⁸⁰
Credit Suisse	Feb. 17, 2012	\$400 million	\$1.8 billion
Deutsche Bank	Oct. 31, 2012	\$500 million	Reduced projected 2013 and 2014 earnings per share to reflect impact of <i>PSEP Decision</i> .
Goldman Sachs	Aug. 7, 2012	\$500 million - \$700 million	
ISI	Nov. 1, 2012	\$750 million	\$2.9 billion

¹⁷⁷ Exh. Joint-79, PG&E Data Responses to OCHP_005-1013, Excerpts from Equity Analyst Reports re Level of Penalty.

 $^{^{178}\,}$ Exh. Joint-79 at 1 (estimated unrecoverable expenses of \$514M in 21013, \$435M in 2014 and \$90M in 2015).

¹⁷⁹ Exh. Joint-79 at 3 (\$1 billion unrecovered costs incurred under *PSEP Decision* and a further \$2.1 billion in San Bruno-related costs, excluding fines).

¹⁸⁰ Exh. Joint-79 at 7 (\$225 million in 2012, \$250 million in 2013, \$75 million in 2014 and \$75 million in 2015).
J.P. Morgan	Oct. 11, 2012	\$100 million	\$535 million
Macquarie (USA)	Feb. 17, 2012	\$300 million	\$1.5 billion
Morgan Stanley	Oct. 15, 2012	\$500 million	\$1 billion ¹⁸¹
UBS	Dec. 31, 2012	\$500 million	
Wells Fargo	Oct. 24, 2012	\$750 million	Costs from PSEP Decision

Based on the estimated range of penalty amounts, there appears to be confidence by the financial community that PG&E has the financial resources to pay the penalty proposed by CPSD. Moreover, many of these analysts express confidence in PG&E's stock performance once the uncertainty surrounding these proceedings is resolved.

As TURN notes "The Commission should be cognizant of Wall Street expectations only to the extent they may affect the company's financial health to such an extent that they affect utility ratepayers."¹⁸² In this respect, Wall Street has signaled that CPSD's proposed penalty amount may not have the adverse impact on PG&E's financial health predicted by PG&E. For example:

• BernsteinResearch concluded that even after incorporating its estimates of unrecoverable San Bruno-related fines into its revised earnings forecast for PG&E, its revised target price still implied an 11% upside (i.e., PG&E's share price was expected to increase).¹⁸³

¹⁸¹ Exh. Joint-79 at 13 ("We believe a headline figure of ~\$1.5 billion is likely, including a penalty of \$500 million and little recovery of certain pipeline costs.").

¹⁸² TURN Opening Brief at 39.

¹⁸³ Exh. Joint-79 at 3.

- BGC initiated coverage of PG&E on January 2, 2013 and noted "One school of investor thought is to wait for the equity issuance that is almost certain to follow any San Bruno resolution, with its likely penalty of perhaps \$600mm. We would probably be buyers on such an issuance, but we feel that expected issuance is already well discounted in the stock and we are more concerned with missing the possible upside from a deal announcement."¹⁸⁴
- ISI states "Despite our frustration with the continue degradation of value at PGC, the stock still looks undervalued to this punitive outcome, and we retain our Buy rating."¹⁸⁵

PG&E argues that while "it may be doable" to raise sufficient equity to pay a \$2 billion fine, its witness Mr. Fornell testified it would " have some consequences in terms of having to limit future capital expenditures"¹⁸⁶ and would place PG&E "in a world of hurt."¹⁸⁷ We remind PG&E that the purpose of a penalty is to deter future violations by the company and others. In achieving this purpose, the Commission is not guided by whether the adopted penalty imposes a hardship upon the company, but rather, whether the adopted penalty has a deterrent effect without adversely impacting ratepayers.

We are unconvinced that investors would not be able to distinguish between a penalty and unrecoverable or unrecovered operating costs. The analyst reports included in the record demonstrate that there is an understanding that the fines and other remedies under contemplation are in response to these adjudicatory proceedings. In contrast, unrecoverable or unrecovered operating costs are associated with general operations of the

¹⁸⁴ Exh. Joint-79 at 4.

¹⁸⁵ Exh. Joint-79 at 10.

¹⁸⁶ *PG&E Remedies Brief* at 70 (citing 15 Joint RT at 1638:13-14 (PG&E/Fornell)).

¹⁸⁷ *PG&E Remedies Brief* at 70 (citing 15 Joint RT at 1619:8 (PG&E/Fornell)).

company, not expenditures for remediation. Further, PG&E provides no basis to support its argument that all spending above rate case amounts in gas transmission and other lines of business are attributable to the issues under consideration in these proceedings. For these reasons, we find that PG&E has the financial resources to pay the penalty proposed by CPSD.

Finally, we do not find PG&E's arguments against a \$2.25 billion penalty on the grounds that (a) it is the larger than any penalty ever imposed on a utility and (b) there is no evidence any utility has every issued stock for paying a penalty, to be persuasive. PG&E has provided no authority that a penalty imposed in these proceedings cannot exceed penalties previously imposed on a utility. As discussed in Sections 4.3 and 5.5 of this decision, we considered penalties imposed in other Commission enforcement proceedings and other pipeline accidents and determined that any penalty imposed in these Pipeline OIIs should be significantly greater. Additionally, it is up to PG&E, not the Commission, to determine how it will pay any fines or disallowances adopted in this decision. Although PG&E had originally stated that it would fund any penalties through the issuance of equity, it may decide to change its funding means upon further consideration.

5.4. The Totality of the Circumstances in Furtherance of the Public Interest

This factor takes into consideration facts that may mitigate or exacerbate the degree of wrongdoing.¹⁸⁸ "In all cases, the harm will be evaluated from the perspective of the public interest."¹⁸⁹

¹⁸⁸ Standards of Conduct Governing Relationships Between Energy Utilities and Their Affiliates, 84 Cal. P.U.C.2d at 189.

5.4.1. CPSD and Intervenors' Positions

CPSD argues that given the strong public interest, the Commission must set a penalty that is not simply "the cost of doing business."¹⁹⁰ Rather, the penalty must be "commensurate with the harm caused."¹⁹¹ Similarly, CSB maintains that the Commission must evaluate facts that exacerbate the wrongdoing and evaluate harm "from the perspective of the public interest, not the utility, not utility shareholders, not investment banks, not underwriters, and not investment analysts that cover the utility industry beat."¹⁹²

DRA and CCSF also contend that the totality of circumstances requires a severe penalty.¹⁹³ Among other things, DRA argues that in addition to the severity of the offense, PG&E's conduct after the San Bruno explosion lacked any contrition, as evidenced by PG&E's efforts to mislead the Commission.¹⁹⁴ CCSF makes similar arguments and notes "An overriding exacerbating fact is the degree of physical harm involved in this case, ... the systematic nature of the violations, the corporate culture that deemphasized safety, and PG&E's continued insistence that its substandard maintenance and shoddy record practices are not violations of the law."¹⁹⁵

¹⁸⁹ Id.

- ¹⁹¹ CPSD Opening Brief at 55.
- ¹⁹² CSB Opening Brief at 37 (citations omitted).

- ¹⁹⁴ DRA Opening Brief at 34.
- ¹⁹⁵ CCSF Opening Brief at 7.

¹⁹⁰ CPSD Opening Brief at 55.

¹⁹³ DRA Opening Brief at 34; CCSF Opening Brief at 7.

5.4.2. PG&E's Position

PG&E argues that an objective evaluation of the regulatory environment and PG&E's practices over time would demonstrate "that PG&E's prior shortcomings do not constitute violations that justify the extreme penalty proposed."¹⁹⁶ Among other things, PG&E contends that its gas transmission business has cooperated with CPSD in audits of PG&E's operations, practices and procedures and that "there was no intentional misconduct or willful neglect on the part of PG&E that led to the rupture."¹⁹⁷

PG&E further notes that "missing, inaccurate or incomplete records, especially regarding pressure testing of older pipelines, are a challenge faced by the entire natural gas industry."¹⁹⁸ Thus, PG&E's recordkeeping shortfall is not unique. Despite that fact, PG&E states that the Commission expects all gas operators to have maintained "traceable, verifiable, and complete" MAOP records, even though "by the account of every industry participant this requirement is new to the industry and difficult to achieve."¹⁹⁹

5.4.3. Discussion

We agree with PG&E that it is not the only gas pipeline operator that has experienced pipeline failure or is faced with recordkeeping shortfalls. We also agree that PG&E did not intentionally cause the San Bruno explosion. However, neither of these arguments diminishes the severity of the San Bruno explosion nor the extent of the recordkeeping shortfalls presented by CPSD.

¹⁹⁶ *PG&E Remedies Brief* at 84.

¹⁹⁷ PG&E Remedies Brief at 84 – 85.

¹⁹⁸ *PG&E Remedies Brief* at 86.

¹⁹⁹ *PG&E Remedies Brief* at 87.

In considering the appropriate penalty, we must consider the gravity and severity of the violations presented in the Pipeline OIIs, PG&E's statutory obligation to provide safe and reliable gas service, the pervasive nature of PG&E's recordkeeping shortfalls, the impact of the San Bruno explosion on its residents, and the Commission's and the public interest in ensuring safe and reliable natural gas service. Based on our discussion in connection with the other factors, we find that a severe penalty is warranted.

5.5. The Role of Precedent

This factor takes into consideration the proposed outcome with "previously issued decisions which involve the most reasonably comparable factual circumstances and explain any substantial differences in outcome."²⁰⁰

5.5.1. CPSD and Intervenors' Positions

CPSD and Intervenors maintain that the San Bruno explosion and fire cannot be compared to any previous incidents. Both CPSD and CSB state that with the exception of the investigation into the explosion of a distribution pipeline in Rancho Cordova, the Commission's past enforcement cases that resulted in large fines did not involve deaths or severe property damage.²⁰¹ Additionally, CSB maintains that the \$38 million fine assessed for the Rancho Cordova explosion was the result of a revised settlement, where the ALJ

²⁰⁰ Standards of Conduct Governing Relationships Between Energy Utilities and Their Affiliates, 84 Cal. P.U.C. 2d at 190.

²⁰¹ CPSD Opening Brief at 57; CSB Opening Brief at 38.

"estimated that PG&E faced up to \$97 million in penalties for stipulated violations."²⁰²

CSB further argues that none of the "fatal gas pipeline accidents since 1999" identified in the *Wells Fargo Report* could be considered precedential since they were the result of different circumstances.²⁰³ CSB notes that, unlike Line 132, the other pipeline explosions involved either pipelines that were significantly smaller in diameter or occurred in rural areas.²⁰⁴

Moreover, CPSD argues that the magnitude of PG&E's "failure to keep traceable, verifiable, complete and accurate gas transmission records" is unprecedented.²⁰⁵ Since there are no comparable cases, CPSD argues that comparison of other precedential cases to San Bruno should be made carefully because "the death and destruction are more severe than any previous public utility incident."²⁰⁶ CCSF echoes this argument, stating "prior Commission decisions are simply inapplicable and the Commission must decide this case based on the particular facts before it."²⁰⁷

5.5.2. PG&E's Position

PG&E notes that a \$2.25 billion penalty would exceed the total amount of fines and restitution ordered by the Commission between 1999 and February 21,

²⁰² CSB Opening Brief at 38 (citing Presiding Officer's Decision Regarding Joint Motion to Approve the Stipulation of Pacific Gas and Electric Company and the Consumer Protection and Safety Division Concerning Rancho Cordova and Related Stipulation (Rancho Cordova) [D.11-11-001] at 41 (slip op.).)

²⁰³ CSB Opening Brief at 39-40.

²⁰⁴ CSB Opening Brief at 40.

²⁰⁵ CPSD Opening Brief at 58.

²⁰⁶ CPSD Opening Brief at 58.

²⁰⁷ CCSF Opening Brief at 8.

2012 or any penalty imposed in any other jurisdiction.²⁰⁸ PG&E identifies two pipeline accidents, in Carlsbad, New Mexico and Allentown, Pennsylvania, that it believes are substantially similar to San Bruno and notes that penalties imposed in those accidents are significantly less than what is being considered here. PG&E further notes that the Commission had determined in its decision on the Rancho Cordova accident: "The potential penalty exposure of more than \$97 million is moderate to large in comparison to the size of PG&E's operation of its public utility business, and would serve as a significant deterrent to ensure that similar incidents do not occur in the future."²⁰⁹

5.5.3. Discussion

We agree with CPSD and Intervenors that none of the Commission's prior enforcement proceedings are comparable. Unlike the other proceedings, the penalties under consideration are for three separate OIIs, each covering separate and distinct violations. The penalties to be imposed here would be for violations that directly resulted in 8 fatalities, numerous injuries, destruction or damage to over 100 homes as well as potential risk of harm to the public due to PG&E's failure to have the necessary records to properly maintain and operate its gas transmission pipeline system and provide safe and reliable gas service. As CSB notes, PG&E "provides natural gas and electric service to approximately 15 million people throughout a 70,000 square mile service area in northern and central California."²¹⁰ None of the Commission's prior enforcement cases or the

²⁰⁸ *PG&E Remedies Brief* at 89.

²⁰⁹ *PG&E Remedies Brief* at 93 – 94 (citing D.11-11-001 at 41.)

²¹⁰ CSB Opening Brief at 28.

other gas pipeline accidents identified in the *Wells Fargo Report* had an impact on such a large area or number of people.

Nonetheless, we find that the 2008 Rancho Cordova explosion and fire provides some precedential guidance. The Rancho Cordova explosion and fire concerned the rupture of a natural gas distribution pipe, which resulted in one fatality, injuries to several others, destruction of one home and damages to adjoining homes.²¹¹ In considering whether to grant a joint motion between PG&E and CPSD to approve a stipulation between the parties, the ALJ had concluded:

In this OII, CPSD alleges five different instances involving violations of Pub. Util. Code §451 and seven sections of 49 CFR that have been incorporated into GO 112-E. If these allegations are fully litigated, and assuming each CPSD allegation is proven and a continuing penalty amount of \$20,000 per day is imposed for each violation of Pub. Util. Code §451 and GO 112-E, PG&E potentially faces \$97 million *or more* in penalties.

The potential penalty exposure of more than \$97 million is moderate to large in comparison to the size of PG&E's operation of its public utility business, and would serve as a significant deterrent to ensure that similar incidents do not occur in the future."²¹²

In contrast to *Rancho Cordova*, the San Bruno explosion and fire resulted in eight fatalities, 58 people injured (many with life-altering injuries), 38 homes destroyed and 70 homes damaged. Based on the determinations in *Rancho Cordova*, and in consideration of the significantly greater physical impact of the San Bruno explosion and fire, the increased risk to all residents in PG&E's service

²¹¹ Rancho Cordova at 3 (slip op.).

²¹² Rancho Cordova at 41-42 (slip op.) (citations omitted, emphasis added).

territory and the duration of the violations,²¹³ it is reasonable for the potential penalty exposure to PG&E for the violations found in these OII proceedings be significantly higher than the \$97 million calculated by the ALJ in the *Rancho Cordova* proceeding.²¹⁴

Further, unlike prior enforcement proceedings, parties have proposed that the Commission adopt a wide-range of remedies in addition to any fines imposed under Pub. Util. Code §§ 2107 and 2108. The remedies are not those traditionally utilized in enforcement proceedings (e.g., refunds), but rather to ensure that PG&E fulfills its obligations to operate its gas pipeline system in a safe manner.

For these reasons, we find that the unique and extraordinary nature of these enforcement proceedings cannot be compared to any prior Commission decisions, or even other gas pipeline explosions.

6. Penalty to Be Imposed

Our decisions on violations in the Pipeline OIIs have found that PG&E committed 2,425 violations, many of them continuing for years, for a total of 18,447,803 days in violation. The Table of Violations for each proceeding is found in Appendix B through D of this decision. Table 3 below summarizes the days in violations by proceeding:

²¹³ Most of the violations in the Pipeline OIIs were found to have continued for a period of over 50 years. In contrast, most of the violations alleged and stipulated to by PG&E in Rancho Cordova ran for slightly more than two years. (See, *Rancho Cordova Decision* at 38-39 & 41, fn. 25 (slip op.).)

²¹⁴ In terms of proportionality, CPSD has argued "since the San Bruno explosion and fire had eight times as many fatalities, more than 10 times as many injuries, and approximately 40 times the homes destroyed or damaged, this would support at least a \$500 million fine in the San Bruno OII alone." (*Response of the Consumer Protection and Safety Division to Request for Review of Commissioner Picker*, filed October 27, 2014, at 3.

Number of Violations from Violations Decisions					
Proceeding	Number of Days in Violation prior to 1/1/1994	Number of Days in Violation on or After 1/1/94	Total Number of Days in Violation		
I.12-01-007 (San Bruno)	27,036	32,219	59,255		
I.11-02-016 (Recordkeeping)	206,984	143,205	350,189		
I.11-11-009 (Class Location)	6,128,519	11,909,840	18,038,359		
TOTAL	6,362,539	12,085,264	18,447,803		

Table 3

c 6 37: -1-1: ът

Based on our discussion in Section 3.4 above, we have found duplication in two areas. Accordingly, we exclude adopted San Bruno violations 1 and 19, for a total reduction of 19,612 days in violation. Table 4 below reflects the total number of days in violation considered for the purpose of determining the penalty to be imposed on PG&E:

Proceeding	Number of Days in Violation prior to 1/1/1994	Number of Days in Violation on or After 1/1/94	Total Number of Days in Violation
I.12-01-007 (San Bruno)	13,521	26,122	39,643
I.11-02-016 (Recordkeeping)	206,984	143,205	350,189
I.11-11-009 (Class Location)	6,128,519	11,909,840	18,038,359
TOTAL	6,349,024	12,079,167	18,428,191

Table 4

Revised Number of Violations

As noted in Section 4.1 above, the range of fines that may be imposed pursuant to Pub. Util. Code § 2107 ranged from \$500 to \$2,000 per offense prior to 1994; from \$500 to \$20,000 per offense between 1994 and 2011; and from \$500 to \$50,000 per offense after 2011. Even if we exclude the increased maximum fine amount in place after 2011, the range of potential fines that could be imposed in light of the violations is from \$9.2 billion to \$254.3 billion.²¹⁵ Nonetheless, we realize that the amount of the penalty to be imposed must be significantly decreased in consideration of PG&E's financial resources.

Similarly, we take into consideration CPSD and parties' proposals that any penalty imposed should consist of a combination of a fine paid to the state's

²¹⁵ Minimum amount calculated as 18,428,191 violations x 500 = 9,214,095,500. Maximum amount calculated as (6,349,024 violations x 2,000 + (12,079,167 violations x 20,000 = 254,281,388,000.

General Fund, a disallowance of rate recovery of certain costs associated with improving PG&E's gas transmission pipeline system and recordkeeping systems, and other remedies. As argued by CSB, the Commission should ease the burden on ratepayers by requiring PG&E's shareholders to bear responsibility for a greater portion of the costs adopted in the *PSEP Decision* to improve PG&E's pipeline system.²¹⁶ Further, CCSF maintains "payment of a penalty that consists largely of remedial measures will happen over time and thus can be effectively managed with PG&E's other financial needs."²¹⁷ Consequently, CPSD and Intervenors propose that the recommended \$2.25 billion penalty consist of: (1) fines imposed pursuant to Pub. Util. Code §§ 2107 and 2108 ranging from \$300 million to \$900 million, and (2) disallowances/remedies imposed pursuant to Pub. Util. Code §§ 451 and 701 of the remaining balance.

Based on the arguments above, we agree that the penalty imposed should be a combination of fines, disallowances and remedies. In setting the penalty amount, we also take into account the fact that PG&E has been ordered to make certain safety improvements and enhancements at shareholder expense. Since any penalties imposed in this decision will be in addition to disallowances adopted in other proceedings, we must balance the need to set the proper penalty at the appropriate level to deter future violations with the need to ensure that any penalty imposed does not adversely impact PG&E's ratepayers.

In their arguments regarding the amount of disallowances, CSB, TURN and DRA all argue that there is a need to consider the tax benefits PG&E would

²¹⁶ *CSB Opening Brief* at 8; see also *CCSF Opening Brief* at 16 ("A large payment to the general fund sends a good signal to utilities but beyond that does not contribute to reasonable rates or ensure that needed safety improvements are made.")

²¹⁷ CCSF Opening Brief at 16.

receive from any disallowance. TURN estimates that a \$1.0 billion disallowance would result in an actual financial impact to PG&E of approximately \$744 million.²¹⁸ As such, TURN proposed a \$670 million fine to be paid to the General Fund to "cover the lost revenue to the state General Fund resulting from PG&E's reduced tax liability for unrecovered costs."²¹⁹ Similarly, CSB states that its proposed \$900 million fine "approximates the value of the federal and state tax deductions available to PG&E for natural gas pipeline safety investments."²²⁰ In light of the tax benefits received by PG&E for unrecovered costs, CPSD and Intervenors have proposed that all costs incurred under the *PSEP Decision* be recovered from PG&E shareholders.²²¹

PG&E argues that all unrecovered gas pipeline safety costs should be applied to the penalty. However, it argues that its shareholders have already paid, or will incur in the future, unrecovered costs totaling more than \$2.25 billion for gas transmission safety work since the San Bruno explosion and fire.²²² As such PG&E argues that no further fine is warranted. Moreover, PG&E asserts that there is no legal basis for further disallowances of PSEP costs. PG&E states:

The Commission unanimously ruled that PG&E's PSEP is reasonable and authorized recovery of other PSEP Phase I costs because those costs did not result from unreasonable and imprudent conduct. In so ruling, the Commission rejected claims

²²² *PG&E Remedies Brief* at 12.

²¹⁸ TURN Opening Brief at 9.

²¹⁹ Reply Brief of The Utility Reform Network on Fines and Remedies (Public Version), filed June 7, 2013, at 8.

²²⁰ CSB Reply Brief at 7.

²²¹ CPSD Opening Brief at 6; CPSD Amended Reply at 3; CSB Reply Brief at 7; CCSF Opening Brief at 17; TURN Opening Brief at 8; DRA Opening Brief at 19.

by DRA and TURN that the Commission should disallow all PG&E's PSEP Phase I costs as the product of past imprudent conduct. ... [T]he Commission has already found the allowed PSEP costs were not the result of such past imprudence, but represent the reasonable cost of the safety enhancements mandated by the Commission in R.11-02-019.²²³

The majority of the projects approved in the *PSEP Decision* were to correct recordkeeping shortfalls and implement safety improvements, including pipeline testing and replacement, that had been neglected by PG&E management for decades.²²⁴ Thus, to the extent that these projects are to address violations found in these proceedings, we may order that their costs be the responsibility of PG&E shareholders pursuant to Pub. Util. Code §§ 451 and 701. The fact that these projects had been approved in a different decision does not change this conclusion. Indeed, as we noted in Section 4.2 above, the *PSEP Decision* contemplated that further disallowances may be warranted based on findings in the Pipeline OIIs and thus made "all ratemaking recovery authorized in today's decision [] subject to refund."²²⁵ There is no requirement that any further disallowances as an equitable remedy pursuant to our ratemaking authority under Pub. Util. Code §§ 451 and 701.

The *PSEP Decision* already disallows rate recovery of costs incurred prior to the date of that decision, for the Pipeline Records Integration Program, and for certain pressure-test and pipeline replacement expenditures. These

²²⁵ *PSEP Decision* at 4 (slip op.)

²²³ PG&E Response to Amended Brief at 4.

²²⁴ See, e.g., *PSEP Decision* at 55 & 99 (slip op.).

disallowances were approximately \$635,000,000.²²⁶ We are unpersuaded by PG&E's arguments that "other unrecoverable gas transmission costs in 2013 and beyond" should be counted in any penalties imposed here.²²⁷ Many of the unrecoverable costs identified by PG&E are both outside of the scope of this proceeding and speculative and should be given no weight. Allowing such a blanket inclusion of shareholder costs as part of the penalty in these proceedings, would imply that CPSD could not initiate any future enforcement actions against PG&E for violations associated with operating its gas transmission pipeline system.

We have considered CPSD and Intervenors' arguments regarding further disallowances and find that an additional \$400,000,000 disallowance, associated with PG&E's Pipeline Modernization Program, is warranted. This amount approximates the amount of revenues earned by PG&E's GT&S group in excess of revenue requirements between 1999 and 2010.²²⁸ As CPSD argues, PG&E's actual revenues for GT&S exceeded revenue requirements during that period "as a result of cutting back on safety-related expenses, deferring needed maintenance, reducing safety-related workers and choosing less effective pipeline inspection methods."²²⁹ Our determination that a \$400 million disallowance is warranted is based on the evidence that PG&E's revenues

²²⁶ In addition to the disallowances, the Commission rejected PG&E's request for a \$380.5 million contingency in the event of cost overruns. (*PSEP Decision* at 97-100 (slip op.).) We do not consider this amount to be a disallowance, since "PG&E's pressure testing cost forecasts are already biased to the high end of the expected cost range and thus include an implicit allowance for unexpected cost overruns." (*PSEP Decision* at 98-99 (slip op.).)

²²⁷ PG&E Remedies Brief at 12.

²³⁰ See, Wise v. Pacific Gas & Electric Co. (1999) 77 Cal. App.4th 287, 300.

²³⁰ See, Wise v. Pacific Gas & Electric Co. (1999) 77 Cal. App.4th 287, 300.

exceeded the amount needed to earn its authorized return on equity by over \$435 million from 1999 to 2010. We note that the disallowance is adopted as an equitable remedy for PG&E's violations of natural gas transmission safety laws and regulations, including PG&E's record of safety-related budget cuts as discussed in Section 5.5.4 of the *San Bruno Violations Decision*. In summary, it is a proper exercise of the Commission's equitable powers to order at least \$400 million to be refunded to its ratepayers.²³⁰

An example of this shift may be seen in PG&E's program to replace aging pipeline. In 1985, PG&E implemented the Gas Pipeline Replacement Program (GPRP), which

calls for the replacement of over 2,000 miles of steel transmission and distribution lines and over 800 miles of cast iron distribution main over a 20-year period. According to PG&E, the replacement of these lines will enhance the safety and reliability of the gas piping system and reduce leak repair expenses as high-maintenance piping is eliminated.²³¹

In 1986, and again in 1992,²³² PG&E was authorized dollars related to the GPRP. However, instead, beginning in the late 1990s, "PG&E has performed risk assessments on its gas transmission pipelines through a Risk Management Program."²³³ Consequently, as noted by CPSD, "[i]nstead of replacing 165 miles of HCA transmission pipeline from 2000-2010, PG&E replaced only 25 miles."²³⁴

²³⁰ See, Wise v. Pacific Gas & Electric Co. (1999) 77 Cal. App.4th 287, 300.

²³¹ *Re Pacific Gas and Electric Company* [D.86-12-095] (1986) 23 Cal.P.U.C. 2d 149, 198.

²³² *Re Pacific Gas and Electric Company* [D.92-12-057] (1992) 47 Cal.P.U.C. 2d 143.

²³³ Recordkeeping *PG&E's June 20, 2011 Response* at 6C-1.

²³⁴ CPSD Opening Brief at 46 (citation omitted).

As noted by TURN, PG&E's recordkeeping shortfalls, including missing and incorrect data in the GIS database, missing pressure test records and failure to track reused and salvaged pipe in its pipeline system, prevented PG&E from properly managing risk and identifying pipe in need of replacement.²³⁵ We believe that this additional disallowance is an equitable remedy for PG&E's failure to replace pipeline as needed to ensure the safe operation of its gas transmission pipeline system as it strikes the appropriate balance of penalizing PG&E for straying from its obligations to maintain and operate its gas transmission pipeline system safely and our determination that "ratepayers should not receive a new pipeline at no cost."²³⁶ Accordingly, PG&E must refund \$400,000,000 to ratepayers, and that amount must be absorbed by shareholders.

We have determined that the most equitable and practical way for ratepayers to receive \$400 million in penalty refunds is to require a one-time bill credit to all customers. PG&E shall calculate the bill credit according to the following guidance and direction. First, the credit should be based on a cents per therm calculation based on the forecast for November and December 2015 gas throughput. For example, if PG&E's forecast customer billing for November through December gas volume is 600,000,000 therms, the billing credit would be \$0.666667/therm (600 million therms divided by \$400 million equals \$0.666667/therm). November and December throughput should be used as those are traditionally the months with the highest volumetric throughput. Second, we recognize that not all customers have their meters read on the same

²³⁵ TURN Opening Brief at 7-8.

²³⁶ *PSEP Decision* at 61 (slip op.).

day. PG&E should apply this bill credit for every billing cycle beginning in November 2015 to apply to the equivalent of a month's consumption. PG&E shall apply this or other appropriate mechanism as it determines necessary for Non-Core customers. Third, we recognize this methodology may result in PG&E issuing bill credits that do not exactly equal the \$400 million penalty. PG&E is directed to calculate the exact amount refunded so that any shortfall or any excess refund may be "trued-up" to ensure that customers receive the full and exact amount of the penalty. Any shortfall or excess refund must then be proportionately applied to both the Purchase Gas Account and the Non-Core Customer Class Charge Account based on the relative throughput of core and noncore gas for the November 2015 billing cycle. PG&E shall file a Tier 3 Advice Letter within 45 days after the effective date of this decision to implement the \$400 million disallowance through a bill credit in accordance with this guidance and direction.

We decline to make any adjustments to the disallowances to account for any tax benefits that PG&E may receive. In response to Intervenors' comments regarding tax impacts, we had requested further briefing of, among other things, the tax treatment of amounts disallowed.²³⁷ The comments highlight, however, that it would be difficult to project the actual tax impact of disallowances and that a subsequent proceeding would be necessary to ensure that the actual after-tax consequences were obtained. Our desire is to provide finality of these proceedings with this decision and our companion decisions on violations.

²³⁷ Administrative Law Judges' Ruling Requesting Additional Comment, filed July 30, 2013, at 4-7.

Setting a disallowance that would be subject to further litigation and uncertainty would not achieve that objective.

In addition to this further disallowance, we find that a fine of \$950,000,000 should be imposed under Pub. Util. Code §§ 2107 and 2108. As we have discussed in Section 4.1 above, the purpose of a fine is to deter future violation of federal and state statutes and regulations related to gas transmission pipeline safety by PG&E and other pipeline operators. In light of the severity of the offenses, PG&E's conduct before, during and after the San Bruno explosion and the public interest in ensuring that PG&E's natural gas transmission pipeline system is maintained and operated in a safe manner, we find that a fine of this magnitude is necessary to deter future violations. This amount serves to put all gas pipeline operators on notice that there is an absolute need to maintain and operate their pipeline systems in compliance with all federal and state safety requirements and that failure to do so will result in a fine that is not simply a "cost of doing business."

Finally, we adopt specific remedies, as discussed in Section 7 below. These remedies shall be at shareholder expense and are estimated to cost at least \$50,000,000.

Based on the considerations above, we impose a total penalty of approximately \$1,400,000,000, consisting of the following:

Fines (Pub. Util. Code §§ 2107 & 2108)	\$950,000,000
Bill Credit (Pub. Util. Code §§ 451 and 701)	\$400,000,000
Remedies	\$50,000,000

These fines and disallowances are in addition to monies PG&E already has been ordered to spend on safety enhancements, as well as future safety investments. That is to say, the penalties adopted in this decision shall not be considered "paid" through prior, current or future pipeline safety investments.

7. Other Remedies

7.1. CPSD Proposed Remedies

CPSD proposes 75 separate remedies in these proceedings: 2 applicable to all three proceedings,²³⁸ 38 applicable to I.12-01-007, 22 applicable to I.11-02-016, and 13 applicable to I.11-11-009.²³⁹ PG&E agrees with many of CPSD's recommended remedies and has "identified operational commitments to achieve them."²⁴⁰ CPSD accepted certain of PG&E's proposed modifications to the recommended remedies.²⁴¹

In general, subject to exceptions discussed below, the remedies proposed by CPSD appear to be well-calculated to address PG&E's practices that led to the extensive and serious violations of safety laws that we have found in these proceedings. In light of these violations, we fully concur with CPSD's assessment that "[t]he extensive shortcomings in PG&E's safety systems and compliance with the law call for extensive changes in their operations."²⁴² Clearly, remedies such as those proposed by CPSD are both necessary and appropriate in addition to the fine we are imposing on PG&E.

²³⁸ CPSD included a third proposed remedy in connection with all three proceedings: "PG&E should apply the remainder of the \$2.25 billion penalty to the PSEP cost and expenses for Phases I and II until it reaches the maximum amount of the penalty." *CPSD Amended Reply*, Appendix A. This proposed remedy is addressed in Section 6 of this decision.

²³⁹ CPSD Opening Brief at 58-70.

²⁴⁰ PG&E Remedies Brief at 94.

²⁴¹ CPSD Amended Reply at 10, Appendixes A and B.

²⁴² CPSD Amended Reply at 10.

To the extent that CPSD's proposed remedies are uncontested, we adopt them without further discussion. In the following discussion we address the disputed recommended remedies as well as those for which clarification is needed. A full statement of the adopted remedies is set forth in Appendix E to this decision. For consistency and clarity, we use the same numbering of remedies used by CPSD and PG&E in their briefs.

Finally, we reiterate that, since these remedies are to cure violations found in the *San Bruno Violations Decision, Recordkeeping Violations Decision* and *Class Location Violations Decision*, all remedies are to be paid for by shareholders. We estimate the cost to implement these remedies to be at least \$50,000,000.

7.1.1. CPSD Recommended Remedies in all three Olls

As noted above, CPSD proposes the following two remedies in connection with all three OIIs:

4.A.1 PG&E should pay to reimburse CPSD for contracts retaining independent industry experts, chosen by CPSD, for the cost of verification audits and inspections to ensure compliance with the other remedies. PG&E should also pay to reimburse CPSD for contracts retaining independent industry experts, chosen by CPSD in the near term to provide needed technical expertise as PG&E proceeds with its hydrostatic testing program, in order to provide a high level of technical in order to provide a high level of technical in order to provide a high level of technical in order to provide a high level of technical in order to provide a high level of technical in order to provide a high level of technical in order to provide a high level of technical in order to provide a high level of technical in order to provide a high level of technical in order to provide a high level of technical in order to provide a high level of technical in order to provide a high level of technical in order to provide a high level of technical in order to provide a high level of technical in order to provide a high level of technical in order to provide a high level of technical in order to provide a high level of technical in order to provide a high level of technical oversight and to assure the opportunity for legacy piping characterization though sampling is not lost in the rush to execute the program.

4.A.2 PG&E should reimburse CPUC/CPSD for the cost of conducting all three of the present investigations.

PG&E agrees with both proposed remedies. The only contested issue is whether PG&E's proposal to require that CPSD auditors be governed by Government Auditing Standards. PG&E proposes to modify CPSD recommended Remedy 4.A.1 to provide that "[t]hese auditors should apply the Government Auditing Standards issued by the U.S. Government Accountability Office when conduction their audits."²⁴³ PG&E also proposes that the Government Auditing Standards be mandated in connection with CPSD recommended remedies 4.C.21 and 4.C.22, which pertain to CPSD audits of PG&E's recordkeeping practices.

PG&E asserts that the Government Auditing Standards issued by the U.S. Government Accountability Office contain appropriate protocols for conducting recordkeeping audits such as those contemplated by CPSD.²⁴⁴ PG&E notes in particular that the standards call for auditors to (1) identify criteria that are relevant to the audit, (2) obtain and report the views of responsible officials of the audited entity concerning the findings, conclusions and recommendations included in the audit report, and (3) provide a draft report for review and comment by responsible officials of the audited entity and others.²⁴⁵

CPSD opposes this proposed requirement.²⁴⁶ CPSD notes that the Government Auditing Standards are designed to audit the government and that they do not contemplate recordkeeping audits.²⁴⁷ CPSD further notes that "it is within this Commission's discretion to choose whatever audits it wishes to employ."²⁴⁸

²⁴³ *PG&E Remedies Brief* at 101-102, Appendix B.

²⁴⁴ *PG&E Remedies Brief* at 101-102.

²⁴⁵ *PG&E Remedies Brief* at 102.

²⁴⁶ CPSD Amended Reply at 10-11, Appendix A.

²⁴⁷ CPSD Amended Reply at 11.

²⁴⁸ CPSD Amended Reply at 11.

PG&E has not shown that the Government Auditing Standards are necessary for CPSD recordkeeping audits; CPSD has shown that they were not designed for the purposes of the audits contemplated by CPSD. Therefore, we will not require CPSD to follow those requirements.

We find CPSD's proposed remedies 4.A.1 and 4.A.2 reasonable. However, we clarify these proposed remedies to make it clear that the reimbursement shall be paid for by PG&E's shareholders.

7.1.2. CPSD Recommended Remedies in I.12-01-007 (San Bruno OII)

CPSD's 38 recommended remedies in the San Bruno OII, the majority of which are uncontested, address PG&E's pipeline construction standards, integrity management practices, SCADA system, work clearance procedures, emergency procedures, corporate governance (including employee incentives), and the NTSB's recommendations.²⁴⁹ PG&E states it has implemented many of the proposals or is taking steps to do so.²⁵⁰ We therefore find it reasonable to adopt the following uncontested recommendations:

4.B.3 PG&E should perform a complete company-wide record search to populate its GIS database with all identified gas transmission pipeline leak history, including closed leak, information not already transferred to the GIS.

4.B.4 PG&E should revise its Integrity Management training to ensure that missing data is represented by conservative assumptions, and that those assumptions are supportable, per the

²⁴⁹ National Transportation Safety Board. 2011. *Pacific Gas and Electric Company Natural Gas Transmission Pipeline Rupture and Fire, San Bruno, California, September 9, 2010.* Pipeline Accident Report NTSB/PAR-11/01. Washington, DC. (NTSB Report). The NTSB Report was received in evidence in the San Bruno OII as Exh. CPSD-9.

²⁵⁰ *PG&E Remedies Brief,* Appendix B at B-1.

requirements of ASME B31.8S. As required by Ordering Paragraph 1 of D.11-06-017, PG&E should be required to fully document any engineering-based assumption it makes for data that is missing, incomplete or unreliable. Such assumptions must be clearly identified and justified and, where ambiguities arise, the assumption allowing the greatest safety margin must be adopted.

4.B.6 PG&E should revise its threat identification and assessment procedures and training, including its Baseline Assessment Plans, to fully incorporate all relevant data for both covered and non-covered segments, including but not limited to potential manufacturing and construction threats, and leak data.

4.B.7 PG&E should re-label its system MAOP nomenclature in accordance with 49 CFR Part 192.

4.B.10 PG&E should revise its threat identification and assessment procedures and training to ensure that cyclic fatigue and other loading conditions are incorporated into their segment specific threat assessments and risk ranking algorithm, and that threats that can be exacerbated by cyclic fatigue are assumed to exist per the requirements of 49 CFR Part 192.917(b).

4.B.11 PG&E should revise its risk ranking algorithm to ensure that PG&E's weighting factors in its risk ranking algorithm more accurately reflect PG&E's actual operating experience along with generally reflected industry experience.

4.B.12 PG&E should revise its threat identification and assessment procedures and training to ensure that PG&E's weighing of factors in its risk ranking algorithm and the input of data into that algorithm corrects the various systemic issues identified in the NTSB report and the CPSD/PHMSA 2011 Risk Assessment Audit.

4.B.13 PG&E should revise its threat identification and assessment procedures and training to ensure that the proper assessment method is being used to address a pipeline's actual and potential threats.

4.B.15 PG&E should revise its SCADA system to reduce the occurrence of "glitches" and anomalies in the control system that desensitizes operators to the presence of alarms and other inconsistent information.

4.B.16 PG&E should reevaluate SCADA alarm criteria with the goal of reducing unnecessary alarm messages.

4.B.24 Internal coordination – PG&E should revise its procedures to outline each individual Dispatch and Control Room employee's roles, responsibility, and lines of communication required to be made in the event of an emergency either during or outside normal working hours. This should include assigning specific geographical monitoring responsibilities for Control Room employees.

4.B.25 External coordination – CPSD agrees with NTSB recommendation P-11-2, which requests that PHMSA issue guidance to operators of natural gas transmission and distribution pipelines and hazardous liquid pipelines regarding the importance of control room operators immediately and directly notifying the 911 emergency call center(s) for the communities and jurisdiction in which those pipelines are located when a possible rupture of any pipeline is indicated. CPSD further recommends that prior to such PHMSA guidance PG&E should revise their own procedures to allow for the immediate and direct notification of 911 emergency call centers when a possible pipeline rupture is indicated.

4.B.26 Decision making authority – PG&E should revise its emergency procedures to clarify emergency response responsibilities, especially in regards to authorizing valve shut offs. PG&E policies should not just delegate authority to act but also detail obligations to act.

4.B.27 RCV/ASV – PG&E should perform a study to provide Gas Control with a means of determining and isolating the location of a rupture remotely by installing RCVs, ASVs, and appropriately spaced pressure and flow transmitters on critical transmission line infrastructure and implement the results. 4.B.28 Response time – PG&E should review required response times in other utility service territories nationwide and devise appropriate response time requirements to ensure that its Emergency Plan results in a "prompt and effective" response to emergencies. PG&E will provide its analysis and conclusions to CPSD.

4.B.29 Emergency Plan Revision – Currently a maintenance supervisor annually reviews SCADA alarm responses and makes revisions as necessary. This process needs to be formalized to ensure a robust feedback loop such that new information is fully analyzed and necessary changes to PG&E's Emergency Plan and/or other procedures are implemented with a subsequent review of made changes to ensure they are adequate.

4.B.30 Public Awareness – CPSD agrees with NTSB recommendation P-11-1, which requests PHMSA issue guidance to operators of natural gas transmission and distribution pipelines and hazardous liquid pipelines regarding the importance of sharing system-specific information, including pipe diameter, operating pressure, product transported, and potential impact radius, about their pipeline systems with the emergency response agencies of the communities and jurisdiction in which those pipelines are located. CPSD further recommends that prior to such PHMSA action PG&E undertake a review of its gas transmission public awareness and outreach programs to ensure that system-specific information is appropriately disseminated.

4.B.37 PG&E shall examine internal communication processes to ensure that all employees understand their job responsibilities and priorities. Goals of PG&E gas employees shall describe what is expected of them and their teams.

7.1.2.1. Construction Standards

CPSD and PG&E have largely agreed to recommended Remedy 4.B.1, which, with CPSD's adoption of most of PG&E's proposed edits, provides that "PG&E's pipeline construction standards should meet or exceed all legal requirements and industry standards for identifying and correcting pipe deficiencies and strength testing."²⁵¹

PG&E would qualify this remedy by adding "relevant" before "legal requirements and industry standards."²⁵² We concur with CPSD's contention that the term "relevant" is subjective and unnecessary, and we therefore exclude the term.

7.1.2.2. Data Gathering Requirements

CPSD's recommended Remedy 4.B.2 pertains to PG&E's data gathering requirements: "PG&E should revise its GTRIMPRMP to robustly meet the data gathering requirements of 49 CFR Part 192.917(b) and ASME-B31.8S, and to do so without limiting its data-gathering to only that data which is 'readily available, verifiable, or easily obtained' by PG&E."²⁵³

CPSD states that it accepts PG&E's proposed edits that would change CPSD's original wording from "PG&E should revise section 2 of RMP-06 …" to "PG&E should revise its integrity management procedures ……"²⁵⁴ However, CPSD also proposes without explanation another revision to the remedy so that it reads "PG&E should revise its GTIMRMP ……"²⁵⁵ We find that the phrase "integrity management procedures" conveys more information than either "GTIMRMP" or "GTRIMPRMP" and, therefore, do not accept this revision. This determination also applies to Remedy 4.B.5.

²⁵¹ CPSD Amended Reply, Appendix A at B-4.

²⁵² *PG&E Remedies Brief*, Appendix B at B-2.

²⁵³ CPSD Amended Reply, Appendix B at 1.

²⁵⁴ CPSD Amended Reply, Appendix A at B-5.

²⁵⁵ CPSD Amended Reply, Appendix A at B-5.

PG&E agrees that its data gathering practices should be reviewed to confirm that they meet or exceed regulatory and industry consensus guidance and revised if necessary.²⁵⁶ However, PG&E proposes to delete the wording "and to do so without limiting its data-gathering to only that data which is 'readily available, verifiable, or easily obtained' by PG&E."²⁵⁷

The deficiencies in PG&E's data gathering that were disclosed in these proceedings demonstrate the need for the wording proposed by CPSD. As CPSD notes, inclusion of the language puts PG&E on notice that it is expected to retrieve and organize all of its transmission pipeline records.

7.1.2.3. Documentation of Assessments

CPSD and PG&E agree with respect to recommended Remedy 4.B.8, which reads: "PG&E should permanently cease the self-suspended practice of regularly increasing pipeline pressure up to a 'system MAOP' to eliminate the need to consider manufacturing and construction threats. In addition, PG&E should analyze all segments that were subjected to the planned pressure increases to determine the risk of failure from manufacturing threats under 49 CFR Part 192.917(e)(3), and perform further integrity assessments as warranted."²⁵⁸

CPSD proposes to add the following sentence to this remedy: "Each assessment should be documented and retained for the life of the facility."²⁵⁹ We concur with CPSD that such documentation is necessary. This added requirement is reasonable and will therefore be adopted.

²⁵⁶ *PG&E Remedies Brief*, Appendix B at B-3.

²⁵⁷ *PG&E Remedies Brief*, Appendix B at B-3.

²⁵⁸ CPSD Amended Reply, Appendix A at B-9.

²⁵⁹ CPSD Amended Reply, Appendix A at B-9.

7.1.2.4. Threat Identification and Assessment Procedures

CPSD recommended Remedy 4.B.9 states that "PG&E should revise its threat identification and assessment procedures and training to ensure that HCA pipeline segments that have had their MAOP increased are prioritized for a suitable assessment method (e.g., hydro-testing), per the requirements of 49 CFR Part 192.917(e)(3)-(4)."²⁶⁰ PG&E agrees with implementing this recommendation but proposes to delete "that have had their MAOP increased" following "HCA pipeline segments."²⁶¹

CPSD states that it accepts PG&E's proposed edit.²⁶² However, CPSD's final recommended remedies do not reflect this agreement.²⁶³ Since CPSD accepts this edit, and it appears reasonable on its face, we will adopt it.

7.1.2.5. Equipment Retention Policy

CPSD recommended Remedy 4.B.14 originally stated that "PG&E should make revisions to its equipment retention policy to ensure that integrity of equipment, wiring and documentation and identification of electrical components does not deteriorate to unsafe conditions such as occurred at the Milpitas Terminal, described herein. If PG&E does not have an applicable equipment retention policy then it should formulate one."²⁶⁴

PG&E states that it is implementing this recommendation and reviewing its inspection, testing, and maintenance procedure applicable to stations to

²⁶⁰ CPSD Amended Reply, Appendix A at B-10.

²⁶¹ *PG&E Remedies Brief,* Appendix B at B-7.

²⁶² CPSD Amended Reply, Appendix A at B-10.

²⁶³ CPSD Amended Reply, Appendix B at 2.

²⁶⁴ CPSD Opening Brief at 60.

ensure the integrity of electrical equipment, wiring, documentation, and identification of electrical components.²⁶⁵ PG&E proposes several edits to CPSD's proposed language, including deletion of reference to the Milpitas Terminal and deletion of the last sentence.²⁶⁶

CPSD states that it accepts PG&E's proposed edits.²⁶⁷ However, CPSD's final recommended remedies do not reflect this agreement.²⁶⁸ Since CPSD accepts the edits, and they appear reasonable on their face, we will adopt them.

CPSD also states that it has included language to ensure the procedure is implemented.²⁶⁹ We understand that CPSD is referring to the phrase "and implement" following "PG&E should review." We concur with CPSD that this provision should be included.

7.1.2.6. Redundant Pressure Sensors

CPSD recommended Remedy 4.B.17 states that "PG&E should revise its control systems, including SCADA, to ensure that all relevant information, including redundant pressure sensors, is considered."²⁷⁰

PG&E agrees that its SCADA system should make available all relevant information and states that it is implementing this recommendation through its Valve Automation Program.²⁷¹ However, PG&E does not agree that all

²⁶⁵ *PG&E Remedies Brief,* Appendix B at B-9.

²⁶⁶ *PG&E Remedies Brief,* Appendix B at B-9.

²⁶⁷ CPSD Amended Reply, Appendix A at B-12.

²⁶⁸ CPSD Amended Reply, Appendix B at 3.

²⁶⁹ CPSD Amended Reply, Appendix A at B-12.

²⁷⁰ CPSD Amended Reply, Appendix A at B-13.

²⁷¹ *PG&E Remedies Brief,* Appendix B at B-10.

redundant information is necessarily relevant, and it proposes edits to delete "including redundant pressure sensors" and to add a sentence indicating this remedy is being implemented through its Valve Automation Program.²⁷²

CPSD opposes PG&E's proposed edits.²⁷³ CPSD asserts that even with the Valve Automation Program, redundant pressure sensor data will be available and should be incorporated into systems including SCADA.²⁷⁴ CPSD asserts that redundant information from alternate sources is both important and relevant in emergency situations.²⁷⁵

We note that PG&E does not make the positive assertion that redundant pressure sensor data is irrelevant, only that it is not necessarily relevant. We are therefore persuaded to adopt CPSD recommended Remedy4.B.17 without modification.

7.1.2.7. Additional Pressure Sensors

CPSD recommended Remedy 4.B.18 states that "PG&E should install more pressure sensors and have them closely spaced and use the additional information to incorporate leak or rupture recognition algorithms in its SCADA system."²⁷⁶

PG&E states that it agrees with this recommendation and is currently performing a pilot program to test the feasibility of performing real time leak and

²⁷² *PG&E Remedies Brief,* Appendix B at B-10.

²⁷³ CPSD Amended Reply, Appendix A at B-13.

²⁷⁴ CPSD Amended Reply, Appendix A at B-13.

²⁷⁵ CPSD Amended Reply, Appendix A at B-13.

²⁷⁶ CPSD Amended Reply, Appendix A at B-14.

line break detection using SCADA information.²⁷⁷ PG&E states that it will review the results of the pilot program before proposing the installation of more pressure sensors system-wide.²⁷⁸ CPSD responds with the assertion that the remedy has merit because PG&E has already begun the pilot program.²⁷⁹

CPSD's recommendation calls for more sensors and for closer spacing of them but does not include specific, quantifiable standards for doing so.²⁸⁰ This suggests that PG&E would have flexibility in its implementation. We also note PG&E's testimony in response to this recommended remedy stated that "[w]e have installed and continue to install additional SCADA monitoring and control devices and capability."²⁸¹ This testimony did not state that PG&E's addition of monitoring and control devices and capability is limited to a pilot program. Since PG&E agrees with the recommendation, and we are not persuaded to limit it to a pilot program, we will adopt CPSD's remedy without the wording changes proposed by PG&E.

7.1.2.8. Negative Pressure Values

CPSD recommended Remedy 4.B.19 states that "PG&E should program its [Power Line Communications] PLCs to recognize that negative pressure values are erroneous and require intervention to prevent valves from fully opening."²⁸²

²⁷⁷ *PG&E Remedies Brief,* Appendix B at B-10.

²⁷⁸ *PG&E Remedies Brief,* Appendix B at B-10.

²⁷⁹ CPSD Amended Reply, Appendix A at B-14.

²⁸⁰ CPSD Amended Reply, Appendix A at B-14.

²⁸¹ San Bruno Exh. PG&E 1-A at 13A-5.

²⁸² CPSD Amended Reply, Appendix A at B-14.

PG&E opposes this remedy.²⁸³ PG&E believes that the redundant pneumatic pressure limiting system is the appropriate countermeasure where regulator valves open unintentionally.²⁸⁴ PG&E does not believe that programming PLCs to disregard pressure information is a prudent practice.²⁸⁵

In response, CPSD maintains the proposed remedy is appropriate and necessary in light of the problems encountered at the Milpitas Station.²⁸⁶ CPSD takes issue with PG&E's characterization that the goal is to program PLCs to disregard pressure information.²⁸⁷ Instead, CPSD asserts, the remedy is to program the PLCs to see negative pressure as reason to signal a problem in the system and take the necessary steps to prevent the valves from fully opening.²⁸⁸

As we noted in the *San Bruno Violations Decision*, redundant pneumatically operated monitor valves provide protection against catastrophic failure but are outside the pressure control system and do not fully provide adequate integrity.²⁸⁹ Thus, we do not share PG&E's confidence that negative pressure values should be disregarded. PG&E's testimony in the San Bruno OII asserted that programming the PLC to disregard pressure information is not prudent.²⁹⁰ However, we do not find that this assertion is adequately substantiated or that

²⁸³ *PG&E Remedies Brief,* Appendix B at B-10.

²⁸⁴ *PG&E Remedies Brief,* Appendix B at B-10.

²⁸⁵ *PG&E Remedies Brief,* Appendix B at B-10.

²⁸⁶ CPSD Amended Reply, Appendix A at B-14.

²⁸⁷ CPSD Amended Reply, Appendix A at B-14.

²⁸⁸ CPSD Amended Reply, Appendix A at B-14.

²⁸⁹ San Bruno Violations Decision, Section 5.3.2.

²⁹⁰ San Bruno Exh. PG&E-1A at 13A-5 to 13A-6; San Bruno Exh. PG&E-1 at 8-7 to 8-8 and 8-14.

the prudency concern outweighs the safety concern that led CPSD to make this recommendation. We therefore adopt the remedy as proposed by CPSD.

7.1.2.9. Replacement of Pressure Controllers

CPSD recommended Remedy 4.B.20 states that "PG&E should replace the three pressure controllers which malfunctioned on September 9, 2010."²⁹¹ PG&E responds that it is "implementing enhanced functionality to the PLCs at Milpitas Terminal, which will render the valve controllers unnecessary, at which point all valve controllers will be removed."²⁹² PG&E therefore proposes to revise the wording of the remedy to state "PG&E should remove the three pressure controllers...."²⁹³

CPSD notes, however, that even though PG&E proposes changes to the Milpitas Terminal, the three controllers could potentially remain in service for years and thereby pose a risk to safety.²⁹⁴ CPSD therefore stands by its proposed remedy as stated "unless PG&E demonstrates that the controllers have already been removed from the system."²⁹⁵

We share CPSD's concern that even though PG&E has plans to remove the controllers that malfunctioned, that might not occur for years. We therefore decline to adopt PG&E's proposed edit. We will, however, add language to the remedy that incorporates CPSD's conditional agreement to PG&E's edits.

²⁹¹ CPSD Amended Reply, Appendix A at B-15.

²⁹² San Bruno Exh. PG&E-1A at 13-A-6.

²⁹³ *PG&E Remedies Brief,* Appendix B at B-11.

²⁹⁴ CPSD Amended Reply, Appendix A at B-15.

²⁹⁵ CPSD Amended Reply, Appendix A at B-15.

7.1.2.10. Abnormal Operating Conditions

CPSD recommended Remedy 4.B.21 states that "PG&E should review its work clearance process to ensure that abnormal operating conditions that may arise during the course of work are anticipated and responses to those conditions are detailed. Additionally, PG&E should create a procedure covering the commission of electrical equipment from one Uninterruptable Power Supply to another. Each project Clearance should include possible scenarios and contingency plans to mitigate any abnormal operating conditions that may arise."²⁹⁶ This recommended remedy enjoys PG&E's agreement, and it reflects CPSD's acceptance of edits proposed by PG&E.²⁹⁷

The above-quoted language also incorporates two additional, minor clarifying edits to the last sentence that were proposed by CPSD.²⁹⁸ We concur with CPSD's clarifying addition of "Clearance" since the work clearance process is the subject of this remedy. We also concur with CPSD's language providing that each clearance should "include" rather than "cover" or "require" possible scenarios and contingency plans. We therefore adopt CPSD's wording.

7.1.2.11. Work Clearance Procedures

CPSD recommended Remedy 4.B.22 states that "PG&E should revisit its Work Clearance procedures and training to ensure that future work will not be authorized unless: all forms and fields therein are comprehensively and accurately populated, and reviewed by a designated clearance supervisor. Additionally, work should not commence until such time as the operator and

²⁹⁶ CPSD Amended Reply, Appendix A at B-15.

²⁹⁷ CPSD Amended Reply, Appendix A at B-15.

²⁹⁸ CPSD Amended Reply, Appendix A at B-15.
technician have reviewed the work clearance and have confirmed that understand the actions to take in the event an abnormal condition is encountered. Lastly, PG&E must ensure that proper records showing the specific steps taken, when taken, and by whom, are maintained pursuant to its Record Retention Schedule."²⁹⁹

PG&E states that it agrees with and is implementing this recommendation.³⁰⁰ Apart from typographical errors, the language quoted above reflects PG&E's edits to CPSD's originally proposed remedy with one exception.³⁰¹ CPSD otherwise accepts PG&E's edits.³⁰²

In the first sentence, PG&E had inserted "necessary" prior to "forms and fields therein."³⁰³ We concur with CPSD that "necessary" leaves room for subjective determination of what is and is not to be filled out. As CPSD notes, this could lead to incomplete forms, which was a problem that arose when the Milpitas work clearance form was filled out. We also correct two typographical errors in CPSD's restatement of the remedy by deleting a semicolon after "unless" and adding "both" after "confirmed that."

7.1.2.12. Gas Service Representative Training

CPSD recommended Remedy 4.B.23 states: "Training - PG&E should provide training to Gas Service Representatives to recognize the differences

²⁹⁹ CPSD Amended Reply, Appendix A at B-16.

³⁰⁰ *PG&E Remedies Brief,* Appendix B at B-12.

³⁰¹ CPSD Amended Reply, Appendix A at B-16.

³⁰² CPSD Amended Reply, Appendix A at B-16.

³⁰³ *PG&E Remedies Brief,* Appendix B at B-12.

between fires of low-pressure natural gas, high-pressure natural gas, gasoline fuel, or jet fuel."³⁰⁴

PG&E agrees that Gas Service Representatives should be provided training to identify hazards associated with natural gas infrastructure, and to make the system safe for the public and other employees.³⁰⁵ PG&E proposes a restated remedy: "Training - PG&E should provide training to Gas Service Representatives [GSR] to identify hazards associated with PG&E natural gas infrastructure and take action to make the condition safe for the public and employees. If assistance is needed and the situation is an imminent hazard, the GSR will remain on site until appropriate resources take control."³⁰⁶

CPSD opposes PG&E's edits to its remedy, claiming that they "completely alters the purpose of the proposed remedy."³⁰⁷ CPSD notes that PG&E's proposed language is already included in the company's emergency response training and asserts that CPSD's proposed training could easily be incorporated into PG&E's current emergency response training program.³⁰⁸

We note that PG&E does not oppose the training proposed by CPSD and that CPSD does not explicitly oppose the training proposed by PG&E. We will therefore combine both statements into a single restated remedy.

³⁰⁴ CPSD Amended Reply, Appendix A at B-17.

³⁰⁵ *PG&E Remedies Brief,* Appendix B at B-13.

³⁰⁶ *PG&E Remedies Brief,* Appendix B at B-13.

³⁰⁷ CPSD Amended Reply, Appendix A at B-17.

³⁰⁸ CPSD Amended Reply, Appendix A at B-17.

7.1.2.13. PG&E's Business Strategies

CPSD recommended Remedy 4.B.31 states that "PG&E's business strategies and associated programs should expressly ensure that safety is a higher priority than shareholder returns and be designed to implement that priority, which may include reinvesting operational savings into infrastructure improvements."³⁰⁹

PG&E opposes this remedy, asserting that it has already committed substantial shareholder investments to gas transmission improvements.³¹⁰ PG&E contends that there is no need to adopt an express requirement that any savings from operational efficiencies be reinvested in infrastructure improvements.³¹¹ In response, CPSD continues to assert that PG&E should have a program to expressly ensure that safety is a higher priority than shareholder returns.³¹²

We fully concur with the proposition that a public utility should make safety the highest priority, even at the expense of shareholder returns. This reflects our view that the requirement of Pub. Util. Code § 451 to "furnish and maintain such adequate, efficient, just, and reasonable service, instrumentalities, equipment, and facilities ... as are necessary to promote the safety ... of its patrons, employees, and the public" is absolute and cannot be compromised by shareholder return considerations. We do not concur with CPSD that the utility's safety obligation can or should be met by linking necessary safety expenditures and investments to operational efficiencies. PG&E must spend

³⁰⁹ CPSD Amended Reply, Appendix A at B-23.

³¹⁰ *PG&E Remedies Brief,* Appendix B at B-16.

³¹¹ San Bruno Exh. PG&E 1A at 13A-11.

³¹² CPSD Amended Reply, Appendix A at B-23.

whatever is necessary to meet its safety obligation whether or not operational efficiencies have been achieved. We therefore adopt this remedy without reference to operational savings.

7.1.2.14. Retained Earnings

CPSD recommended Remedy 4.B.32 states that "PG&E should target retained earnings towards safety improvements before providing dividends, especially if the ROE exceeds the level set in a [General Rate Case] GRC decision."³¹³ PG&E opposes this remedy, asserting that shareholders have spent and will spend significant funds to improve gas transmission safety without rate recovery.³¹⁴ PG&E also contends that CPSD's proposed remedy is "vaguely worded" and "would likely have an adverse effect on PG&E's ability to access debt and equity markets on as favorable terms as other California utilities, potentially increasing its cost of capital."³¹⁵

We make no findings here regarding the amounts PG&E shareholders have spent or will spend on gas transmission work without rate recovery. Nevertheless, we are not persuaded that imposing restrictions on dividends is either necessary to achieve safety or an effective means of doing so. As we noted in Section 7.1.2.13 above, the absolute safety obligation created by Pub. Util. Code § 451 means that PG&E must spend whatever is necessary for safe operations and practices without regard to whether operational savings have been achieved. Similarly, PG&E must ensure safe operations and practices

³¹³ CPSD Amended Reply, Appendix A at B-24.

³¹⁴ *PG&E Remedies Brief,* Appendix B at B-17.

³¹⁵ *PG&E Remedies Brief,* Appendix B at B-17.

without regard to its dividends policy. Accordingly, we will not adopt proposed Recommendation 4.B.32.

7.1.2.15. Incentive Plan

CPSD recommended Remedy 4.B.33 originally provided that "PG&E's incentive plan, and other employee awards programs, should include selection criteria for improved safety performance and training and/or experience in the reliability and safety aspects of gas transmission and distribution. PG&E should ensure that upper management attends gas safety training."³¹⁶

PG&E responded that it agrees with this recommendation.³¹⁷ PG&E noted that (1) it has revised its short-term incentive plan (STIP) program to make safety performance 40% of the score used to determine the total award, (2) it endorses the recommendation that upper management participate in activities that enhance and expand their safety knowledge, (3) it continues to enhance its gas emergency response training, and (4) all officers have an opportunity to participate in an annual drill, but it is expanding the number and types of exercises conducted throughout the year.³¹⁸ PG&E proposed edits to the remedy so that it would read "A component of PG&E's gas employee incentive plan should include safety. PG&E's annual training plan should require that all gas leaders attend gas safety training."³¹⁹

³¹⁶ CPSD Opening Brief at 62.

³¹⁷ *PG&E Remedies Brief,* Appendix B at B-18.

³¹⁸ San Bruno Exh. PG&E 1A at 13-13 to 13-14, Appendix A at 13A-12.

³¹⁹ *PG&E Remedies Brief,* Appendix B at B-18.

CPSD recommends incorporating PG&E's implementation plan into the remedy and proposes further language revisions to accomplish that.³²⁰ We concur with CPSD that it is appropriate to codify PG&E's implementation plan by incorporating it into the remedy. We therefore adopt CPSD's proposed modifications to the language of the remedy along with clarifying wording indicated by PG&E.

7.1.2.16. Joint Board Meetings

CPSD recommended Remedy 4.B.34 states that "PG&E should not hold joint Company and Corporation Board of Director meetings as the two entities should have different priorities."³²¹ PG&E opposes this remedy, asserting that "the interests of the Company and the Utility are aligned."³²²

CPSD's witness asserted that "[t]he same corporate culture seems to run through PG&E Corporation and PG&E Company, as evidenced in part by the fact that the Corporation and the Company hold joint board meetings."³²³ He also provided evidence that "[i]t is understandable that PG&E Corporation has a goal in growing its financial performance. It is also understandable that PG&E Company focuses on being financially healthy; however, its primary and overarching focus should be on the safe and reliable operation of the electric and natural gas pipeline facilities."³²⁴ CPSD's rebuttal testimony went on to assert that "PG&E's history demonstrates that PG&E Corporation cannot appropriately

³²⁰ CPSD Amended Reply, Appendix A at B-25.

³²¹ *CPSD Amended Reply*, Appendix A at B-26. CPSD is clearly referring to PG&E Corporation and its subsidiary, Pacific Gas and Electric Company.

³²² *PG&E Remedies Brief,* Appendix B at B-19.

³²³ San Bruno Exh. CPSD-1 at 127.

³²⁴ San Bruno Exh. CPSD-1 at 130.

balance the responsibility for both pipeline safety and maximizing profits. The San Bruno explosion exposed this inherent conflict. Decisions on safety and budgeting were distorted with tragic results."³²⁵ The rebuttal testimony went on to assert that "[t]he Company and the Corporation each serve a conflicting purpose."³²⁶

We do not find that the evidence offered by CPSD demonstrates that there is a conflict of interest between PG&E Corporation and PG&E that impacts safety in a way that would be resolved by precluding joint board meetings. Accordingly, we do not adopt this recommended remedy.

7.1.2.17. Safety as Core Mission

CPSD recommended Remedy 4.B.35 initially provided that "PG&E should examine whether the time and money it spends on public relations and political campaigns distracts it from its core mission of providing safe and reliable gas service."³²⁷ PG&E's testimony stated that "[w]hile we do not agree with the premise of this recommendation, … we are focusing on enhancing public safety and operational excellence."³²⁸ PG&E thus opposes this remedy as unnecessary.³²⁹

In response, CPSD modified the wording of its recommended remedy to incorporate PG&E's statement so that it reads: "PG&E should focus on enhancing public safety and operational excellence as a core mission, and should

³²⁵ San Bruno Exh. CPSD-5 at 56.

³²⁶ San Bruno Exh. CPSD-5 at 57.

³²⁷ CPSD Opening Brief at 62.

³²⁸ San Bruno Exh. PG&E 1A, Appendix A at 13A-13.

³²⁹ *PG&E Remedies Brief,* Appendix B at B-19.

examine whether the time and money it spends on public relations and political campaigns distracts it from this core mission."³³⁰

PG&E's opposition to this remedy is based on its objection to the underlying premise and its position that it is unnecessary. PG&E does not indicate opposition to a self-examination of whether expending resources on public relations and political campaigns is distracting. We are pleased that PG&E is focusing on enhancing both public safety and operational excellence, and are at a loss to understand why it would object to a remedy requiring such focus. We adopt the remedy with the wording changes proposed by CPSD.

7.1.2.18. Pipeline 2020 Program

CPSD recommended Remedy 4.B.36 states that "PG&E should revisit its Pipeline 2020 program, and subsequent variations thereof, to ensure that its implementation is fully flushed out with specific goals, performance criteria, and identified funding sources."³³¹ PG&E opposes this remedy and asserts it is unnecessary.³³² The Pipeline 2020 program is no longer active and has been superseded by the PSEP. CPSD has agreed with deleting this remedy,³³³ and we therefore do so.

³³⁰ CPSD Amended Reply, Appendix A at B-26.

³³¹ CPSD Amended Reply, Appendix A at B-26.

³³² *PG&E Remedies Brief,* Appendix B at B-19.

³³³ CPSD Amended Reply, Appendix A at B-26.

7.1.2.19. NTSB Recommendations

CPSD recommended Remedy 4.B.38 begins with the statement that "CPSD agrees with the following NTSB recommendations to PG&E."³³⁴ CPSD then lists several recommendations that the NTSB made to PG&E.³³⁵

PG&E agrees with and is implementing this recommendation to follow the NTSB recommendations.³³⁶ We wish to make clear that this remedy does not merely note CPSD's agreement with the NTSB's recommendations. This remedy directs PG&E to follow and implement them.

7.1.3. Recommended Remedies in I.11-02-016 (Recordkeeping OII)

CPSD proposed 22 recommended remedies in the Recordkeeping OII to ensure "compliance with all applicable rules, regulations and laws related to recordkeeping."³³⁷ CPSD, however, warns that while these recommendations are based on evidence in the record, they "are not intended to state all regulatory and engineering requirements for PG&E's recordkeeping systems."³³⁸

PG&E proposed revisions to a number of CPSD's recommendations, which CPSD accepted with no additional changes. Since these recommendations and edits were not opposed, we find it reasonable to adopt the following recommendations:

4.C.1 PG&E's gas transmission organization should be required to achieve at least a Level 3 information maturity score

³³⁴ CPSD Amended Reply, Appendix A at B-27.

³³⁵ CPSD Amended Reply, Appendix A at B-28-32.

³³⁶ *PG&E Remedies Brief,* Appendix B at B-20.

³³⁷ CPSD Opening Brief at 64.

³³⁸ CPSD Opening Brief at 64.

under the Generally Accepted Records Keeping Principles within 3 years. (CPSD Exhibit 6, Appendix 4.)

4.C.7 PG&E should identify and document the employees responsible for implementing the Records and Information Management program for gas transmission.

4.C.8 PG&E should develop consistent standard practices that include gas transmission records management linked to corporate polices on information governance.

4.C.10 PG&E should ensure that each gas transmission standard conforms with Records and Information Management (RIM) policies for gas transmission.

4.C.11 PG&E should include the treatment of active and inactive records in its Records and Information Management (RIM) Policy for gas transmission.

7.1.3.1. ISO Certification

CPSD's recommended Remedy 4.C.2 would require PG&E to "achieve International Organization Standard (ISO) certification against ISO 30300 for its Management System for Records (MSR) within five years of the ISO 30300 audit standard being finalized and published."³³⁹ PG&E opposes this recommendation, stating "ISO 30300, which will be a newly revised update to ISO 15489, is primarily used for organizations that have international demands on information governance, including EU directives and other cross-country requirements."³⁴⁰

CPSD argues that the ISO 30300 series is applicable to all organizations, regardless of size or location, and "is especially useful in demonstrating

³³⁹ CPSD Opening Brief at 65.

³⁴⁰ CPSD Amended Reply, Appendix A at B-33.

compliance with the documentation and records requirements of other Management System Standards.^{"341} Additionally, since the standard has not yet been finalized and published, CPSD suggests "PG&E could begin working toward the ISO 15489 standard currently in place.^{"342}

Although the *Duller/North Report* refers to the ISO 30300 series in its discussion of records management responsibilities, CPSD has not provided sufficient justification why it is necessary for PG&E to achieve ISO certification against ISO 30300. Accordingly, Recommendation 4.C.2 is rejected. While we reject CPSD's recommendation at this time, we do not foreclose the possibility that achieving this certification may be appropriate in the future.

7.1.3.2. Corporate Record and Information Management Policy

CPSD recommended Remedy 4.C.3 states:

- 3 PG&E should develop a program to draft, review, approve and issue corporate policies and policy guidance that will:
 - a. establish guidance for all departments and divisions to assist them with drafting standard practices to implement the corporate policies,
 - b. will incorporate an internal audit function to review standard practices for compliance, consistency and accuracy, and
 - c. will incorporate a retention policy with a schedule that identifies all records within the business for which there is a retention period mandated by federal/state laws; general orders and regulations including CPUC section 451 and its successors.³⁴³

³⁴¹ CPSD Amended Reply, Appendix A at B-33.

³⁴² CPSD Opening Brief at 65, fn.32.

³⁴³ CPSD Opening Brief at 65.

PG&E generally agrees with this proposed remedy and notes that its Information Management (IM) and Compliance Department has begun to implement this recommendation. However, PG&E proposes several edits, as "It is impractical to draft standard practices that would fit business processes as diverse as Gas Operations, Human Resources and Regulatory Affairs, for example."³⁴⁴

CPSD accepts PG&E's proposed revisions with one edit. It proposes to add the phrase "that underlie its post-2010 Corporate Records and Information Management Policy and Standard" to subpart (a) so that it will read:

Communicate recordkeeping expectations that underlie its post-2010 Corporate Records and Information Management Policy and Standard for all departments and divisions across PG&E.³⁴⁵

CPSD's edit provides the context for PG&E's recordkeeping expectations. We concur with this edit and adopt recommended Remedy 4.C.3 as follows:

3 PG&E shall issue a corporate policy and standard that will:

3.a Communicate recordkeeping expectations that underlie its post-2010 Corporate Records and Information Management Policy and Standard for all departments and divisions across PG&E. These expectations should be incorporated into procedures specific to meet the needs of every Line of Business.

3.b The Information Management and Compliance Department should design a governance controls catalog for recordkeeping practices to assess compliance with the corporate policy and standard, consistency of behavior with

³⁴⁴ *CPSD Amended Reply*, Appendix A at B-34 – B-35.

³⁴⁵ CPSD Amended Reply, Appendix A at B-34.

official records being stored in approved systems of record, and timeliness of addressing records during their lifecycle.

3.c The retention schedule will support the policy by providing retention length for all identified official records to meet legal and regulatory mandates.

7.1.3.3. Records Management Education and Training

PG&E agrees with CPSD recommended Remedy 4.C.4 that it should develop and implement Records and Information Management (RIM) training. It proposes several edits and also clarifies that the training is "for the gas transmission organization."³⁴⁶

CPSD accepts PG&E's edits, but adds back the phrase "within an information governance framework" that PG&E had proposed be deleted. CPSD explains that this is the basis of Generally Accepted Record-keeping Principles (GARP).³⁴⁷ Since PG&E agrees to CPSD recommended Remedy 4.C.1, which recommend PG&E achieve a Level 3 information maturity under GARP within three years, we find that retention of the phrase "within an information governance framework" in recommended Remedy 4.C.4 to be reasonable.

CSB also proposes three remedies – V.D.2.c, V.D.2.d and V.D.2.e – related to records management training.³⁴⁸ PG&E opposes these recommendations on the grounds that they are duplicative of CPSD's recommended Remedy 4.C.4.³⁴⁹ We do not agree. CPSD recommended Remedy 4.C.4 is a general recommendation for training, while CSB's proposed remedies outline the

³⁴⁶ CPSD Amended Reply, Appendix A at B-36.

³⁴⁷ CPSD Amended Reply, Appendix A at B-36.

³⁴⁸ CPSD Amended Reply, Appendix A at B-62 – B-63.

³⁴⁹ CPSD Amended Reply, Appendix A at B-62 – B-63.

expectations of the training and education programs. We find it is reasonable to incorporate CSB's recommendations into CPSD recommended Remedy 4.C.4, as this will provide more specificity regarding the requirements that should be included. Finally, we modify CSB proposed remedies V.D.2.d and V.D.2.e to add a requirement that these training programs be offered at least annually. We believe that requiring this training be offered at regular intervals will ensure that PG&E's recordkeeping practices are communicated to employees in a consistent and ongoing manner.

We therefore adopt recommended Remedy 4.C.4 as follows:

- 4 PG&E shall develop and implement an education and training program for the gas transmission organization in Records and Information Management principles and practices within an information governance framework. The education and training program shall include the following:
 - All staff shall receive training to understand the responsibilities and tasks that relate to managing records. These education and training programs shall be updated and offered at regular intervals, at least twice annually, to include amendments to the records management program and for the benefit of new staff.
 - b. There shall be specific and additional training for those staff involved directly in the management of retention and disposal of records. These education and training programs shall be offered at least annually.
 - c. There shall be specific and additional training focusing on all of the recordkeeping systems used within the Gas Operations Organization. Employees and PG&E contractors who have duties using these programs shall be required to attend these training sessions. These education and training programs shall be offered at least annually.

7.1.3.4. Records

CPSD recommended Remedy 4.C.5 states:

PG&E should develop and deploy the systems necessary to manage, maintain, access and preserve both records and documents (physical and electronic, in all formats and media types); their related data, metadata, and geographic location and geospatial content in accordance with legal and business mandated rules, utilizing technology that includes appropriate aids to help improve data and metadata quality, including but not limited to validation, verification and referential integrity.³⁵⁰

PG&E agrees to this recommended, but proposes several edits. CPSD opposes PG&E's proposal to have the recommendation apply to "gas transmission" systems. It argues that "systems" is not limited to gas transmission, as it could also refer to "records/document/content/management systems; Quality management systems at any level in the Corporation."³⁵¹ CPSD further opposes PG&E's addition to have this recommendation apply in accordance with "PG&E's records retention schedule."³⁵² CPSD believes this phrase is unnecessarily vague and is not convinced the record retention schedule would incorporate the requirements specified in the CPSD remedy.

We agree with CPSD that the phrase "gas transmission" may be limiting and therefore exclude the phrase. We also agree that the phrase "records retention schedule" is vague, especially since there is no assurance that these retention schedules incorporate all the requirements contained in the CPSD recommendation. This phrase is also excluded. Although CPSD did not oppose

³⁵⁰ CPSD Opening Brief at 65.

³⁵¹ CPSD Amended Reply, Appendix A at B-37.

³⁵² CPSD Amended Reply, Appendix A at B-37.

other edits proposed by PG&E, it did not include them in its final revised proposal. We find PG&E's other proposed changes reasonable and adopt them.

7.1.3.5. Responsibility for Information Governance Strategies

PG&E agrees with CPSD recommended Remedy 4.C.6 and states that it is already implementing this recommendation in its gas transmission business. However, PG&E proposes edits to clarify the proposed operational commitment for purposes of implementation.³⁵³ CPSD agrees that the remedy should be clarified, and proposes further edits that incorporates PG&E's proposed language. CPSD's additional edits would identify PG&E senior management as responsible for implementation of PG&E's governance strategy.³⁵⁴

While we believe that it should be understood that PG&E senior management would be responsible for ensuring PG&E's governance strategy is implemented, there is no harm in making that specific statement. We therefore, adopt recommended Remedy 4.C.6 as follows:

PG&E shall establish accountability for development and implementation of a PG&E governance strategy across gas transmission that shall rest with PG&E Senior Management and a method of accountability shall be developed and implemented.

7.1.3.6. Mandated Retention Period

CPSD recommended Remedy 4.C.9 states "PG&E should implement mandated retention periods for all relevant records."³⁵⁵ PG&E agrees with this

³⁵³ CPSD Amended Reply, Appendix A at B-38.

³⁵⁴ CPSD Amended Reply, Appendix A at B-38.

³⁵⁵ CPSD Opening Brief at 66.

recommendation and proposes to add the phrase "in gas transmission" at the end of the sentence.³⁵⁶

CPSD accepts PG&E's edit and makes a further edit to insert the word "relevant" to gas transmission. We agree that this further edit is reasonable and adopt the proposed changes.

7.1.3.7. Records Management Processes

CPSD recommended Remedy 4.C.12 requires PG&E's records management processes be managed and maintained in accordance with the traceable, verifiable and complete standard.³⁵⁷ PG&E agrees with this recommendation, which it is already implementing in its gas transmission business. PG&E proposes edits to clarify the proposed operational commitment for purposes of implementation.³⁵⁸

CPSD agrees with some of PG&E's edits. However, it does not agree that the phrase "for the life of the asset" should be replaced with "aligned with PG&E's record retention schedule." It notes that the primary concern of this remedy relates to the physical assets. CPSD also does not agree to limit the records to just "as built" records because, as "it has been difficult to discern exactly what records PG&E includes in that classification."³⁵⁹

We concur with CPSD that the phrase "for the life of the asset" should be retained in the remedy. As we found in the *Recordkeeping Violations Decision*, PG&E's retention schedules were both inconsistent and did not comply with

³⁵⁶ CPSD Amended Reply, Appendix A at B-39.

³⁵⁷ CPSD Opening Brief at 66.

³⁵⁸ CPSD Amended Reply, Appendix A at B-40.

³⁵⁹ CPSD Amended Reply, Appendix A at B-40.

federal requirements to retain certain records for the life of the asset.³⁶⁰ We further agree with CPSD that the term "as-built" should be excluded because it is unclear what PG&E considers an "as-built" record.

We therefore adopt recommended Remedy 4.C.12 as follows:

PG&E's records management processes shall be managed and maintained in accordance with the traceable, verifiable and complete standard, including retention of physical and digital pipeline records for the 'life of the asset.'

7.1.3.8. Data Discrepancies

CPSD recommended Remedy 4.C.13 states:

The accuracy and completeness of data within gas transmission records should be traceable, verifiable and complete and when errors are discovered, the record should be corrected as soon as correct information is available and the reason(s) for each change should be documented and kept with the record.³⁶¹

PG&E agrees with this recommendation states that it is implementing this recommendation in its gas transmission business. PG&E proposes edits to the recommendation to discrepancies in GIS 3.0.³⁶²

CPSD opposes this edit, as it believes this would limit PG&E to addressing discrepancies in only GIS 3.0, not any other PG&E records. However, it proposes to add a sentence to this recommendation to refer to requirements for discrepancies discovered in GIS 3.0.

We agree with CPSD that this limiting language should be deleted. PG&E has had more than one database system tracking gas transmission records, and

³⁶⁰ *Recordkeeping Violations Decision,* Section 7.2.1, 8.3 and 9.3.

³⁶¹ CPSD Opening Brief at 66.

³⁶² CPSD Amended Reply, Appendix A at B-41.

will likely have more in the future. It is important that records in all of these systems are accurate and complete, not only the records in GIS 3.0. We do not believe, however, that CPSD's proposed sentence "For example, when discrepancies are discovered in GIS 3.0, GIS 3.0 should be updated as soon as the new information is available and reflected in the audit change log" is necessary and therefore exclude it.

7.1.3.9. Job Files

CPSD proposed remedies 4.C.14 and 4.C.15 address problems associated with Job Files. These recommendations state:

14 PG&E should create a standard format for the organization of a job file so that PG&E personnel will know exactly where to look in a file folder, or set of file folders, to find each type of document associated with a job file. At a minimum, a job file will contain traceable, verifiable and complete records to support the MAOP of the pipeline segment installed; design documentation; purchase documentation showing the sources and specifications of equipment purchased; permits; environmental documents; field notes; design, construction and as-built drawings; x-ray reports and weld maps; pressure test records; correspondence with the CPUC; and inspection reports and correspondence.

15 Job file data, including drawings, for all parts of the active PG&E gas transmission system should be immediately accessible from multiple locations. The development of a complete and accurate catalog of "job files that can be searched immediately should be included within this objective."³⁶³

PG&E agrees with both recommendations. PG&E states that it is implementing recommendation 4.C.14 by creating an electronic format for job

³⁶³ CPSD Opening Brief at 66.

file organization and recommendation 4.C.15 through Project Mariner.³⁶⁴ It proposes edits to clarify the proposed operational commitment for purposes of implementation.

For recommendation 4.C.14, PG&E proposes that the job files be in a standard "electronic" format and would limit the records to the "features that were reviewed as part of the MAOP Validation project." Further, it proposes to delete the following types of records listed by CPSD: segment installed, permits, environmental documents, field notes, x-ray reports and weld maps, correspondence with the CPUC and inspection reports and correspondence.³⁶⁵

CPSD opposes PG&E's proposed edits. It argues that Job Files should "include all of the records listed that document the history of the pipeline, including any past, present or future records that support the MAOP of the pipeline or pipeline segment installed."³⁶⁶ Further, CPSD notes that the list of document types included in recommendation 4.C.14 "was developed from lists of job file contents provided by PG&E."³⁶⁷

We concur with CPSD that Job Files should include all records documenting the history of the pipeline. PG&E has represented in the Recordkeeping OII that a Job File that contains original documents is the "master job file" or file of record.³⁶⁸ These original documents include permits,

GasTransmissionSystemRecordsOII_DR_CPUC_017-Q05Supp.pdf.

³⁶⁴ Project Mariner is PG&E's Gas Transmission Asset Management Project which was authorized in the *PSEP Decision*.

³⁶⁵ CPSD Amended Reply, Appendix A at B-42.

³⁶⁶ CPSD Amended Reply, Appendix A at B-42.

³⁶⁷ CPSD Amended Reply, Appendix A at B-42.

³⁶⁸ Recordkeeping, Exh. CPSD-18,

environmental documents, x-ray reports and weld maps and inspection reports.³⁶⁹ PG&E witness Keas has testified that Job Files are a source of information for PG&E's integrity management program and used as a means to confirm information in GIS.³⁷⁰ However, PG&E now proposes that a Job File only contain information obtained as part of the MAOP Validation Project conducted between 2011 and 2013, not historical information. Further, PG&E proposes to eliminate documents that are relevant to the design and construction of transmission pipelines.

As we found in the *Recordkeeping Violations Decision*, PG&E's recordkeeping practices with respect to Job Files, along with errors in its GIS system, adversely impacted PG&E's ability to operate its gas transmission pipeline system in a safe manner.³⁷¹ CPSD's recommended Remedy 4.C.14 addresses these deficiencies. Therefore, we agree with CPSD that PG&E's proposed edits should be excluded.

For recommendation 4.C.15, PG&E proposes that the word "immediately" be deleted and to limit the scope of Job Files to "records" of gas transmission "pipelines." PG&E further proposes to delete the requirement to have a complete and accurate catalog of Job Files.³⁷²

CPSD opposes these edits. It states that the recommendation should apply to PG&E's entire gas transmission system, including terminals, etc., and not just "pipelines." CPSD further notes that it had included a requirement for a catalog

³⁶⁹ Recordkeeping, *PG&E's June 20, 2011 Response* at 2A-19 – 2A-20 (Table 2A-3) & 7-3.

³⁷⁰ Recordkeeping, 11 Joint RT at 1153:7 – 1154:26 (PG&E/Keas).

³⁷¹ Recordkeeping Violations Decision, Section 8.1 and 8.7.

³⁷² CPSD Amended Reply, Appendix A at B-43.

of Job Files so the PG&E's staff would "have immediate access to relevant information and not have to wit days or months for the information to be located."³⁷³

As we found in the *Recordkeeping Violations Decision*, PG&E does not have a central repository or a system-wide index for Job Files.³⁷⁴ As a result, it took a total of 250,000 man days of work to gather, review, catalogue and index, copy and analyze PG&E's Job Files for all phases of its MAOP validation project.³⁷⁵ Given the inherent dangers associated with operating a high pressure natural gas transmission pipeline system, we concur with CPSD that it is imperative that PG&E employees have immediate access to relevant information. It is simply unacceptable to have employees search for information and hope to find it at some point. As such, we concur with CPSD that PG&E's edits should be excluded.

For the reasons stated above, we adopt CPSD's proposed remedies 4.C.14 and 4.C.15 with no changes.

7.1.3.10. Missing or Destroyed Information

CPSD's recommended Remedy 4.C.16 addresses the methodology to recover information contained in PG&E's historic records and documents that has been identified as "missing" or "disposed of."³⁷⁶ PG&E states that it is implementing this recommendation through its MAOP validation effort. It therefore proposes that this recommendation read:

³⁷³ CPSD Amended Reply, Appendix A at B-43.

³⁷⁴ *Recordkeeping Violations Decision*, Section 8.1.

³⁷⁵ *Recordkeeping Violations Decision*, Section 8.1.

³⁷⁶ CPSD Opening Brief at 66-67.

In the course of the MAOP Validation Project, when PG&E cannot locate records, PG&E should apply conservative assumptions in its development of its Pipeline Features Lists for gas transmission pipelines.³⁷⁷

CPSD opposes PG&E's proposed edits. CPSD states that these edits "completely ignore the inferred 'duty of care' element to recover such information via a range of options, rather than simply insert a conservative value."³⁷⁸ We agree with CPSD that PG&E cannot simply "apply conservative assumptions" whenever there is missing information in its historical records and documents. However, we note that the CFR allows the use of conservative assumptions. We therefore, reject PG&E's modifications, but modify this recommendation to reflect TURN's recommended Remedy 2A concerning the use of assumed values.³⁷⁹ Accordingly, CPSD recommended Remedy 4.C.16 is revised to read:

16. The information that was contained in PG&E's historic records and documents, and that has been identified as 'missing or disposed of,' and is necessary to be retained for the safe operation of the pipelines, pursuant to laws, regulations and standards and the PG&E retention schedule, shall be recovered. This recovery shall include but not be limited to:

a. updating and verification of data in engineering databases, such as the leak database, GIS and the integrity management model,

b. updating plat sheets and other engineering drawings, and

c. updating and organizing job files.

³⁷⁷ CPSD Amended Reply, Appendix A at B-44.

³⁷⁸ CPSD Amended Reply, Appendix A at B-44.

³⁷⁹ CPSD Amended Reply, Appendix A at B-59.

When PG&E cannot locate records, it may apply conservative assumptions consistent with the requirements of Ordering Paragraph 1 of D.11-06-017. PG&E shall be required to fully document any engineering-based assumptions it makes for data that has been identified as "missing or disposed of." Such assumptions must be clearly identified and justified and, where ambiguities arise, the assumption allowing the greatest safety margin must be adopted.

7.1.3.11. Changes in Gas Transmission Policies and Standard Practices

CPSD's recommended Remedy 4.C.17 addresses the documentation and preservation of changes to PG&E's policies and standards.³⁸⁰ Although PG&E agrees with this recommendation, it would limit the requirement to "gas transmission standards and procedures" and eliminate the requirement for permanent retention. It argues "Permanent retention of all documents is not practicable."³⁸¹

We concur with PG&E that this requirement should not apply to all documents. However, we do not agree that a limitation to "gas transmission standards and procedures" is appropriate, as it is unclear what documents would be included. As demonstrated by language in this proposed remedy, CPSD and PG&E have used the terms "standards and procedures," "policies and standard practices" and "policies, standards and procedures." It is unknown whether these terms are all the same, or would encompass different types of documents. For purposes of ensuring all documents are included, we revise the recommendation to use the term "policies, standards and procedures." We

³⁸⁰ CPSD Opening Brief at 67.

³⁸¹ CPSD Amended Reply, Appendix A at B-45.

further revise the recommendation to apply to all documentation within the Gas Operations Organization.

We further reject PG&E's proposal to retain only documentation of changes "according to PG&E's Records and Information Management (RIM) policies, standards and procedures."382 As highlighted in the Recordkeeping OII, there is a need to retain policies, standards and procedures even after they are discontinued. For example, PG&E's standards and procedures for the reconditioning of A O Smith pipe in the late 1950's and early 1960's was not retained. Consequently, when the Office of Pipeline Safety issued a safety alert about this type of pipe in 1988, PG&E had to determine what had been done "based on discussion with people who were involved with the Decoto Pipe Yard reconditioning program" during that time.³⁸³ Consequently, adopting PG&E's proposed retention requirement would not provide the audit trail proposed by CPSD, especially since PG&E believes that an explanation of changes "should be maintained so long as the standard practice is in effect, or for a reasonable, defined period of time." As such, while it is not necessary to retain a permanent record of all documents, we find CPSD's proposal to require permanent retention of an audit trail of changes, including cancellation, to be reasonable.

For the reasons discussed above, we adopt recommended Remedy 4.C.17 as follows:

PG&E shall document adoption of, and changes and amendments to policies, standards and procedures within the Gas Operations Organization (or its successor division(s) with responsibility for design, construction, operations, maintenance,

³⁸² CPSD Amended Reply, Appendix A at B-45.

³⁸³ Recordkeeping Exh. PG&E-48 at 2; see also, 4 RT at 498:18 – 499:9.

testing, safety and integrity management of PG&E's natural gas pipeline system). The documentation shall include the reasons for adoption, amendment or cancellation of the policies, standards and procedures. An audit trail of changes shall be maintained, retained for as long as the standard is in effect. If a policy, standard or procedure is cancelled, a copy of the policy, standard or procedure in effect at the time of cancellation, as well as the reason for its cancellation, shall be preserved permanently, taking heed of potential changes in technology that may render documents unreadable in the future.

7.1.3.12. Salvaged and Reused Pipe

CPSD proposed remedies 4.C.18 and 4.C.19 address the need to identify and track salvaged and reused pipe in PG&E's gas transmission pipeline system.³⁸⁴ PG&E agrees with recommendation 4.C.18 and states that it will identify salvaged and reused pipes through its MAOP Validation Effort. PG&E opposes recommendation 4.C.19 on the grounds that it is duplicative of recommendation 4.C.18.³⁸⁵ Similarly, PG&E states that TURN recommended Remedy 1 is duplicative of CPSD proposed remedies 4.C.18 and 4.C.19.³⁸⁶

CPSD opposes PG&E's proposal to limit the methodology for identifying salvaged and reused pipe to PG&E's MAOP validation effort. It further argues that recommendation 4.C.19 is not duplicative of recommendation 4.C.18. CPSD states that proposed recommendation 4.C.18 concerns identification of salvaged and reused pipe in its system and corrections to GIS.³⁸⁷ In contrast,

³⁸⁴ CPSD Opening Brief at 67.

³⁸⁵ CPSD Amended Reply, Appendix A at B-47.

³⁸⁶ *CPSD Amended Reply*, Appendix A at B-58.

³⁸⁷ CPSD Amended Reply, Appendix A at B-47.

recommendation 4.C.19 would require PG&E to create and maintain a separate system to track salvaged and reused pipe in its gas transmission system.³⁸⁸

We agree with CPSD that proposed remedies 4.C.18 and 4.C.19 impose different requirements on PG&E. Recommendation 4.C.18 addresses the fact that PG&E considers the date of pipe installation as the date of manufacture in the GIS system. As such, GIS cannot be used to identify salvaged or reused pipe. Since GIS is a source of data for PG&E's integrity management program, this would mean that PG&E's ability to assess the integrity of its pipeline system and effectively manage risk is compromised, resulting in safety risks to the public.

In contrast, recommended Remedy 4.C.19 addresses the fact that PG&E does not have a means to track where salvaged and reused pipe has been reinstalled in its pipeline system. This system would provide different information than what is currently contained in GIS. We agree with PG&E that TURN recommended Remedy 1 duplicates CPSD recommended Remedy 4.C.19. However, we find TURN's recommendation better addresses the violations found. We therefore reject CPSD recommended Remedy 4.C.19 and adopt TURN recommended Remedy 1 instead. We modify the first sentence of TURN recommended Remedy 1 to read "PG&E shall create a centralized database to track where..." We further modify TURN recommended Remedy 1 to add the following sentence at the end: "PG&E will maintain this database so long as there are sections of reused pipe in the PG&E operating gas transmission pipeline system."

³⁸⁸ CPSD Amended Reply, Appendix A at B-47.

Based on the above, we adopt CPSD recommended Remedy 4.C.18 as

follows:

PG&E will identify each section of pipe that has been salvaged and reused within the PG&E gas transmission system. For each section of pipe identified, PG&E will change the installed date in its GIS and its IM model to the date the pipe was originally installed in the PG&E pipeline system.

We adopt TURN recommended Remedy 1, as modified:

PG&E shall create a centralized database to track where it has placed re- used or otherwise reconditioned pipe in its system. For each such segment, the database should show the date of manufacture of the segment, if known. If this date is unknown, the database should so indicate, to ensure that the segment is given appropriate attention in integrity management. The database shall include a link to reliable and readily accessible documentation showing, for each re-used or otherwise reconditioned pipe segment, that all steps necessary to prepare the segment for installation were performed and inspected. If such documentation is unavailable, the centralized documentation shall so indicate so that the segment will be given appropriate attention in integrity management. PG&E will maintain this database so long as there are sections of reused pipe in the PG&E operating gas transmission pipeline system.

7.1.3.13. Pricewaterhouse Coopers Audit Report Recommendations

CPSD recommended Remedy 4.C.20 requires PG&E to "implement the recommendations included in the final Pricewaterhouse Coopers (PwC) audit report. (TURN Exhibit 16, Appendix B)."³⁸⁹ PG&E opposes this recommendation

³⁸⁹ CPSD Opening Brief at 67.

and states that it has already addressed the PwC recommendations in Exh. PG&E-61 of the Recordkeeping OII.³⁹⁰

CPSD asserts that its proposed remedy should stand because PG&E does not commit that it will implement all of the PwC recommendations, but "merely states that many PwC recommendations are under review or under consideration."³⁹¹ We agree with CPSD that PG&E's statement does not constitute a commitment to implement all of the PwC recommendations, as it gives PG&E discretion over which recommendations should be implemented.

The PwC recommendations are complementary or supplement the remedies proposed by CPSD. We therefore find that these recommendations should be implemented and adopt recommended Remedy 4.C.20.

7.1.3.14. Audits

CPSD proposed remedies 4.C.21 and 4.C.22 address CPSD's audit of PG&E's recordkeeping practices and PG&E's correction of any deficiencies found.³⁹² PG&E proposes that these audits be performed in accordance with the Government Auditing Standards. It further opposes CPSD's proposal that audits be performed annually for a minimum of ten years after the final decision is issued in the Recordkeeping OII.³⁹³

CPSD opposes both of PG&E's proposals. We have already considered and rejected PG&E's proposal to use Government Auditing Standards issued by the U.S. Government Accountability Office in Section 7.1.1.

³⁹⁰ CPSD Amended Reply, Appendix A at B-47.

³⁹¹ CPSD Amended Reply, Appendix A at B-47.

³⁹² CPSD Opening Brief at 67.

³⁹³ CPSD Amended Reply, Appendix A at B-48 – B-49.

We further reject PG&E's proposal that these audits not be performed annually. PG&E argues that an annual audit would not be "practical or useful" because "[t]he steps necessary for audits to be successful (define audit criteria, conduct and audit, discuss findings with PG&E, issue report, PG&E to implement corrective actions in response to findings, allow time for implementation) will take longer than a year."³⁹⁴ However, many of the actions listed are the same as those performed in annual financial audits. Furthermore, as provided in recommended Remedy 4.C.22, CPSD does not anticipate that all deficiencies will be corrected and implemented within a year. Finally, it is up to CPSD to determine whether annual audits are useful, not PG&E.

We therefore adopt proposed remedies 4.C.21 and 4.C.22 as follows:

21 Using independent auditors, CPSD will undertake audits of PG&E's recordkeeping practices within the Gas Transmission Division on an annual basis for a minimum of ten years after the final decision is issued in I.11-02-016.

22 PG&E will correct deficiencies in recordkeeping discovered as a result of each CPSD audit and will report to CPSD when such deficiencies have been corrected.

7.1.4. Recommended Remedies in I.11-11-009 (Class Location OII)

CPSD proposed 13 recommended remedies in the Class Location OII, all of which were contained in CPSD's Investigative Report.³⁹⁵ PG&E did not oppose 7 of these proposed remedies. Additionally, PG&E proposed revisions to 3 of CPSD's recommendations, which CPSD accepted. We therefore adopt the following remedies:

³⁹⁴ CPSD Amended Reply, Appendix A at B-48.

³⁹⁵ Class Location OII, Exh. CPSD-1, Attachment 17.

4.D.1 Systems: Utilize industry-standard software for electronic storage of class location information. Devise a process to capture new PG&E service hook-ups especially in proximity to transmission lines and incorporate into the class location analysis.

4.D.3 Procedure 6.3 (3) should be rewritten as "List all new observations regardless if it is believed that the ground crew has already investigated the observation."

4.D.4 TD-4412-07 section 6.1 (2) should include specific language for the pilot to recommended increased patrolling to the Aerial Patrol Program Manager.

4.D.5 Ensure that the Report of New Construction forms are completed.

4.D.6 Increase the duties of the Aerial Patrol Program Manager (APPM) to include oversight and review of the quality and accuracy of patrol reports.

4.D.7 Create a detailed procedures manual containing the APPM's duties to ensure quality control of aerial patrol responsibilities.

4.D.8 Training: Utilize varied training exams for patrolling.

4.D.11 Audits the patrolling process should include a comparison of new construction observations with new gas/electrical hook ups near the line to ensure that new construction has not been missed.

4.D.12 A new item "All Sections of Document Completed" should be added to the audit checklist when reviewing Reports of New Construction.

4.D.13 Audits should make sure that copies of completed Reports of New Construction are being provided to local supervisors as required by standard procedure TD-4127P-01 section 3.8 (5).

7.1.4.1. Patrol Standards

CPSD recommended Remedy 4.D.2 states:

<u>Procedures</u>: Update procedure TD 4412-07 6.2 (4) to require written confirmation to patrollers that follow up has been performed on all new construction that the patroller has previously observed and documented. The same change should be made to Attachment 7 Item 5 of TD 4412-07, *Aerial Patrolling Process Instructions*.³⁹⁶

PG&E states that it agrees with the essence of CPSD's recommendation and is in the process of revising its patrol standard to ensure that all patrol observations are properly addressed. Additionally, PG&E states it will use its SAP software to schedule all pipeline patrols and necessary corrective actions.³⁹⁷ PG&E proposes various changes to this recommendation to clarify the proposed operational commitment for purposes of implementation. Among other things, PG&E proposes deletion of reference to TD 4412-07 and requiring confirmation to Patrol Supervisors, and allowing confirmation to be verbal or written.³⁹⁸

CPSD agrees with some of PG&E's edits, but opposes other. It proposes further edits to the proposed remedy so that it would state:

Procedures: Update procedures, patrolling process instructions, and related OQ training to require written confirmation to Patrol Supervisors that follow up has been performed on all new construction that the patroller has previously observed and documented.³⁹⁹

³⁹⁶ CPSD Opening Brief at 68.

³⁹⁷ CPSD Amended Reply, Appendix A at B-51.

³⁹⁸ *CPSD Amended Reply*, Appendix A at B-51.

³⁹⁹ CPSD Amended Reply, Appendix A at B-51.

We find CPSD's revised recommended Remedy 4.D.2 reasonable and accept it. We believe written confirmation will provide assurance that new construction has been considered when evaluating whether to revise class designations. However, we replace the acronym "OQ" to "Operator Qualification" for further clarity.

7.1.4.2. Patrolling Exams

CPSD recommended Remedy 4.D.9 would require training exams for patrolling to "include questions with greater detail and complexity than the current exam."⁴⁰⁰ PG&E states that it is evaluating a specialized training program and testing regiment utilizing enhanced training exams for patrolling personnel. It proposes that this recommendation be revised to read: "Training materials and associated tests will be reviewed and updated to enhance employee competency, use aerial photos as exam exhibits where pilots indicate which structures are approximately 660 feet from the right of way and would require reporting. Training materials and associated tests should be reviewed and updated to enhance employee competency, utilize aerial photos and other aids, and reflect field conditions to approximate buildings' key distances from lines."⁴⁰¹

CPSD opposes PG&E's proposed deletion. It states that patrolling exams currently contain "fairly simple questions which require only a rudimentary understanding of class locations."⁴⁰² Therefore it believes the exams should contain greater detail and complexity. CPSD therefore proposes to retain the

⁴⁰⁰ CPSD Opening Brief at 69.

⁴⁰¹ CPSD Amended Reply, Appendix A at B-55.

⁴⁰² CPSD Amended Reply, Appendix A at B-55.

language in its originally-proposed remedy, but include PG&E's additional language. Further, in response to PG&E's assertion that CSB recommended Remedy V.D.2.g is duplicative, CPSD proposes to add the following language from VD.2.g to the proposed remedy: "and shall use aerial photos as exam exhibits where pilots indicate which structures are approximately 600 feet from the right of way and would require exploring."⁴⁰³

We concur with CPSD that PG&E's training exams for patrolling should contain greater detail and complexity to ensure that there is more than a rudimentary understanding of class location. We therefore adopt CPSD's proposed revised remedy.

7.1.4.3. Aerial Patrol Pilot Training

CPSD recommended Remedy 4.D.10 states:

PG&E should consider pilot training using aerial photographs taken at an altitude of 750 feet, which replicates what the pilots see on patrol, and include a number of structures both within and outside of the 660 foot standard. Use the photos as exam exhibits where the pilots indicate which structures are approximately 660 feet from the right of way and would require reporting. Training should also include a WDA in the exhibit as well.⁴⁰⁴

PG&E agrees with CPSD's proposed remedy. However, it proposes to delete the use of aerial photographs taken at an altitude of 750 feet and replace it with "photographs, video or other aids to reflect expected views to be seen from typical patrol altitudes."⁴⁰⁵

⁴⁰³ CPSD Amended Reply, Appendix A at B-55.

⁴⁰⁴ CPSD Opening Brief at 69.

⁴⁰⁵ *CPSD Amended Reply*, Appendix A at B-56.

CPSD does not oppose the language proposed by PG&E. However, it opposes proposed deletion of aerial photographs taken at an altitude of 750 feet. It believes that "PG&E employees may gain a better understanding of the structures and PG&E's system by using this additional source of information."⁴⁰⁶

We concur with CPSD that the Aerial Pilot Training Program should include photographs that replicate what pilots would see on patrol. Accordingly, we adopt CPSD's revised proposed remedy which states:

Improve Aerial Patrol Pilot training. PG&E shall consider pilot training using aerial photographs taken at an altitude of 750 feet, which replicates what the pilots see on patrol, and include a number of structures both within and outside of the 660 foot standard. Use the photos as exam exhibits where the pilots indicate which structures are approximately 660 feet from the right of way and would require reporting. Training shall also include a Well-Defined Area (WDA) in the exhibit as well. PG&E shall also consider using in its training photographs, video or other aids to reflect expected views to be seen from typical patrol altitudes.

7.2. Intervenors' Proposed Remedies

In addition to the remedies proposed by CPSD, CSB has proposed 6 additional remedies (some with multiple sub-parts), TURN has proposed 4 additional remedies and DRA has proposed 2 additional remedies. We have addressed the following proposed remedies in our discussion of CPSD's proposed remedies:

- 1. CSB recommended Remedy V.D.2.a Incorporated into CPSD adopted Remedy 23 for I.12-01-007.
- 2. CSB recommended Remedy V.D.2.c Incorporated into CPSD adopted remedy 4 for I.11-02-016.

⁴⁰⁶ CPSD Amended Reply, Appendix A at B-56.

- 3. CSB recommended Remedy V.D.2.d Incorporated into CPSD adopted remedy 4 for I.11-02-016.
- 4. CSB recommended Remedy V.D.2.e Incorporated into CPSD adopted remedy 4 for I.11-02-016.
- 5. CSB recommended Remedy V.D.2.f Incorporated into CPSD adopted remedy 10 for I.11-11-009.
- 6. TURN recommended Remedy 1 Adopted in lieu of CPSD proposed remedy 19 in I.11-02-016.
- 7. TURN recommended Remedy 2A Incorporated into CPSD adopted remedy 4 for I.12-01-007.

The remainder of this section addresses all remaining proposed remedies.

7.2.1. California Pipeline Safety Trust

CSB recommended Remedy V.B requests that the Commission direct PG&E to provide an endowment of \$5 million per year over a minimum of 20 years to fund a "California Pipeline Safety Trust" (Pipeline Trust).⁴⁰⁷ CSB states that the purpose of the Pipeline Trust would be to serve as an independent, pipeline safety organization that would provide "proper oversight over the implementation, not only of PG&E's PSEP, but the other equitable remedies the Commission imposes in connection with the Line 132 Investigatory Proceedings."⁴⁰⁸ Additionally, the Pipeline Trust would:

> • Ensure that California citizens and emergency responders are represented in policymaking, ratemaking and investigatory proceedings that bear on natural gas safety matters before the Commission;

⁴⁰⁷ CSB Opening Brief at 41 – 42.

⁴⁰⁸ *CSB Opening Brief* at **42 – 43**.
- Promote a regional pipeline system in which technology, policy, and practice together provide the safest possible means of transporting gas across California; and
- Promote independent scrutiny of natural gas pipeline investment, maintenance and operations.⁴⁰⁹

CSB argues that the Pipeline Trust is necessary to establish a long-term partnership between local communicates, government and industry to improve pipeline safety; increase accountability for intrastate pipeline safety, and; increase awareness of pipeline safety.⁴¹⁰ It further proposes that PG&E be allowed to seek contribution from other regulated pipeline operators to fund the Pipeline Trust. Additionally, CSB contends that the Pipeline Trust "will serve a role not currently filled by Interveners that regularly appear before the Commission" and "there is not one Intervener in these historic and unprecedented proceedings that advocates solely for public safety."⁴¹¹

PG&E opposes this recommendation. It contends that "any penalty should be directed toward improving pipeline safety" and dedicating any portion of a penalty "to fund an advocacy organization will not address the more immediate infrastructure concerns at the center of these proceedings."⁴¹² PG&E therefore believes that in light of the cost of already-identified pipeline safety projects, it would be an inappropriate use of funds.

⁴⁰⁹ CSB Opening Brief at 43.

⁴¹⁰ CSB Opening Brief at 43.

⁴¹¹ City of San Bruno's Rebuttal Brief in Response to the Amended Reply Brief of the Consumer Protection and Safety Division on Fines and Remedies and Pacific Gas and Electric's Response to CPSD's Amended Reply Brief on Fines and Remedies, filed August 28, 2013, at 10.

⁴¹² *PG&E Remedies Brief* at 97.

CSB correctly points out that there is no safety/advocacy counterpart to CPSD.⁴¹³ However, while CSB advocates for the Pipeline Trust, it has provided no specifics on how the Pipeline Trust would be organized or why it needs to be funded by PG&E over 20 years. We note that CSB envisions the Pipeline Trust intervening in Commission proceedings. Under those circumstances, the Pipeline Trust could be subject to the requirements for an intervenor pursuant to Pub. Util. Code § 1801 et seq.

While we do not dispute that such an organization could provide an unique voice and perspective in Commission proceedings, we do not find it appropriate to require PG&E shareholders to fund this work. Therefore, CSB's proposed remedy is rejected.

7.2.2. Independent Monitor

CSB recommended Remedy V.C requests that the Commission direct PG&E shareholders to pay for an Independent Monitor and necessary consultants to evaluate and review PG&E's compliance with the *PSEP Decision*, and any fines and remedies ordered in this decision.⁴¹⁴ DRA makes a similar proposal.⁴¹⁵ Both TURN and CCSF support the proposal for an independent third-party monitor.⁴¹⁶ Additionally, TURN proposes the following specific remedies regarding audits to be performed:

2B With respect to the MAOP Validation Project, PG&E should pay for the costs of a qualified independent auditor, retained by

⁴¹³ *Rebuttal Brief of the City of San Bruno Concerning the Fines and Remedies to be Imposed on Pacific Gas and Electric Company, filed June 7, 2013, at 24.*

⁴¹⁴ CSB Opening Brief at 43.

⁴¹⁵ DRA Opening Brief at 38 – 39.

⁴¹⁶ TURN Opening Brief at 49; CCSF Opening Brief at 17.

the Commission, to: (a) audit PG&E's MAOP Validation results for accuracy, reliability, and compliance with the requirements of D.11-06-017, and (b) to prepare a full report to the Commission and available to interested parties of its conclusions and recommendations for remediation of any observed deficiencies.

With respect to Project Mariner, PG&E should pay for the costs of a qualified independent auditor, retained by the Commission, to (a) examine the new systems developed in Project Mariner, including observations of the systems in operation, to ensure that they result in accurate, reliable, and accessible pipeline data that meets all safety operational needs, and (b) to prepare a report to the Commission and available to interested parties of its conclusions and recommendations for remediation of any observed deficiencies.⁴¹⁷

Noting that "CPSD is the Commission's staff responsible for safety enforcement," PG&E opposes this proposed remedy.⁴¹⁸ PG&E states that it "recognizes that CPSD's resources are limited and that adding substantial management and oversight obligations to its existing duties could outstrip available resources."⁴¹⁹ PG&E proposes that instead of creating an independent monitor, the Commission should provide CPSD with additional resources by ordering that a portion of the penalty in this proceeding be used to fund consultants retained to assist CPSD in managing and overseeing PSEP activities.⁴²⁰ This would continue a practice that has been followed for two years

⁴¹⁷ TURN Opening Brief at 49.

⁴¹⁸ *PG&E Remedies Brief* at 95-96, Appendix B at B-41.

⁴¹⁹ PG & E Remedies Brief at 96.

⁴²⁰ PG & E Remedies Brief at 96.

whereby such consultants would be identified, hired, and directed by CPSD but funded by PG&E.⁴²¹

CSB and DRA discuss their proposals for an independent monitor and the rationales therefore at length in their briefs.⁴²² However, the essence of their argument is that an independent monitor is required because CPSD is not positioned to adequately fulfill its regulatory role in overseeing the safety of PG&E's natural gas safety practices and operations, including in particular the company's implementation of PSEP and its compliance with the remedies ordered in these investigation proceedings. For evidence of this proposition, DRA points to the findings of the Independent Review Panel (IRP) regarding the cultures of the Commission as well as PG&E.⁴²³ DRA also points to the NTSB Report's finding that the Commission's "failure to detect the inadequacies of PG&E's pipeline integrity management program" contributed to the San Bruno explosion.⁴²⁴ DRA goes on to note the NTSB's finding that the Commission is unable to effectively evaluate and assess the integrity of PG&E's pipeline system because neither PG&E nor the Commission has incorporated the use of effective and meaningful metric as part of their performance-based pipeline safety management programs.⁴²⁵ CSB similarly notes the IRP finding that CPSD lacks

⁴²¹ *PG&E Remedies Brief* at 96.

⁴²² CSB Opening Brief at 43-49; DRA Opening Brief at 36-40; CSB Rebuttal Brief, filed June 7, 2013, at 21-24; DRA Rebuttal Brief, filed June 7, 2013, at 19; CSB Rebuttal Brief in Response to Amended Reply Brief of CPSD, filed August 28, 2013, at 7-9.

⁴²³ *DRA Opening Brief* at 37-38, citing the IRP Report at 8 and 18-22. The IRP Report is San Bruno Exh. CPSD-10.

⁴²⁴ *DRA Opening Brief* at 38, citing the NTSB Report at xii. The NTSB Report is San Bruno Exh. CPSD-9.

⁴²⁵ DRA Opening Brief at 38, citing the NTSB Report at 126, Finding 25.

adequate resources⁴²⁶ and the NTSB finding that an ineffective enforcement posture on the part of CPSD allowed PG&E's organizational failures to continue for decades.⁴²⁷

The evidence from the IRP and NTSB reports shows that in the years leading to the San Bruno disaster, the Commission, including CPSD, did not meet all reasonable expectations for its oversight of PG&E's gas transmission safety. However, it does not follow from evidence of past shortcomings that CPSD cannot or will not fulfill its mission if provided with adequate resources. In particular, there is no record evidence that CPSD is stuck in the culture of the past. Moreover, the Commission and CPSD are designated by law as the exclusive California regulator of the safety of PG&E's natural gas transmission system facilities, operations and practices. The Commission's safety jurisdiction cannot be delegated, and an independent monitor established to augment CPSD's role is no substitute for, and does not obviate the need for, a properly resourced, trained, and tasked CPSD.

We also find shortcomings in the current proposals for an independent monitor: Parties have pointed to the use of independent monitors elsewhere as examples that might be followed here, such as the independent monitors established in settlements of the BP oil spill in Alaska in 2006, the 1999 rupture of a Shell and Olympic Oil pipeline, and the 2000 Carlsbad accident. However, those were settled matters where the party to be monitored consented to be monitored. Moreover, parties have not pointed to evidence of the effectiveness, or lack thereof, of such independent monitor programs or what the costs were or

⁴²⁶ *CSB Opening Brief* at 44-45, citing the IRP Report at 5.

⁴²⁷ *CSB Opening Brief* at 45, citing the NTSB Report at 122.

would be for an independent monitor here. Further, no party has provided adequate information that would allow us to adopt an independent monitor program without further consideration. DRA acknowledges this by proposing further proceedings in the form of a comment process to implement its proposal.⁴²⁸

Rather than establish an independent monitor program to address the resource constraints and organizational issues identified by the IRP and the NTSB, the more appropriate course is to ensure that CPSD has adequate resources to oversee compliance with the adopted remedies and to oversee PSEP implementation. Adopted Remedy 1 for all three OIIs directs PG&E to reimburse CPSD for the costs of contracts to retain independent experts chosen by CPSD for verification audits and inspections to ensure compliance with other remedies. We clarify here that this includes ensuring compliance with the *PSEP Decision* and all remedies ordered in this decision, including CPSD's costs for hiring qualified independent auditors to audit and issue reports for both PG&E's MAOP Validation results and Project Mariner systems as proposed by TURN. If CPSD determines that it needs the services of outside consultants to develop additional capabilities to evaluate and assess the integrity of PG&E's pipeline system through the use of meaningful metrics, then the costs of such consultants would fall within the scope of this remedy.

We note that while the *PSEP Decision* provided a funding mechanism for carrying out the directives in that decision subject to balancing account treatment for recovery from ratepayers,⁴²⁹ the directives in this decision are remedies in

⁴²⁸ DRA Opening Brief at 39.

⁴²⁹ *PSEP Decision*, Ordering Paragraph 9 at 128.

consideration of violations of gas safety laws by PG&E. Accordingly, the reimbursement costs that PG&E incurs pursuant to this order are not eligible for recovery from ratepayers. The PSEP Decision capped the reimbursement obligation in that decision at \$15,000,000.⁴³⁰ At this time we will cap the reimbursement penalty ordered by this remedy at \$30,000,000. If CPSD determines that additional funding is required to carry out this remedy, it may file a petition for modification of this decision seeking additional reimbursement obligation on the part of PG&E.

Finally, we direct CPSD to present a proposal to the Commissioners within 60 days of the effective date of this decision to perform the MAOP Validation and Project Mariner audits, and the timing for such audits to occur.

7.2.3. Peninsula Emergency Response Fund

CSB recommended Remedy V.D.1 requests that the Commission direct PG&E shareholders to pay \$150 million over three fiscal years in equal installments that would be placed in a trust for a newly established Peninsula Emergency Response Fund (Response Fund).⁴³¹ CSB states that the Response Fund would assist cities on the Peninsula in San Mateo County and focus on enhancing the Peninsula's emergency preparedness and response. CSB further proposes that the Response Fund provide funding for certain fire, emergency response, police or sheriff buildings, facilities, and/or equipment.

Similar to its arguments opposing the Pipeline Trust, PG&E does not believe it is appropriate to designate a portion of penalty funds for the Response Fund, since the proposed use of these amounts "will neither increase pipeline

⁴³⁰ *PSEP Decision*, Ordering Paragraph 9 at 128.

⁴³¹ CSB Opening Brief at 50.

safety nor have an impact outside a limited area."⁴³² Additionally, PG&E notes that it has already paid \$70 million to establish a non-profit entity directed by the City of San Bruno, and an additional \$50 million to a trust for the benefit of the City.

While the CSB was directly impacted by the September 9, 2010 explosion and fire, most of the violations found in these proceedings affect ratepayers and residents throughout PG&E's service territory. San Bruno has not provided sufficient justification why a fund should be established solely to assist cities on the Peninsula in San Mateo County. In light of the impact of this remedy on a limited area, we reject CSB's proposed remedy.

7.2.4. Training for Emergencies

CSB recommended Remedy V.D.2.b states that PG&E should

Provide training to its Gas Service Representatives and Gas Control Operators to ensure that they coordinate effectively with emergency responders, follow PG&E's own internal procedures when responding to emergencies, and each GSR Gas Control Operators shall be trained and able to manually shut off valves. PG&E shall also audit its GSRs and Gas Control Operators annually to ensure that they are properly trained.⁴³³

PG&E agrees with this proposed remedy except that it contends that annual auditing to ensure proper training is impractical and unnecessary.⁴³⁴ PG&E also proposes clarifying wording changes so that the remedy reads as follows:

⁴³² *PG&E Remedies Brief* at 97.

⁴³³ CSB Opening Brief at 51.

⁴³⁴ *PG&E Remedies Brief,* Appendix B at B-42.

PG&E shall provide training to its Gas Service Representatives and Gas Control Operators to ensure that they coordinate effectively with emergency responders, follow PG&E's own internal procedures when responding to emergencies, and each GSR under Gas Control Operators' direction should be trained and able to manually shut off emergency shutdown zone valves. PG&E should also audit its GSRs and Gas Control Operators to ensure they are properly trained.⁴³⁵

We are not persuaded that annual auditing is necessary to ensure that

GSRs and Gas Control Operators are properly trained. Accordingly, we adopt

this remedy with the revisions proposed by PG&E.

7.2.5. Formal Agreement with Agencies in PG&E's Territory

CSB recommended Remedy V.D.3 requests the Commission

require PG&E to formalize its emergency response role and disclosure obligation with each city, county and fire district in its service territory either through a memorandum of understanding (MOU) or by reforming PG&E's franchise agreements to make them conform to the public interest in protecting property used by the franchisee and responding to threats or catastrophes quickly and efficiently.⁴³⁶

CSB maintains that this remedy is necessary because "[1]ocal governments cannot trust PG&E to do what's necessary to protect its customers."⁴³⁷ It proposes that this formal agreement "would allow local communities to require PG&E to provide them with the information and support they need to protect the

⁴³⁵ *PG&E Remedies Brief,* Appendix B at B-42.

⁴³⁶ CSB Opening Brief at 52.

⁴³⁷ CSB Opening Brief at 52.

public welfare and effectively respond in an emergency."⁴³⁸ This agreement would also give local communities the option to specify PG&E's emergency response role and obligations, so that failure to meet these obligations would be considered a breach of contract, and hold PG&E strictly liable for any pipe or facility failure regardless of cause.⁴³⁹

PG&E opposes this recommendation. It argues that CSB's proposal "could impose through contract broad, additional quasi-regulatory mandates and potentially unlimited cost exposures that would fundamentally change the utility-ratepayer relationship, to the detriment of both."⁴⁴⁰ "Shifting the regulatory balance to place additional, poorly-defined liabilities onto a utility, as San Bruno's proposal would do, is contrary to the public interest and would inevitably result in adverse consequences to both the utility and all its ratepayers."⁴⁴¹ Finally, PG&E maintains that any effort by the Commission to modify PG&E's contractual franchise agreements with local governments would be in violation of the Contract Cause.⁴⁴²

We agree with CSB that PG&E must formalize its emergency response and disclosure obligations with each and every city, county and fire district in its service territory. In *San Bruno Violations Decision*, we found that PG&E had violated 49 CFR 192.615(a)(8) for failing to notify the appropriate first responders

⁴³⁸ CSB Opening Brief at 53.

⁴³⁹ CSB Opening Brief at 53-54.

⁴⁴⁰ PG&E Remedies Brief at 98.

⁴⁴¹ *PG&E Remedies Brief* at 98.

⁴⁴² *PG&E Remedies Brief* at 98-99.

of an emergency and coordinate with them.⁴⁴³ Further, we had found a violation of 49 CFR 192.615(a)(2) for failing to establish and maintain adequate means of communication with the appropriate fire, police and other public officials during the San Bruno explosion and fire.⁴⁴⁴

Many of the reasons identified by CSB for adopting this recommendation have already been addressed in remedies proposed by CPSD.⁴⁴⁵ However, these remedies do not require PG&E to formalize its emergency response and disclosure obligations to cities, counties and fire districts. We agree with CSB that these obligations should be provided to cities, counties and fire districts in writing. However, we do not agree that this should be achieved through a memorandum of understanding or by modifying existing franchise agreements. As CSB notes, PG&E's Emergency Plan already contains a section for "external mutual assistance agreements."⁴⁴⁶ Enforcement of these mutual assistance agreements lies with the Commission, not the individual cities, counties or fire districts. We therefore direct PG&E to enter into such agreements with the individual cities, counties or fire districts by no later than December 2015. These mutual assistance agreements shall be maintained in the appropriate Division Emergency Plan.

⁴⁴³ San Bruno Violations Decision, COL 44 (Violation 27).

⁴⁴⁴ San Bruno Violations Decision, COL 44 (Violation 29).

⁴⁴⁵ See CPSD adopted Remedies 4.B.25, 4.B.26 and 4.B.30.

⁴⁴⁶ CSB Reply Brief at 29.

7.2.6. Automatic Shutoff Valve Pilot Program

CSB proposed remedy V.E requests the Commission direct PG&E to install automated valves with automatic capabilities (ASVs)⁴⁴⁷ in all HCAs and undertake an ASV pilot program within six months of the issuance of this decision.⁴⁴⁸ CSB proposes that the pilot program should be specifically calculated to fully resolve any remaining policy and technological issues associated with deployment of ASV devices and pave the way for ASVs or their true equivalent (i.e., not remote control valves) in terms of response time capability to be deployed by PG&E and operational in all HCAs in the utility's service territory on an expedited basis.⁴⁴⁹

PG&E supports automated valves in its gas transmission system and notes that its PSEP includes the installation of 300 automated valves, but it opposes this recommendation, noting that automated safety valve implementation is addressed in the PSEP in R.11-02-019.⁴⁵⁰

A remote control valve (RCV) can be operated remotely from a control room distant from the actual valve, whereas an ASV is designed to stop the flow of gas, without human intervention, when established criteria are met.⁴⁵¹ The main benefit of an ASV or RCV over a manually operated valve is that a rupture may be isolated sooner, limiting the amount of natural gas release after a rupture

⁴⁴⁷ Parties have also used the term "automated safety valve" and "automatic shutoff valve" when referring to ASVs.

⁴⁴⁸ CSB Opening Brief at 54.

⁴⁴⁹ CSB Opening Brief at 54-55.

⁴⁵⁰ *PG&E Remedies Brief* at 99, Appendix B at B-44.

⁴⁵¹ San Bruno Exh. CPSD-1 at 104.

has occurred.⁴⁵² Major concerns regarding ASVs are that they may trigger and close when closure criteria are met but no emergency condition exists, although newer ASVs have the ability to send an alarm before tripping and closing, giving the operator an option to review operating data before deciding whether to allow or cancel imminent valve closure.⁴⁵³ The vast majority of injuries, fatalities, and property damage associated with a catastrophic pipeline incident occur within the first few minutes of the event, well before activation of ASVs or RCVs is possible.⁴⁵⁴

In approving PG&E's PSEP, including the company's plan to replace, automate, and upgrade 228 valves in Phase 1 of the Implementation Plan, the Commission stated that

We share the parties' objective of reliable and automatic shut-off valves. We direct PG&E to continue its review of new designs and operational options to allow for expanded use of automated valves. In its next rate case, PG&E must submit an updated showing of then-current best practices within the natural gas pipeline industry for automated shut-off valves. PG&E must also continue to improve its gas system control room operation due to the critical role it plays in addressing a rupture or functioning as the manual override on automatic valves. PG&E must avoid unnecessarily complicating natural gas system operations with unpredictable technology, and at the same time develop knowledgeable and fast-acting human control to enhance system safety. The Independent Panel recognized that remote controlled and/or automated shut-off valves are a major issue for the pipeline industry, with the safety and reliability trade-offs discussed at length in Appendix L to their report. [Footnote

⁴⁵² San Bruno Exh. CPSD-1 at 104.

⁴⁵³ San Bruno Exh. CPSD-1 at 104.

⁴⁵⁴ San Bruno Exh. CPSD-1 at 105.

Omitted.] PG&E should monitor the development of this issue in the pipeline industry. 455

CSB points to evidence that RCVs would not have been as effective as ASVs on September 9, 2010 in San Bruno.⁴⁵⁶ Still, the record evidence in this proceeding shows that there are remaining concerns with ASVs that must be addressed, and it does not provide a basis for us to depart from the plan for PG&E's system going forward that the Commission adopted in D.12-12-030. Accordingly, we do not adopt CSB's proposed remedy for ASVs.

7.2.7. Incentive Program Modifications

Concerned that PG&E's employee incentive program links employee financial reward to shareholder return, CSB requests the Commission direct PG&E to revise its Long-Term Incentive Plan (LTIP) and its Short-Term Incentive Plan (STIP) such that safety is the single largest factor that determines employee financial rewards (proposed remedy V.F.).⁴⁵⁷

PG&E opposes this remedy as duplicative of CPSD recommended Remedy 4.B.33, which we have adopted as discussed in Section 7.2.1.15 above.⁴⁵⁸ PG&E also argues, however, that it is not appropriate to modify the LTIP.⁴⁵⁹

Since CPSD remedy 4.B.33 incorporates PG&E's revised STIP, for which safety performance now accounts for 40% of the score used to determine the total award, this proposed remedy is duplicative with respect to the STIP. However,

⁴⁵⁵ *PSEP Decision* at 76-77 (slip op.).

⁴⁵⁶ CSB Rebuttal Brief at 26-27, citing October 2, 2012 Jt. Hearing Tr. At 200-201.

⁴⁵⁷ CSB Opening Brief at 55.

⁴⁵⁸ *PG&E Remedies Brief,* Appendix B at B-44.

⁴⁵⁹ *PG&E Remedies Brief,* Appendix B at B-44.

CSB's recommendation for the LTIP is not duplicative. Nevertheless, we do not find that CSB has produced or referred us to record evidence that would enable us to make findings in support of modifying PG&E's LTIP. Accordingly, we do not adopt this proposed remedy.

7.2.8. Implementation of NTSB Recommendations

DRA proposes that the Commission "conduct a comprehensive audit of all aspects of PG&E's operations, including control room operations, emergency planning, record-keeping, performance-based risk and integrity management programs and public awareness programs" as recommended by the NTSB in its report on the San Bruno explosion.⁴⁶⁰

DRA's recommendation is directed at the Commission, not PG&E. We agree with the NTSB's recommendation that a comprehensive audit of all aspects of PG&E's operations should be performed. Therefore, we direct CPSD to present a proposal to the Commissioners within 60 days of the effective date of this decision to perform such an audit, and the timing for such audit to occur.

7.2.9. Reimbursement of Litigation Expenses

DRA proposes that the Commission require PG&E shareholders to reimburse TURN, CSB, CCSF, and DRA, for their litigation costs, including expert witness fees.⁴⁶¹ PG&E did not respond to this recommendation.

⁴⁶⁰ DRA Opening Brief at 5, citing National Transportation Safety Board Pipeline Accident Report of Pacific Gas and Electric Company Natural Gas Transmission Pipeline Rupture and Fire, San Bruno, California, September 9, 2010 (NTSB/PAR-11/01), adopted August 30, 2011, at 130.

⁴⁶¹ DRA Opening Brief at 5.

In adopted CPSD Remedy A.2, PG&E agreed that it shareholders would pay the Commission's and CPSD's costs of conducting the Pipeline OIIs. DRA's proposed remedy seeks to expand this to include all Intervenors.

Generally, compensation for participation in Commission proceedings is governed under the Commission's Intervenor Compensation Program.⁴⁶² However, intervenors who are eligible to receive compensation under the program must be a "customer"⁴⁶³ and the compensation award would be funded by utility ratepayers.⁴⁶⁴ Under the Intervenor Compensation Program, only TURN would be eligible to be compensated for its participation in these proceedings. However, we do not find such an outcome to be equitable.

In the San Bruno and Recordkeeping OIIs, we sought participation from interested parties and stated:

The Commission invites interested parties to participate actively in this formal investigation, as it involves safety matters important on a local, state, and national basis. Participation by informed parties can facilitate the Commission reaching a decision that is both informed and fair.⁴⁶⁵

TURN, CSB, CCSF, and DRA have all actively participated in these proceedings and have contributed substantially to our decisions on violations, as well as this decision. Given the nature of these proceedings, we believe it that it is only equitable that all four of these intervenors have the ability to recover their litigation expenses. Further, we do not believe that ratepayers should be

⁴⁶² See, Pub. Util. Code § 1801 et seq.

⁴⁶³ See, Pub. Util. Code § 1802(b) (defining "customer").

⁴⁶⁴ Pub. Util. Code § 1807.

⁴⁶⁵ Recordkeeping OII at 9; see also, San Bruno OII at 9-10.

responsible for any portion of these litigation expenses. Therefore, pursuant to our authority under Pub. Util. Code § 701, we find that PG&E shareholders should be ordered to reimburse TURN, CSB, CCSF, and DRA for their reasonably-incurred litigation expenses, including the expert witness fees, in connection with these three proceedings.

Pub. Util. Code § 701 states that the Commission "may do all things, whether specifically designated in this part or in addition thereto, which are necessary and convenient in the exercise of such power and jurisdiction." Although the Commission's authority under this statute is to be liberally construed, these additional powers and jurisdiction "must be cognate and germane to the regulation of public utilities."⁴⁶⁶ There is no doubt that ensuring the provision of safe utility services is cognate and germane to the regulation of public utilities. To that end, Intervenors have provided testimony and evidence that assists us in reaching our decisions in these three proceedings.

Accordingly, we adopt DRA's recommendation and direct PG&E shareholders to reimburse CSB, DRA, TURN and CCSF for all reasonably-incurred litigation expenses, including the expert witness fees, in connection with these three proceedings. This would include expenses incurred from the initiation of the proceedings through the effective date of this decision.

We further adopt the follow guidelines to ensure that the reimbursement requests are properly considered:

CSB, DRA, TURN and CCSF may seek reimbursement in accordance with the procedural timelines set forth in Rules 17.3 and 17.4 of the Commission's Rules of Practice and Procedure, as follows:

⁴⁶⁶ CLAM 25 Cal. 3d at 305-306 (citation omitted).

- 1. A summary identification of the hours worked each month by each attorney and/or expert witness. No further breakdown, such as among the different investigations, will be required.
- 2. The hourly rates approved by the Commission for payment by PG&E's shareholders shall be established as follows:
 - a. The hourly rates for DRA and CCSF attorneys shall be calculated as the attorney's annual salary divided by 2,080 hours.
 - b. The hourly rate for CSB's attorneys shall be based on the contract between CSB and its attorneys for provision of services for these proceedings.
 - c. The hourly rates for TURN's attorneys shall be based on the hourly rates established for these attorneys in our intervenor compensation program.
 - d. Expert witness fees shall be based on the contract between the intervenor and the expert witness.
 - e CSB, DRA, TURN and CCSF's reimbursement requests shall be decided by decision of the Commission. Within 30 days of any such decision, PG&E shall pay the amount determined by the Commission out of shareholder funds.

8. Compliance Filing

It is likely that some of the remedies adopted here have already been implemented in response to mandates by the National Transportation Safety Board, the Pipeline and Hazardous Materials Safety Administration, the Blue Ribbon Panel or decisions issued in R.11-02-019. It is not our intent to duplicate remedies. Therefore, PG&E shall file a Compliance Filing in these dockets, which:

1. Identifies the remedies ordered in this decision that have already been ordered elsewhere, where that remedy (decision, report,

etc.) was ordered, and PG&E's progress to date in complying with that remedy.

2. Identifies any remedy ordered in this decision that modifies or eliminates any remedies ordered elsewhere.

Further, PG&E shall include a timeframe for completion of each of the remedies adopted in Appendix E of this decision. This Compliance Filing shall be filed within 60 days of the date this decision is issued.

9. Transcript Corrections

PG&E proposes various corrections to the March 4 & 5, 2013 Transcripts.⁴⁶⁷ No parties have opposed PG&E's corrections and they are hereby accepted.

10. Rulings on Motions

As expected from proceedings of this complexity and high level of contention, parties have made numerous requests and filed a large number of motions. Motions have been filed in each individual proceeding, as well as coordinated motions applicable to all three proceedings. The assigned ALJs have issued filed, electronic and oral rulings in response to these motions. This decision confirms all rulings issued in response to the coordinated motions.

On July 28, 2014, CSB filed Motion of the City of San Bruno For An Order To Show Cause Why Pacific Gas And Electric Company Should Not Be Held In Violation of Commission Rule of Practice And Procedure 8.3(b) (Rule Against Ex Parte Communications) and for Sanctions and Fees. In its motion, CSB alleges 41 separate instances where PG&E communicated with Commissioner Peevey concerning the level of the penalty to be imposed in the Pipeline OIIs. On November 10, 2014, CSB filed Motion for Evidentiary Hearing on City of San Bruno's Motion for an

⁴⁶⁷ *PG&E Remedies Brief,* Appendix D.

Order to Show Cause as to Why Pacific Gas and Electric Company Should Not Be Held in Violation of Commission Rule of Practice And Procedure 8.3(b) and for Sanctions and Fees. All the motions were opposed by PG&E. Due to seriousness of the allegations raised by the CSB in these motions, the assigned ALJ shall determine whether further action is warranted.

On October 15, 2014, CPSD filed Motion of the Consumer Protection and Safety Division To Strike Extra-Record Material from Pacific Gas and Electric Company Appeals of Presiding Officers' Decisions (CPSD Motion to Strike). This motion was opposed by PG&E and supported by CSB. CPSD's motion concerns statements made in PG&E's appeals of this Presiding Officer's Decision (POD), the San Bruno POD and the Recordkeeping POD. CPSD contends that in all three of these appeals, PG&E includes references to alleged PG&E shareholder funding to argue that a lower penalty should be imposed.⁴⁶⁸ CPSD argues that this is in direct violation of our June 3, 2013 Ruling. Therefore, CPSD requests that these references be struck from the appeals. We have reviewed the references identified by CPSD in Exhibit F of the Declaration of Harvey Y. Morris in Support of Motion to Strike that was attached to the CPSD Motion to Strike and agree that PG&E has referred to extra-record evidence in its appeals. Moreover, our June 3, 2013 Ruling had ordered PG&E to remove extra-record evidence from its coordinated brief on fines and remedies. PG&E's inclusion of the very same extra-record evidence in its appeals can only be construed as a direct violation of our June 3, 2013 Ruling. Accordingly, we grant the CPSD Motion to Strike and strike from PG&E's appeals of this POD, the San Bruno POD and the Recordkeeping POD the references to extra-record evidence identified by CPSD

⁴⁶⁸ CPSD Motion to Strike at 4.

in Exhibit F of the *Declaration of Harvey Y. Morris in Support of Motion to Strike*. Further, we give no weight to any references to shareholder funding of safety improvements to PG&E's gas transmission pipeline system unless those references are supported by record evidence that has been tested and subject to cross-examination.

CPSD also filed on October 15, 2014 *Motion of the Consumer Protection and Safety Division for an Order to Show Cause as to Why Pacific Gas and Electric Company Should not be Held in Contempt, or Fines Imposed (CPSD OSC Motion).* This motion was opposed by PG&E and supported by San Bruno. CPSD alleges PG&E's inclusion of extra-record evidence regarding alleged PG&E shareholder funding violates a June 3, 2013 Ruling. As discussed above, we agree that PG&E's inclusion of this extra-record evidence in its appeals rises to the level of a violation of our June 3, 2013 Ruling and sanctions should be imposed. Nonetheless, we decline to grant the *CPSD OSC Motion* in this instance.

Our decision to not grant the *CPSD OSC Motion* does not diminish the seriousness of this violation. PG&E's apparent failure to comply with our June 3, 2014 Ruling is a serious violation. However, the Commission has already initiated other enforcement proceedings against PG&E for violations associated with its natural gas pipeline system,⁴⁶⁹ and we will also be considering in this proceeding whether further action should be taken concerning the alleged ex parte communications violations. If further action is taken against PG&E for violations of the Commission's ex parte rules, it could require significant

⁴⁶⁹ See, e.g., Order Instituting Investigation and Order to Show Cause on the Commission's Own Motion into the Operations and Practices of Pacific Gas and Electric Company with respect to Facilities Records for its Natural Gas Distribution System Pipelines (I.14-11-008).

Commission resources and result in further sanctions imposed on PG&E. In light of those considerations, we do not believe that it is prudent in this instance to expend additional Commission resources to pursue this violation, especially since we have ordered the extra-record evidence to be struck from PG&E's appeals.

On November 14, 2014, CSB filed *Motion to Strike Extra-Record Material from Pacific Gas and Electric Company's Response to Appeals and Requests for Review of the Presiding Offices' Decision on Fine and Remedies.* The motion concerns a footnote regarding payments from PG&E to CSB. We agree with CSB that this footnote refers to extra-record evidence and therefore grant the motion and strike Footnote 42 on page 11 of *Pacific Gas and Electric Company's Response to Appeals and Requests for Review of the Presiding Officers' Decision on Fines and Remedies.*

On December 15, 2014, San Bruno filed *City of San Bruno's Motion to Compel Pacific Gas and Electric Company to Respond to Data Request Seeking Production of Documents and to Appoint a Special Discovery Master, or in the Alternative, to Set Aside Submission and Reopen the Record; Declaration of Britt K. Strottman in Support of City of San Bruno's Motion to Compel Pacific Gas and Electric Company to Respond to Data Request Seeking Production of Documents and to Appoint a Special Discovery Master, or in the Alternative, to Set Aside Submission and Reopen the Record; Proposed Ruling Granting Motion of the City of San Bruno to Compel Discovery and Appointing a Special Discovery Master.* This motion, concerning 65,000 email communications between PG&E and the Commission, is essentially the same as a motion filed in Application (A.) 13-12-012. In a January 13, 2015 ALJ Ruling issued in A.13-12-012, CSB's motion to compel was granted in part and denied in part. As such, San Bruno's motion in this proceeding is rendered moot. Unless specifically discussed in this section, all outstanding motions filed in all three proceedings that have not yet been ruled on are hereby denied.

11. Appeals and Requests for Review of POD

CARE filed its appeal of the Presiding Officers' Decision on September 17, 2014.⁴⁷⁰ PG&E, CPSD, CSB and Joint Appellants (TURN, DRA and CCSF) filed appeals on October 2, 2014. Commissioners Florio, Sandoval and Picker each filed a Request for Review on October 2, 2014.⁴⁷¹ CPSD filed its response to CARE's appeal on October 2, 2014. PG&E, CPSD, CSB and Joint Parties filed responses on October 27, 2014.

The grounds of the appeals and requests for review are discussed below. Where noted, the POD has been revised in response to the appeals or requests for review. In all other respects, the appeals and requests for review are denied.

11.1. Number of Violations

11.1.1. Duplicative and Overlapping Violations

11.1.1.1. Alleged Duplication Among Proceedings

PG&E argues that "egregious examples of duplicative violations occur

across the different PODs."472 PG&E claims that such duplication is in

Footnote continued on next page

⁴⁷⁰ CARE's appeal, filed in all three Pipeline OIIs, fails to state specific grounds as to why the POD is unlawful. Further, CARE relies on evidence that is not in the record of any of the OIIs. As such, the arguments raised in CARE's appeal have been accorded little weight. (See, Commission's Rules of Practice and Procedures, Rule 14.4(c).)

⁴⁷¹ On October 15, 2014, Commissioner Florio recused himself from further participation in the Pipeline OIIs. This decision therefore does not address the issues raised in his request for review.

⁴⁷² *PG&E Appeal* at 27. PG&E's reference to "the different PODs" means the *Presiding Officers' Decision on Fines and Remedies to Be Imposed on Pacific Gas and Electric Company for Specific Violations in Connection with the Operation and Practices of its Natural Gas Transmission System Pipelines* (POD) as well as the PODs in I.12-01-007, I.11-02-016, and I.11-11-009 (San Bruno POD,

contravention of "[a] fundamental principle of statutory construction, with roots in due process principles, ... that a statute cannot be interpreted to allow the imposition of 'double penalties for the same conduct.'"⁴⁷³ PG&E goes on to assert that this "fundamental principle" is contravened by the POD's finding of "multiple and overlapping violations of the same statutory and regulatory provisions based on the same conduct and course of conduct."⁴⁷⁴ However, the POD has not imposed multiple violations of the same law for the same conduct. On the contrary, it has considered PG&E's allegations of duplication and overlap of violations, found that certain instances of such duplication or overlap occurred, and removed those violations for purposes of assessing penalties.⁴⁷⁵

In one example of alleged duplication, PG&E claims that the POD relies on findings of deficiencies in its GIS data from both the San Bruno and Recordkeeping OIIs.⁴⁷⁶ PG&E claims this is improper and disagrees with the POD's justification of separate treatment because "the San Bruno violation is found under 49 C.F.R § 192.917(b) while the Records violations are based on § 451."⁴⁷⁷ This example does not uphold PG&E's duplication argument. Even if the same conduct or course of conduct were at issue, we do not accept PG&E's contention that a single course or instance of conduct can only lead to a single

- ⁴⁷⁵ POD at 21-24.
- ⁴⁷⁶ $PG\mathcal{E}E$ Appeal at 28.
- ⁴⁷⁷ *PG&E Appeal* at 28, referring to the POD at 23.

Recordkeeping POD, and Class Location POD, respectively; also referred to collectively as the Violations PODs) (See *PG&E Appeal* at 1, fn 2.)

⁴⁷³ *PG&E Appeal at 27, citing De Anza Santa Cruz Mobile Estates Homeowners Ass'n v. De Anza Cruz Mobile Estates,* 94 Cal. App 4th 890, 912 (2001).

⁴⁷⁴ *PG&E Appeal* at 27.

violation. Violation of each regulation or statute is a separate and distinct offense. Applying PG&E's argument would lead to an absurd result.⁴⁷⁸ Accordingly, PG&E can and should be held responsible for its multiple violations of different laws.

PG&E contends that another example of the POD's improper use of allegedly duplicative violations is its reliance on the Violations PODs' findings of violations related to SMYS values greater than 24,000 psi.⁴⁷⁹ Here, PG&E is referring to San Bruno OII Violation 4, Recordkeeping Violation 21, and Class Location Violation 1.⁴⁸⁰ PG&E argues that "the fact that an assumed value – once assumed, and even if it should not have been – is utilized in various aspects of PG&E's pipeline operations does not form a proper basis for multiple violations

⁴⁷⁸ Consider the following hypothetical: Albert is in a club and takes a speedball (heroin and cocaine). He decides to leave, but he doesn't have a car, because his license has been suspended for a prior drug DUI that he is still on probation for. He steals the car keys of one of his companions and takes their car. As he drives off, Albert hits another car but keeps going until he crashes into a light pole. The police come and arrest him. Albert is charged with: 1) driving with a suspended license (Vehicle Code § 14601); 2) driving under the influence of drugs (Vehicle Code § 23152(e)); 3) being under the influence of a controlled substance (Health and Safety Code § 11550(a)); 4) driving or taking a vehicle that is not his own (Vehicle Code § 10851); 5) hit-and-run (Vehicle Code § 20002); and 6) a probation revocation (and resulting penalties) on his prior drug DUI. Under PG&E's "fundamental principle" theory, Albert could only be charged with one count of a drug DUI, as he really only did one thing wrong (driving while under the influence of drugs). Or, to take PG&E's argument to its logical extreme, the only thing Albert really did wrong was taking the drugs (the rest flowing from that one course of conduct), so he could only be charged with one count of being under the influence of a controlled substance.

⁴⁷⁹ *PG&E Appeal* at 27.

⁴⁸⁰ *PG&E Appeal* at 27. As CPSD notes (CPSD Response at 28, fn 20), PG&E's Appeal switches between adopted and alleged violation numbers. However, Appendix B of the Recordkeeping POD and Appendix B of the San Bruno POD delineate between alleged and adopted violation numbers. Unless otherwise indicated, violation numbers refer to the adopted violations as set forth in those appendixes.

premised on the same initial act."⁴⁸¹ PG&E appears to be arguing that if it is found to have incorrectly assigned a yield strength above 24,000 psi on Segment 180 in 1956, it can never again be held responsible for a violation for any action involving SMYS values above 24,000 anywhere on its pipeline system. Such an argument is absurd on its face and must be rejected. As the POD explains, the San Bruno violation pertains to Segment 180, while the Class Location violation pertains to 133 pipeline segments that do not include Segment 180.⁴⁸² Similarly, the Recordkeeping violation concerns incorrect data in survey sheets, which was not a factor in the San Bruno or Class Location violations.⁴⁸³ Even if all three violations involve SMYS values greater than 24,000 psi, that does not mean they are the same or overlap.

PG&E next claims that San Bruno Violation 7 and Recordkeeping Violation 4 are the same because both are "based on the absence of the same records relating to Line 132."⁴⁸⁴ PG&E purports to acknowledge that the POD addressed this issue by noting that the San Bruno POD addressed records issues in the 1950s whereas the Recordkeeping POD addressed the absence of records of pressure testing decades later.⁴⁸⁵ Nevertheless, PG&E fails to explain why a one-time violation found to have occurred in 1956 duplicates another violation found to have continued from 2004 to 2010. Moreover, even if the same absence of records underlies both violations, PG&E fails to address the POD's

⁴⁸¹ *PG&E Appeal* at 27.

⁴⁸² POD at 21-22.

⁴⁸³ POD at 22.

⁴⁸⁴ $PG\mathcal{E}E$ Appeal at 28.

⁴⁸⁵ *PG&E Appeal* at 28.

explanation that the violations have a different focus -- the San Bruno violation concerns PG&E's failure to account for the conditions, characteristics, and specifications for the pups whereas the Recordkeeping violation concerns PG&E's failure to first conduct a hydrostatic test.⁴⁸⁶ There is no duplication or overlap of these two violations.

Finally, PG&E argues that San Bruno Violation 18 and Recordkeeping Violation 5 are duplicative because both pertain to PG&E's clearance documentation.⁴⁸⁷ However, the former is a violation of 49 CFR 192.13(c) while the latter is a violation of Section 451. As noted above, a single course of conduct can result in the violation of more than one law. Therefore, these violations are not duplicative.

11.1.1.2. Alleged Duplication Within Proceedings

PG&E contends that San Bruno Violations 1 through 7 are encompassed within San Bruno Violation 8 and that San Bruno Violations 18 and 19 (Violations of 49 CFR 192.913(c) and Section 451, respectively) are duplicative because they are for the same conduct.⁴⁸⁸ The latter contention is without merit because, as noted above, a single course of conduct can result in two or more separate violations of law. Also, PG&E fails to recognize the San Bruno POD's holding that that failure to follow a work procedure in violation of 49 CFR 192.913(c) "was not just a technical violation of federal regulations; it was [also] unsafe" in violation of Section 451.⁴⁸⁹

⁴⁸⁶ POD at 22.

⁴⁸⁷ PG&E Appeal at 28.

⁴⁸⁸ *PG&E Appeal* at 28-29.

⁴⁸⁹ San Bruno POD at 156.

With respect to San Bruno Violations 1–7 allegedly being encompassed within Violation 8, we first note that the POD determined that San Bruno Violation 1 was similar to the more inclusive Recordkeeping Violation 3 and therefore excluded it from the total number of violations considered for fines and remedies.490 Accordingly, PG&E's contention is moot as to San Bruno Violation 1. Also, each of San Bruno Violations 2-7 is a one-time violation that was found to have occurred in 1956 in connection with the installation of Segment 180, whereas San Bruno Violation 8 is a continuing violation calculated from December 31, 1956 to September 9, 2010. From a timing aspect alone it is not reasonable to characterize San Bruno Violations 2-7 as being "encompassed" within San Bruno Violation 8. Moreover, the subject matter of San Bruno Violation 8 pertains to PG&E's failure to install suitable and safe pipe on Segment 180 as necessary to promote the safety of the line as well as its failure to remediate the unsafe condition for decades,491 whereas San Bruno Violations 2-7 arise from a series of discrete safety-related failures that occurred in 1956.492 PG&E's noncompliance with Section 810.1 of ASME B31.1.8-1955 (requiring suitable and safe materials and equipment) is separate and distinct from its noncompliance with the requirement to visually inspect the pups and other such requirements where it failed to comply. We therefore find that PG&E's contention that San Bruno Violation 8 encompasses San Bruno Violations 1 through 7 lacks merit.

⁴⁹⁰ POD at 22.

⁴⁹¹ San Bruno POD at 93.

⁴⁹² San Bruno POD at 79-91.

PG&E next contends that Recordkeeping Violation 19 duplicates Recordkeeping Violation 33.⁴⁹³ We disagree. Although both violations relate to leak records, they are two distinct violations. Recordkeeping Violation 19 concerns leak records with inaccurate and/or missing data, while Recordkeeping Violation 33 concerns PG&E's failure to maintain a "definitive, complete and readily accessible database of all leaks for their pipeline system."⁴⁹⁴ PG&E's bases its arguments that these two violations are duplicative on the grounds that the violations "are premised on the same course of conduct, namely PG&E's historic practices for maintaining leak records."⁴⁹⁵ However, as we have discussed elsewhere in this POD, PG&E's "same course of conduct" consisted on multiple discrete courses of action, each of which would be considered a violation. In this instance, PG&E's "historic practices" resulted in both failing to maintain complete and accurate leak records and failing to maintain a database to access leak information. Accordingly, we find PG&E's arguments to be without merit.⁴⁹⁶

PG&E also contends that Recordkeeping Violation 1 should be subsumed within Recordkeeping Violation 2 because the pipeline specifications for Segment 180 are a subset of the records the Recordkeeping POD finds should be

⁴⁹³ *PG&E Appeal* at 29.

⁴⁹⁴ Recordkeeping POD at 245-246.

⁴⁹⁵ *PG&E Appeal* at 29.

⁴⁹⁶ PG&E further appears to suggest that the Recordkeeping POD found these violations because of the "decentralized nature of [PG&E's leak] records." (*PG&E Appeal* at 29.] PG&E is incorrect. The Recordkeeping POD clearly notes that regardless of PG&E's approach to recordkeeping (centralized vs. decentralized), "it is still required to retain records to ensure the safe operation of its gas transmission pipeline system." (Recordkeeping POD at 204.)

included in the job files.⁴⁹⁷ However, Recordkeeping Violation 1 relates to the lack of pipe inventory records, while Recordkeeping Violation 2 concerns the lack of design or construction records for the construction for the installation of Segment 180. These are distinct violations and PG&E is incorrect that Recordkeeping Violation 1 should not be counted as an independent violation.

PG&E claims that the Class Location POD improperly counts violations of various standards and rules on a per-segment basis.⁴⁹⁸ However as we have discussed in the Class Location POD, the Federal Regulations refer specifically to "segments" of pipeline and each segment of pipeline must comply with multiple federal regulations.⁴⁹⁹ Violation of each regulation is a separate and distinct offense. As we have discussed above, to conclude otherwise would lead to an absurd result.

Finally, PG&E claims the Class Location POD improperly finds "cascading violations" when it finds at various points that PG&E's failure to correctly designate the classification of a segment constituted a violation of applicable standards, then finds that the consequences of those violation themselves constituted separate violations.⁵⁰⁰ PG&E's assertions, however, fails to acknowledge that classification of a segment and applying the correct MAOP to a pipeline segment are two separate and distinct activities, governed by different regulations under the CFR.⁵⁰¹ As we have discussed in this POD, as well as in

⁴⁹⁷ *PG&E Appeal* at 29.

⁴⁹⁸ *PG&E Appeal* at 29.

⁴⁹⁹ Class Location POD, Sections 7.2 and 12.1.

⁵⁰⁰ *PG&E Appeal* at 30.

⁵⁰¹ See, 49 CFR § 192.13(c) & 49 CFR § 192.611.

the Violations PODs, violation of each regulation or statute is a separate and distinct offense. Accordingly, we find PG&E's claims to be without merit.

11.1.1.3. "Other" Alleged Duplication

PG&E claims that "other duplicative findings across and within the PODs account for thousands of the adjudicated findings."⁵⁰² Apart from including a footnote that lists certain violations adopted in the three Violations PODs, however, PG&E offers no explanation of why such violations are duplicative.⁵⁰³ We therefore give this claim no weight.

11.1.2. Hindsight

PG&E claims that the PODs improperly find violations based on hindsight, *i.e.*, where the "circumstances surrounding the violation [were not] known or at least knowable to the party at the time of the event."⁵⁰⁴ Citing *Lambert v. California*, PG&E argues that even for strict liability offenses, "while the party need not intend for the violation to occur, the facts that render the conduct unlawful must at least be discernible to the party at the time."⁵⁰⁵ However, *Lambert* is inapposite because there, the appellant had "no actual knowledge of the requirement that she register" pursuant to a city ordinance that required felons to register within five days. In other words, the appellant knew that she was a felon. What she did not know is that the law required felons to register with the city.

⁵⁰² *PG&E Appeal* at 30.

⁵⁰³ *PG&E Appeal* at 30, fn 105.

⁵⁰⁴ *PG&E Appeal* at 36. Although PG&E refers to "the PODs," the discussion of hindsight at pages 36-37 of the PG&E Appeal is limited to the San Bruno POD.

⁵⁰⁵ *PG&E Appeal* at 36, citing *Lambert v. California* (*Lambert*) 355 U.S. 225, 228 (1957).

Here, in contrast, PG&E was aware of the law but alleges ignorance of the facts underlying the violation. Also unlike here, *Lambert* did not involve a strict liability health and safety offense. As the San Bruno POD noted, public welfare offenses are strict liability offenses.⁵⁰⁶ A strict liability offense is an unlawful act which does not require proof of mental state.⁵⁰⁷ Thus, the PODs do not need to establish PG&E's mental state with regard to the alleged violations. PG&E violated the law when it placed the flawed pups into service, and much like a driver who speeds, the reasons why are irrelevant. PG&E's ignorance of the pups and their condition is not a defense.

Moreover, as the San Bruno POD discusses, PG&E's actual ignorance of the flawed pups is questionable as there were numerous instances where PG&E could have and should have discovered the flaws in the pups but failed to do so.⁵⁰⁸ Finally, as the San Bruno POD also noted, the law requires that PG&E know what it has in its system, as "[f]urnishing and maintaining safe natural gas transmission equipment and facilities requires that a natural gas transmission system operator know the location and essential features of all such installed equipment and facilities."⁵⁰⁹ It is not acceptable that a public utility like PG&E did not know the nature of the pipes it puts in the ground. PG&E is responsible because, as a public utility operating dangerous natural gas pipelines, it has a duty to know the condition of those pipelines.

⁵⁰⁶ San Bruno POD at 45.

⁵⁰⁷ Black's Law Dictionary, 6th Ed.

⁵⁰⁸ San Bruno POD at 46-48.

⁵⁰⁹ San Bruno POD at 45, citing D.12-12-030 at 91-92.

11.1.3. Alleged New Charges

PG&E argues that "new charges [were] introduced after the accused [had] already made its defense."⁵¹⁰ However, as explained in the San Bruno POD⁵¹¹ and below, no new charges were made against PG&E after the close of the hearings. All of CPSD's allegations were contained in the San Bruno OII, the CPSD Report⁵¹² and supporting testimony, and the Scoping Memo, all of which were provided to PG&E months before the hearings.

PG&E has alleged that the CPSD Report is the "charging document" in this investigation.⁵¹³ However, the San Bruno POD explains that the OII itself is a source of notice of the violations.⁵¹⁴ Just as the indictment, not the police report, is the charging document in a criminal case, the OII, not the CPSD Report, is the charging document here.

PG&E asserts that it cannot be required to "decipher and distill" from the CPSD Report the "legal basis" for CPSD's alleged violations.⁵¹⁵ However, PG&E has not cited any authority for the proposition that CPSD must present all of its legal arguments in advance of its opening briefs. As the San Bruno POD correctly noted, "if a statement of alleged facts constituting a violation is set forth

⁵¹⁰ *PG&E Appeal* at 42. Although PG&E refers to "the PODs" in the heading for this discussion, the discussion of belatedly-asserted allegations at pages 42-44 of the PG&E Appeal is limited to the San Bruno POD.

⁵¹¹ San Bruno POD, Section 4.5.

⁵¹² Consumer Protection and Safety Division Incident Investigation Report, September 9, 2010 PG&E Pipeline Rupture in San Bruno, California, received in evidence in I.12-01-007 as San Bruno Exhibit CPSD-1.

⁵¹³ *PG&E Appeal* at 42-43.

⁵¹⁴ San Bruno POD at 52-53.

⁵¹⁵ *PG&E Appeal* at 44.

in the OII or in its referenced documents [i.e., the NTSB, IRP, and CPSD reports], then PG&E had adequate notice prior to evidentiary hearings of the factual allegations that it needed to defend against."⁵¹⁶

PG&E claims that it must be provided with "clear and effective notice."⁵¹⁷ However, it is well-established that due process requires "adequate notice" and an opportunity to be heard. PG&E ignores the controlling California Supreme Court case in this area, *People v. Western Airlines*, which states: "Due process as to the commission's initial action is provided by the requirement of adequate notice to a party affected and an opportunity to be heard before a valid order can be made."⁵¹⁸ In a recent decision, the Commission described the due process notice requirements as follows:

Constitutional due process protections require this Commission, in broad terms, to give parties adequate notice and an opportunity to be heard. (*People v. Western Airlines, Inc.* (1954) 42 Cal.2d 621, 632.) Parties are normally entitled to know the subject matter of a proceeding, to know what information this Commission will consider when it addresses those subjects, and to have an opportunity to present their views to us.⁵¹⁹

PG&E complains that "[t]he San Bruno POD notes that the original charges consistently alleged that '49 CFR Parts 192 and 199 and Section 451 are applicable,' but 49 C.F.R Part 192 contains the entire set of federal regulations addressing gas pipeline construction, operation, maintenance, integrity

⁵¹⁶ San Bruno POD at 50.

⁵¹⁷ PG&E Appeal at 44.

⁵¹⁸ People v. Western Airlines, Inc. (1954) 42 Cal. 2d 621, 632; 1954 Cal. LEXIS 193.

⁵¹⁹ Order Modifying Decision 11-12-053 and Denying Rehearing of the Decision as Modified [D.12-08-046.] at 28 (slip op.).

management, written policies and procedures and emergency response, including hundreds, if not thousands, of regulatory provisions.⁵²⁰ PG&E goes on to argue that "[a]lleging that an operator violated 49 C.F.R Part 192 (or 49 C.F.R. Part 199, or § 451) is only slightly more meaningful than alleging that the operator 'violated federal law.'"⁵²¹ This distorts what was actually stated in the San Bruno. A fair reading of the San Bruno POD demonstrates that it was not content to allow CPSD to merely allege that PG&E had violated unspecified provisions of Parts 192 and 199 of Title 49.⁵²²

The fact is that the San Bruno OII provided PG&E notice of the violations and an opportunity to respond, as the following example demonstrates. PG&E has claimed that it was not adequately placed on notice of violations of 49 CFR § 192.615, which applies to emergency plans and procedures.⁵²³ However, 49 C.F.R. § 192.615, which was referenced in Section X of the CPSD Report, contains more than one requirement. In its Opening Brief in the San Bruno OII, CPSD referred to the different provisions of 49 C.F.R. § 192.615 that mandate that operators' emergency plans provide for "receiving, identifying, and classifying notices of events" as well as "emergency shutdown and pressure reduction" in an emergency situation. Thus, PG&E was adequately on notice, especially in light of the fact that the factual allegations underpinning the violations were fully described in the CPSD Report.

⁵²⁰ PG&E Appeal at 43.

⁵²¹ *PG&E Appeal* at 43-44.

⁵²² San Bruno POD at 49-60.

⁵²³ PG&E Appeal of San Bruno POD at 25.

Moreover, PG&E's claim that it was unaware of the emergency plans and procedures violation allegations is undermined by the fact that its prepared testimony in the San Bruno OII presented PG&E's defenses to the specific subsections that it now claims it was unaware of. That testimony contains factual arguments as to why PG&E's emergency plans were legally sufficient.⁵²⁴ On page 5 of Chapter 11, PG&E states that "PG&E had a written, comprehensive plan in effect that met the requirements of § 192.615." PG&E then goes on to describe how its plans met all of the subsections of 49 CFR § 192.615. For example, 49 CFR § 192.615(a)(1) ("receiving, identifying, and classifying notices of events") is addressed on pages 14 and 15 of Chapter 11. Part 192.615(a)(8) ("notifying appropriate fire, police, and other public officials") is addressed on pages 15 and 16. 49 CFR § 192.615(b)(2) ("failure to properly train personnel") is addressed on pages 14, 15, 17, and 20. PG&E specifically reprinted 49 CFR § 192.615(a)(1) through (a)(8) in its testimony. At pages 3–5 of Chapter 11, PG&E reprinted the entirety of 49 CFR § 192.615, including every subsection of (a)(1) through (a)(8), (b)(1) to (b)(4), and (c)(1) to (c)(4). 49 CFR § 192.615(a)(3) relates to "prompt and effective" responses to emergencies. The text of (a)(3) is reprinted on page 3 of Chapter 11. On page 12 of Chapter 11, PG&E explains that its emergency plans call for its personnel to "gather critical information to promptly initiate the operator's response efforts", and cites to 49 CFR § 192.615(a). In Attachment C to Chapter 11, PG&E includes copies of its emergency plans, which contain the following:

Section 192.615(a)(3)(i) allows operators latitude in responding to notices of gas odor inside buildings. As long as an operator's

⁵²⁴ San Bruno Exhibit PG&E-1, Chapter 11.
response is "prompt" and is "effective" in minimizing the hazard, there would be little reason, if any, to challenge the appropriateness of the operator's procedures.⁵²⁵

PG&E would not have presented a defense to allegations of violations of 49 CFR § 192.615 and its subsections if it were truly unaware of them being at issue. PG&E had an opportunity to respond to the charges against it and did so.

11.2. Penalties Imposed

11.2.1. Violations under Pub. Util. Code § 451

As with its appeals of the Violations PODs, PG&E contends that Pub. Util. Code § 451 is a ratemaking statute and may not serve as a basis for finding violations.⁵²⁶ Among other things, PG&E notes that § 451 is placed within the "Rates" article of the Public Utilities Code and that the language of the statute "requires a balancing of rates against the proper level of service."⁵²⁷ Further, PG&E argues that Pub. Util. Code § 451 cannot be read as imposing a stand-alone safety obligation, as that would "render superfluous entire provisions of the Public Utilities Code and every Commission regulations that requires any safety measure of any kind."⁵²⁸ Finally, PG&E asserts that Pub. Util. Code § 451 cannot be interpreted "to incorporate extrinsic safety standards," particularly ASME B.31.8.⁵²⁹

Many of PG&E's arguments have already been considered and rejected in Sections 4.2, 9.1 and 9.6 of the *San Bruno Violations Decision*, Sections 5.3 and 14.1

⁵²⁵ Page 71 of PG&E's Emergency Plans, San Bruno PG&E-1, Chapter 11.

⁵²⁶ *PG&E Appeal* at 18.

⁵²⁷ PG&E Appeal at 19.

⁵²⁸ PG & E Appeal at 20.

⁵²⁹ *PG&E Appeal* at 24.

of the *Recordkeeping Violations Decision*, and Sections 9 and 12.6 of the *Class Location Violations Decision*. We find no reason for repeating our discussion in those decisions verbatim here, but rather summarize our discussions in the violations decisions here and incorporate their full discussion by reference.

PG&E's statutory construction argument is contradicted by *Gay Law* Students Ass'n v. Pac. Tel & Tel. Co. (Gay Law Students Ass'n) (1979) 24 Cal.3d 458. In Gay Law Students Ass'n, the California Supreme Court addressed a complaint alleging in part that PT&T illegally practiced discrimination against homosexuals in the hiring, firing and promotion of employees. The complainant sought declaratory and injunctive relief to prevent PT&T from continuing such practices. The Court rejected PT&T's argument that Pub. Util. Code § 453(a) was "limited" only to a prohibition of rate or service-oriented discrimination." 530 Rather, the Court found that Pub. Util. Code § 453(a) "prohibits a public utility from engaging in arbitrary employment discrimination."⁵³¹ As relevant here, Pub. Util. Code § 453 is also within Article 1 of the Pubic Utilities Code. Thus, just as the California Supreme Court held that Pub. Util. Code § 453 is not limited as a ratemaking provision, Pub. Util. Code § 451 cannot be limited in that way either. Finally, PG&E fails to recognize Pub. Util. Code § 6 which states: "Division, part, chapter, article, and section headings do not in any manner affect the scope, meaning, or intent of the provisions of this code." PG&E's reliance on the heading of an article in its attempt to undermine Pub. Util. Code § 451's safety obligation is contrary to § 6 and we therefore reject it.

⁵³⁰ Gay Law Students Ass'n v. Pac. Tel & Tel. Co., 24 Cal.3d at p. 478.

⁵³¹ Gay Law Students Ass'n v. Pac. Tel & Tel. Co., 24 Cal.3d at p. 475.

PG&E's attempt to frame Pub. Util. Code § 451 as a balancing of rates and service is equally unconvincing. In *Cingular*, the California Court of Appeal upheld the Commission's imposition of a fine on a wireless carrier under Pub. Util. Code § 451 even though the court found that the Commission was preempted by federal law from regulating rates of wireless carriers. In other words, the court held that the Commission may find violations under the second paragraph of Pub. Util. Code § 451, even where the first paragraph is inapplicable and no balancing of rates and service is at issue.⁵³² Moreover, even under the construct described by PG&E, i.e., that Pub. Util. Code § 451 provides for a balancing of rates and other considerations that include safety, there is nothing to suggest that safety is not an absolute duty under Pub. Util. Code § 451. The fact that the safety obligation appears in an article entitled "Rates" does not diminish the significance of that obligation.

PG&E challenges the Commission's reliance on *Cingular* on the grounds that "Cingular had nothing to do with safety."⁵³³ However, we did not rely on *Cingular* for the proposition that Pub. Util. Code § 451 serves as a basis for safety requirements.⁵³⁴ Rather, *Cingular* affirms our conclusion that the second paragraph of Pub. Util. Code § 451 is a stand-alone provision, independent of ratemaking. Indeed, the *Cingular* Court stated: "Even in the absence of a specific statute, rule or order barring the imposition of an EFT without a grace period, or

⁵³² *Pacific Bell Wireless (Cingular) v. PUC, supra,* 140 Cal.App. 4th at p. 723.

⁵³³ *PG&E Appeal* at 22.

⁵³⁴ This second paragraph states, in relevant part: "Every public utility shall furnish and maintain such adequate, efficient, just, and reasonable service, instrumentalities, equipment, and facilities ... as are necessary to promote the safety, health, comfort, and convenience of its patrons, employees and the public."

barring the specific nondisclosures identified by the Commission in this case, Cingular can be charged with knowing its actions violated Section 451's requirement that is provide 'adequate, efficient, just and reasonable service' to its customers."⁵³⁵ Similarly in this instance, PG&E can be charged with violating Pub Util. Code § 451 for not providing "instrumentalities, equipment, and facilities" necessary to promote the safety of its customers. *Cingular* clearly supports this conclusion.

PG&E's argument that Pub. Util. Code § 451 cannot be read as imposing a stand-alone safety obligation has been rejected by the California Courts. The California Court of Appeal has cited numerous instances where Pub. Util. Code § 451's mandate for public utilities to operate safely has been invoked on a stand-alone basis.⁵³⁶ In *Cingular* the California Court of Appeals specifically addressed the Section 451 vagueness argument and rejected it. The Court examined Cingular's alleged conduct and rhetorically asked: "how could [Cingular] have notice that this conduct would violate section 451?"⁵³⁷ The Court found that Cingular could reasonably discern from the Commission's interpretations of Pub. Util. Code § 451 that its conduct in that case would violate the statute. Similarly here, the Violations PODs do not impose "arbitrary or capricious" interpretations on Pub. Util. Code § 451, but in fact grounds the violations in well-known industry standards and guidelines in effect in the 1950s. PG&E was more than adequately on notice that standards such as ASME B.31.8 created guidelines for good safety practices. In addition, in *Carey v. Pacific Gas &*

⁵³⁷ Id.

⁵³⁵ *Cingular, supra,* 140 Cal.App. 4th at p. 740.

⁵³⁶ See, e.g., *Cingular, supra*, 140 Cal.App. 4th at p. 751.

Electric Company [D.99-04-029] (1999) 85 Cal. P.U.C. 2d 682, the Commission specifically invoked Pub. Util. Code § 451 for a stand-alone safety violation.

We further disagree with PG&E's argument that interpreting Pub. Util. Code § 451 as imposing a stand-alone safety obligation would render entire provisions of the Public Utilities Code and Commission regulations that require any safety measure superfluous. Section 5.3.2 of the Recordkeeping POD specifically addresses this allegation and discusses the complementary relationship between the general, overarching safety obligation established by Pub. Util. Code § 451 and other, specific gas pipeline safety requirements.

Finally, PG&E states: "Although [Pub. Util. Code] § 451 did not and does not grant authority for the Commission to impose sanctions for particular violations of 'safety' standards, it clearly allows the Commission to consider a utility's record on 'safety' issues in setting rates..."⁵³⁸ PG&E does not cite to any authority to support this assertion. Moreover, as noted by CPSD, PG&E's argument is contradicted by the testimony of its own expert witness in the San Bruno OII.⁵³⁹ In the San Bruno OII, PG&E witness O'Laughlin stated that the authorized revenue requirement and the amount PG&E should spend on reliable and safe service "are two independent questions or two independent items."⁵⁴⁰ Accordingly, we find this assertion to be without merit.

11.2.2. Level of Penalties

The level of penalties imposed is the subject of both appeals and requests for review. PG&E asserts that a \$1.4 billion penalty is too high, and raises

⁵³⁸ *PG&E Appeal* at 23.

⁵³⁹ CPSD Response at 21.

⁵⁴⁰ 8 RT (San Bruno OII) at 616; see also San Bruno POD at 200.

various arguments why the amount should be lower in its appeal. Joint Parties, on the other hand, argue that in light of the number of violations found in the three decisions on violations, as well as the potential maximum and minimum fines authorized under Pub. Util. Code §§ 2107 and 2108, "penalties of over \$2 billion are not just warranted, but necessary to ensure that PG&E fully comprehends the reprehensible nature of the way it has conducted its business for the past 60 years and to deter any utility from allowing the type of carelessness and mismanagement that led to the San Bruno explosion."⁵⁴¹ Finally, both Commissioners Picker and Sandoval seek review to determine whether the level of fines and refunds ordered in the POD is adequate.⁵⁴² We have considered the arguments presented in the appeals and the requests of Commissioners Picker and Sandoval and conclude that there should be no change in the level of penalties.

As discussed in Section 5 above, our determination of the penalty to be imposed took into consideration the factors identified in D.98-12-075. In particular, we considered the PG&E's financial resources. Under Pub. Util. Code §§ 2107 and 2108, the potential minimum fine to be imposed would have been be \$9.2 billion, or nearly a third of PG&E's market capitalization. However, a fine of that magnitude would have significantly affected PG&E's ability to provide safe and reliable gas and electric service to its customers. Additionally, while the *Overland Report* provided guidance on the maximum level of penalties PG&E could sustain without negatively impacting its creditworthiness, there is no

⁵⁴¹ Joint Parties' Appeal of the Presiding Officers' Decision on Fines and Remedies in the Pipeline Investigations filed October 2, 2015, at 12.

⁵⁴² *Request for Review [of Commissioner Picker],* filed October 2, 2014, at 2; *Request for Review [of Commissioner Sandoval],* filed October 2, 2014, at 2.

requirement that we adopt this amount. The penalty we adopt in this decision, which is comprised of fines paid to the General Fund, a one-time bill credit to ratepayers and remedies, provides PG&E with the ability to provide safe and reliable gas and electric service, while still serving as providing notice to all gas pipeline operators of the need to maintain and operate their pipeline systems in compliance with all federal and state safety requirements.

PG&E argues that the POD must take into consideration "other unrecoverable gas safety-related PSEP and Gas Accord V costs that PG&E's shareholders have incurred or will incur."⁵⁴³ It contends that these costs are similar to the costs disallowed in the *PSEP Decision*, and thus must be taken into account.⁵⁴⁴ Further, PG&E asserts that even if these are outside the scope of the Pipeline OIIs, it would still need to issue equity to fund these amounts, and it would not matter to a "potential investor" was due to a specific disallowance or because PG&E had spent more than it had been authorized to recover.

As an initial matter, PG&E's appeal on this issue relies on extra-record evidence that we had ruled be struck from its Opening Brief. For that reason alone, we give no weight to PG&E's arguments. Additionally, as noted by CPSD, PG&E's efforts to include all expenses it allegedly had already incurred or may incur in the future would essentially allow PG&E to decide what it should pay for its violations. Moreover, it is entirely speculative to assume, as PG&E does, that all of the "unrecoverable gas safety-related PSEP and Gas Accord V costs" were associated with the violations found in the Pipeline OIIs. The fact that PG&E has or will incur costs associated with making its gas transmission

⁵⁴³ *PG&E Appeal* at 4.

⁵⁴⁴ *PG&E Appeal* at 5.

pipeline system safer does not mean that all these costs should be included in considering the penalty amount. Finally, PG&E's arguments concerning the "potential investor" are absurd at best. If that argument were accepted, all equity issuances, regardless of the reason, should be considered in setting the penalty level.

11.2.3. Allocation of Penalties

A number of the appeals and requests for review seek to change how the penalties are allocated. In particular, PG&E, as well as Commissioners Picker and Sandoval, urge that that a portion of the penalties should be redirected toward future pipeline safety enhancements.⁵⁴⁵ PG&E presents various arguments why penalties should be directed towards pipeline safety. It contends that the POD incorrectly concludes that any fines imposed under Pub. Util. Code § 2107 must be paid to the State General Fund.⁵⁴⁶

We have already considered and rejected these arguments. As discussed in Section 4.1, the Commission has long interpreted Pub. Util. Code § 2107 to require that fines imposed by the Commission must be deposited in the General Fund.

PG&E suggests that the POD's "reliance on the Commission's 'broad authority' under [Pub. Util. Code] § 701 in discussing the Commission's ability to order PG&E to spend \$50 million to carry out the required remedies is inconsistent with its conclusion that the Commission lacks the discretion to direct

⁵⁴⁵ Pacific Gas and Electric Company's Appeal of the Presiding Officer's [sic] Decision on Fines and Remedies (PG&E Appeal), filed October 2, 2014, at 8; Request for Review [of Commissioner Picker] at 2; Request for Review [of Commissioner Sandoval] at 2.

⁵⁴⁶ PG&E Appeal at 9.

that financial penalties be used to fund gas pipeline safety enhancements."⁵⁴⁷ PG&E conflates the Commission's authority to imposed fines under Pub. Util. Code § 2107 with the Commission's broad authority to impose equitable remedies, including monetary payments, under Pub. Util. Code § 701. Indeed, when Pub. Util. Code § 2107 was amended in 1993 to increase the maximum level of fines, the report of the Assembly Committee on Utilities and Commerce noted that the Commission's broad authority to levy fines under Pub. Util. Code § 701 was <u>supplemented</u> by specific authority under Pub. Util. Code § 2107.⁵⁴⁸ Thus, it is not inconsistent for the Commission to impose both a fine under Pub. Util. Code § 2107 (payable to the State's General Fund) and a monetary remedy under Pub. Util. Code § 701 (payable to ratepayers).

Joint Parties do not propose to change the overall level of penalties, but request that the allocation be changed to reduce the fine imposed under Pub. Util. Code §§ 2107 and 2108 and to increase the disallowance to include all PSEP costs. Joint Parties argue that disallowing all PSEP costs would:

(1) better reflect the remedial nature of the PSEP work; (2) better serve the goals of deterrence and fairness to ratepayers by preventing PG&E from collecting a 65-year return on PSEP assets; and (3) better alleviate the burden on PG&E customers who will still be called upon to pay several billion dollars to improve the safety of PG&E's gas system.⁵⁴⁹

⁵⁴⁷ PG&E Appeal at 11.

⁵⁴⁸ Assem. Com. on Utilities and Commerce, Report on Sen. Bill No. 485 (1993–1994 Reg. Sess.) June 14, 1993.

⁵⁴⁹ Joint Parties' Appeal of the Presiding Officers' Decision on Fines and Remedies in the Pipeline Investigations filed October 2, 2014, at 14.

In addition, Joint Parties contend that the "mechanics of the revenue requirement reduction in the Remedies POD are unclear and likely to be more cumbersome than the full PSEP disallowance."⁵⁵⁰ In particular, Joint Parties note that the total PSEP revenue requirement for 2012-2014 is likely to be far less than the \$400 million reduction. Thus, if the shortfall is applied against future revenue requirements, "it could take several years before PG&E has paid down the full \$400 million, which, in net present value terms, would inure to the benefit of PG&E and the detriment of ratepayers."⁵⁵¹

We disagree that all PSEP costs should be disallowed. As we noted in the *PSEP Decision*, "Certain pipeline segments, for reasons unrelated to PG&E's poor document management, require replacement, rather than just re-testing."⁵⁵² Thus, in considering the costs to be allocated, the *PSEP Decision* concluded that PG&E's shareholders should be responsible for costs of retesting, but not replacement, as "ratepayers should not receive a new pipeline at no cost."⁵⁵³ Adopting Joint Parties' proposal, however, would directly contradict this conclusion. Further,

[P]ayment of fines to the General Fund may have significant different tax differences to PG&E. While it is clear that "fines paid to the State General Fund are not tax deductible," unrecoverable costs for remedies such as ratepayer relief for the costs of the PSEP, may be tax deductible. If so, the "after-tax impact is only about 63 cents" on the dollar.⁵⁵⁴

⁵⁵³ PSEP Decision at 61.

⁵⁵⁰ Joint Parties' Appeal at 19.

⁵⁵¹ Joint Parties's Appeal at 20.

⁵⁵² *PSEP Decision* at 60.

⁵⁵⁴ CPSD Response at 13 (citations omitted).

Although the POD did not address the after-tax impact of the proposed penalty, it is clear that a change in allocation could materially change the effect of the penalty imposed. Given the potential after-tax impact, we cannot agree that disallowing all PSEP costs would "better serve the goals of deterrence and fairness to ratepayers."

PG&E further notes that the POD improperly justifies the \$400 million disallowance based on revenues earned by PG&E's GT&S group in excess of revenue requirement between 1999 and 2010. PG&E argues that these earnings in excess of revenue requirements "were due to its 'at risk' market storage business, not any 'underspending' on gas transmission safety-related work."⁵⁵⁵ PG&E misinterprets our discussion regarding the basis for this disallowance. The \$400 million disallowance is an equitable remedy for PG&E's failure to comply with Commission orders and state and federal regulations and statutes regarding pipeline safety, not cost savings. As discussed in great detail in the San Bruno POD, the record demonstrates that PG&E had intentionally cut back on transmission safety expenditures between 1999 and 2010.⁵⁵⁶ To eliminate further confusion, we revise Section 6 of the POD to clarify this point.

PG&E also requests that Ordering Paragraph 4 be revised to permit the option of a rate reduction and/or a one -time bill credit.⁵⁵⁷ CPSD does not oppose this request.⁵⁵⁸ We do not agree that PG&E should be given the option to choose the form of the \$400 million disallowance. However, we agree that a one-

⁵⁵⁵ *PG&E Appeal* at 11-12.

⁵⁵⁶ San Bruno POD at 201-205; see also San Bruno Exh. CPSD-168 (Harpster).

⁵⁵⁷ PG&E Appeal at 15.

⁵⁵⁸ CPSD Response at 13.

time bill credit would address the concerns raised by Joint Parties regarding the mechanics associated with a revenue requirement reduction. Accordingly, we revise Section 6 of the POD and Ordering Paragraph 4 to implement a one-time bill credit for the \$400 million disallowance.

11.2.4. Proportionality of Penalties

PG&E's appeal maintains that the penalty imposed is disproportionate and in violation of the Excessive Fines Clause. We have considered PG&E's arguments regarding the proportionality of the penalties imposed in Sections 4.3 and 5.5.3 of the POD. While we do not repeat our discussion here, we address the two main arguments raised by PG&E on appeal.

First, PG&E asserts that violations did not result from intentional misconduct and "most of the violations had no practical impact on system operations."⁵⁵⁹ PG&E contends that it "acted at all times in good faith and with the goal of complying with all applicable regulations, rules and standards."⁵⁶⁰

PG&E's argument, however, is unsupported by the record in the Pipeline OIIs. As part of our analysis in setting the penalty amount, we considered PG&E's conduct before, during and after the San Bruno explosion and fire and concluded that PG&E had demonstrated bad faith. As discussed in Section 5.2.3 of the POD, PG&E recognized its duty pursuant to Commission orders and federal regulations to maintain specific documents for all segments of its gas transmission pipeline system, yet did not take adequate steps to ensure compliance prior to the San Bruno explosion and fire. The Violations PODs discuss in detail, even when PG&E was made aware that it was in violation of

⁵⁵⁹ *PG&E Appeal* at 45.

⁵⁶⁰ *PG&E Appeal* at 45.

applicable laws and regulations, it took no action to correct these violations. PG&E's actions after immediately after the San Bruno explosion and fire does not minimize the fact that it had neglected to take necessary actions to correct or address violations for decades prior to that incident.

Further, PG&E mistakenly believes that a lower penalty should be imposed because the violations were "unintentional" or may not have "actually caused or contributed to" the San Bruno explosion and fire.⁵⁶¹ Regardless of whether the violations were due to intentional conduct, or were due to mistake, irresponsibility or incompetence, the fact remains that PG&E took no corrective action even after it was made aware of the violation. Further, PG&E is incorrect that the violation must be directly related to the San Bruno explosion and fire before a penalty can be imposed. PG&E is essentially arguing that there must be actual physical harm before a penalty can be imposed. This is comparable to arguing that a driver may not be cited for exceed the speed limit because he did not hit another vehicle. However, as discussed in D.98-12-075, "disregarding a statutory or Commission directive, regardless of the effects on the public," will be accorded a high level of severity" due to its harm to the integrity of the regulatory process."⁵⁶² Moreover, PG&E's arguments that the penalty is excessive because the violations were "unintentional" or caused no actual harm ring hollow because the amount proposed is significantly less than the minimum potential penalty of \$500 per day in violation, or \$9.2 billion.

⁵⁶¹ *PG&E Appeal* at 45 & 46.

⁵⁶² Standards of Conduct Governing Relationships Between Energy Utilities and Their Affiliates, 84 Cal. P.U.C.2d at 188.

PG&E's second argument is that that the POD fails to consider the fines and penalties imposed in comparable circumstances, in particular the penalties associated with the natural gas accidents in Carlsbad, New Mexico and Allentown, Pennsylvania.⁵⁶³ It contends the Excessive Fines Clause "requires consideration of sanctions imposed in analogous cases."⁵⁶⁴

PG&E's argument that Carlsbad and Allentown accidents are similar to the Pipeline OIIs is flawed. As we note in Section 4.3 above, the Carlsbad and Allentown investigations focused on the accident, while the Pipeline OIIs encompass not only an investigation into the San Bruno explosion and fire, but also examination of PG&E's classification of pipeline segments in areas of higher population density and a comprehensive review of PG&E's recordkeeping practices. Further, any potential penalties imposed as a result of the Carlsbad and Allentown accidents were limited by statute. In the Carlsbad example, El Paso Natural Gas was governed by a federal statute, which provides for civil penalties of \$200,000 per violation with the maximum civil penalty "for a related series of violations" capped at \$2 million.⁵⁶⁵ At the time of the Allentown accident, Pennsylvania law capped the civil penalty for accidents at \$500,000. In contrast, Pub. Util. Code §§ 2107 and 2108 do not establish the maximum amount of fines that may be imposed on a continuing violation or related series of violations. Thus, although we do not deny that there are some similarities between these two accidents and the San Bruno explosion and fire, there is

⁵⁶³ *PG&E Appeal* at 46.

⁵⁶⁴ *PG&E Appeal* at 46 (citing *Hale v. Morgan* (1978) 22 Cal. 3d 388, 403 and *BMW of N. Am., Inc. v. Gore* (1996) 517 U.S. 559, 584).

⁵⁶⁵ See 49 U.S.C. § 60122.

nothing inappropriate or disproportionate about the penalties imposed on PG&E in light of the facts presented in the Pipeline OIIs.

PG&E's reliance on *Hale* and *Gore* are equally unpersuasive. Both cases are distinguishable. In *Hale*, the California Supreme Court found that a penalty, pursuant to Civ. Code § 789.3, imposed on the landlord of a small mobile home park for willfully depriving his tenant of utility services for the purpose of evicting the tenant was excessive under the circumstance. This determination, however, was because the mandatory penalties under Civ. Code § 789.3 could indefinitely accumulate. Consequently, the Hale Court concluded that where "a penal statute may be subject to both constitutional and unconstitutional applications, courts evaluate the propriety of the sanction on a case-by-case basis."566 In Gore, the U.S. Supreme Court, in determining whether punitive damages were reasonable, compared statutory penalties for comparable misconduct, noting that a reviewing court should defer to "legislative judgments concerning appropriate sanctions for the conduct at issue."⁵⁶⁷ As a result, the Supreme Court disallowed punitive damages imposed on BMW by an Alabama court that were substantially greater than the statutory fines available in Alabama and elsewhere for similar misconduct.

In this instance, Pub. Util. Code §§ 2107 and 2108 authorize the Commission to impose a fine of "not less than five hundred dollars (\$500) nor more than fifty thousand dollars (\$50,000) for each offense"⁷³ and provides that for continuing violations, each day "shall be a separate and distinct offense." Further the defendant in *Gore* was a national distributor of autos, thus making

⁵⁶⁶ *Hale, supra,* 22 Cal. 3d at 404.

⁵⁶⁷ *Gore, supra*, 517 U.S. at 583.

the statutory penalties in other states relevant to the issue of whether it could have expected such a large penalty for what it had done.⁵⁶⁸ In contrast, PG&E is aware of the potential penalties available under California law. Moreover, consistent with *Hale*, the POD considered evidence concerning PG&E's financial resources and adopted a penalty that would have a deterrent effect without impacting PG&E's credit worthiness. Accordingly, the penalty adopted in the POD does not violate the Excessive Fines Clause.

11.2.5. Extension of Time to Pay Penalties

PG&E requests that the time to pay the fine be extended.⁵⁶⁹ It presents various reasons why 40 days is not enough time to raise the required funds. PG&E first states that depending on the timing of the final decision, it may not be able to issue public securities to pay the fine during the 40-day time period due to restrictions under federal and state securities laws.⁵⁷⁰ Further, PG&E explains that it needs "some flexibility in timing to ensure that the capital raising transaction is successful, and 40 days is not sufficient."⁵⁷¹ For these reasons, PG&E requests that the time to pay any fine be extended to 180 days.

CPSD does not oppose PG&E's request to extend the time for it to make its payment, "so long as interest accrues from the date of the Commission's Decision."⁵⁷²

⁵⁷¹ *PG&E Appeal* at 15.

⁵⁶⁸ *Gore, supra,* 517 U.S. at 584.

⁵⁶⁹ *PG&E Appeal* at 14.

⁵⁷⁰ PG&E Appeal at 14.

⁵⁷² CPSD Response at 13.

We modify the time to pay the fine as requested by PG&E. PG&E explained that it is seeking an extension of time is to allow it to comply with federal and state securities laws and to provide flexibility for a successful issuance of public securities. Given the size of the fine adopted in this decision, we agree that an extension of time is warranted. However, we decline to accrue interest on this amount from the date of this decision, provided the fine is paid in full within 180 days of this decision. If not, payment of any outstanding amount shall include interest at the rate earned on prime, three-month, non-financial commercial paper as reported in Federal Reserve Statistical Release H.15, beginning the 181st day after the effective date of this decision.

11.3. Rule 1.1 of the Commission's Rules of Practice and Procedure

PG&E next challenges penalties imposed as a result of violations of Rule 1.1 of the Commission's Rules of Practice and Procedure (Rule 1.1).⁵⁷³ Specifically, PG&E asserts that the Recordkeeping POD errs in holding that a violation of Rule 1.1 does not require an intention to mislead the Commission.⁵⁷⁴ PG&E relies on the language of Rule 1.1 and a line of Commission decisions and court orders to support its arguments.

PG&E's arguments are without merit. As relevant to PG&E's arguments, Rule 1.1 states that a party shall "never ... mislead the Commission or its staff by an artifice or false statement of fact or law." From PG&E's perspective, the word

⁵⁷³ See, *Pacific Gas and Electric Company's Appeal of the Presiding Officer's Decision*, filed in I.11-02-016 on October 2, 2014, at 18.

⁵⁷⁴ *PG&E Appeal* at 26.

"'mislead' ...necessarily implies a purposeful action."⁵⁷⁵ Further, it asserts that the terms "artifice" and "false statement" also incorporate an element of intentional deception. While PG&E is correct that "artifice" requires intention, a "false statement" does not. A statement does not have to be intentionally false in order to be false. Rather, it may be false due to carelessness, ignorance or mistake. The Commission is equally misled regardless of whether the statement was intended to be false or not. Thus, if the sentence had ended with the term "artifice," PG&E would be correct that there must be an intention to mislead. However, the inclusion of "or false statement" shows that intent is not required.

Moreover, PG&E's interpretation is not supported by the plain language of Rule 1.1. Nowhere does the plain language of Rule 1.1 refer to *mens rea*, state of mind, or purposeful intent. To interpret Rule 1.1 as proposed by PG&E would effectively rewrite the Rule to include the word "knowingly," "purposely" or "intentionally" before the term "mislead." Such an interpretation, however, would be contrary to the rules of statutory construction.

Prior Commission decisions have held that a violation of Rule 1.1 can result from a reckless or grossly negligent act. As we previously held: "The misleading or misrepresentation that occurs as a result of the reckless or grossly negligent act can cause the Commission to expend additional staff resources in trying to resolve the misleading statement."⁵⁷⁶

⁵⁷⁵ *PG&E Appeal* at 26.

⁵⁷⁶ *Re Facilities-based Cellular Carriers and Their Practices, Operations and Conduct in Connection with their Siting of Towers* (D.94-11-018) (1994) 57 Cal. PUC 2d 176, 204; see also, Order Instituting Investigation Into Southern California Edison Company's Electric Line Construction, Operation, and *Maintenance Practices Southern California Edison Company* (D.04-04-065) 2004 Cal. PUC LEXIS 207 at *53.

PG&E's reliance on penal or criminal cases is also unavailing. The Pipeline OIIs are not criminal cases, so the requirements for proving a criminal offense do not apply. As we have discussed elsewhere in this decision, the relationship between the Commission and the utilities it regulates is very different than that between the court and a litigant. As a regulator, the Commission needs accurate information from the utility in order to, among other things, ensure that it is providing just, reasonable and safe service. Further, the utility is under an obligation to provide information to the Commission under state law,⁵⁷⁷ and presumably that information needs to be accurate. Thus, regardless of whether the Commission received wrong information because PG&E intended to deceive the Commission, or because PG&E was negligent, the end result is the same – the Commission was misled.

As discussed in Section 7.4 of the Recordkeeping POD, PG&E "had failed to verify that its security system had been configured to operate as specified, failed to take steps to preserve any recordings from the security cameras at the Brentwood Facility, and failed to inquire with Corporate Affairs whether the security tapes were subject to the preservation order." PG&E's gross negligence resulted in misleading information being provided to CPSD, which caused CPSD staff to expend additional time and resources. Similarly, PG&E's failure to identify all the people in Milpitas Terminal handling the pressure problem on September 9, 2010 or who were present at the Milpitas Terminal after 5:00 p.m. on that date prejudiced CPSD's investigation.

⁵⁷⁷ See, e.g., Pub. Util. Code §§ 313, 314, 581, 582, 584 and 702.

Based on these considerations, the Recordkeeping POD properly found violations of Rule 1.1, and this decision properly imposes penalties associated with these violations.

11.4. Continuing Violations

PG&E asserts that the POD, as well as the PODs on violations, incorrectly concludes that many of the violations are continuing in nature. According to PG&E, the language in Pub. Util. Code § 2108 "applies only to violations that **continue** over time, not to the subsequent consequences of finite events that themselves constitute a violation."⁵⁷⁸ Based on its interpretation, PG&E maintains that a violation may only be considered continuing "when the misconduct at issue was actually ongoing."⁵⁷⁹ As support, PG&E cites to *People ex rel. Younger v. Superior Court* (1976) 16 Cal. 3d 30, which resolved a statutory ambiguity in Water Code Section 13350(a) by holding that a penalty for an unlawful oil deposit should be based on each day the process of deposit lasted, and not each day the oil remained on the water.⁵⁸⁰ Thus, in its appeal, PG&E argues that the continued absence of a record is not continuing violation until the record appears.⁵⁸¹

PG&E raises the same arguments in its briefs and appeals of the Violations PODs. We have considered these arguments and found them to be without merit. The Violations PODs consider each violation and determine whether it should be considered continuing in nature. We find no reason for repeating our

⁵⁸¹ PG&E Appeal at 32.

⁵⁷⁸ *PG&E Appeal* at 31 (emphasis in original).

⁵⁷⁹ *PG&E Appeal* at 32.

⁵⁸⁰ PG&E does not assert that Pub. Util. Code § 2108 is ambiguous.

discussion in those decisions verbatim here, but incorporate their full discussion by reference.

As each of the Violations PODs discusses, the violations that were determined to be continuing in nature were not one-time occurrences, but on-going obligations.⁵⁸² Thus, each day that PG&E failed to fulfill this obligation constituted a separate offense. Such a conclusion is entirely consistent with *Younger*, which states:

It appears that the Legislature by enacting section 13340, subdivision (a) (3) [of the Water Code], was concerned with persons who caused oil spills day after day – in other words, with persons who intentionally or negligently caused oil to be deposited regularly or over a period of time. By imposing an additional penalty for each day that the person continues to deposit the oil in the waters, the Legislature provides an effective deterrent to continuous or chronic violations.⁵⁸³

Finally, as noted by Joint Parties: "Operating a gas pipeline system without legally required information is a continuing violation."⁵⁸⁴ For these reasons, the POD and the Violations PODs correctly concluded that many of the violations were continuing in nature.

⁵⁸² For example, the Class Locations POD found that continuing obligations include patrolling pipeline system on a regular basis, performing continuing surveillance and monitoring changes in population density; the San Bruno POD found that continuing obligations include correcting unsafe condition and conducting required pressure tests; the Recordkeeping POD found that continuing obligations include keeping records of its gas transmission pipeline system.

⁵⁸³ *Younger, supra,* 16 Cal. 3d at p. 44.

⁵⁸⁴ Joint Parties Response at 20.

11.5. Spoliation

PG&E argues that the PODs misapplies the spoliation doctrine.⁵⁸⁵ It contends "[s]poliation is 'the destruction or significant alteration of evidence, or the failure to preserve property for another's use as evidence in pending or reasonably foreseeable litigation.'"⁵⁸⁶ According to PG&E, the Recordkeeping POD illogically concludes that PG&E should have been on notice that as far back as 80 years ago there would have been future litigation that would have required PG&E to preserve its documents.⁵⁸⁷ PG&E contends litigation is "reasonable foreseeable" if there is an identifiable specific claim, not the "mere existence of a potential claim or the distant possibility of litigation."⁵⁸⁸

PG&E raised these same arguments in its appeal of the Recordkeeping POD.⁵⁸⁹ However, as stated in *Reeves v. MV Transportation* (2010) 186 Cal. App. 4th 666, 681: "In order for an adverse inference to arise from the destruction of evidence, the party having control over the evidence must have had an obligation to preserve it at the time it was destroyed."⁵⁹⁰ Thus, the first question is whether PG&E had a duty or obligation to preserve the documents in question, not whether PG&E reasonably foresaw or anticipated litigation. PG&E's argument, however, narrows the spoliation doctrine by arguing that the duty to preserve documents <u>only</u> arises if there is "pending or reasonably

⁵⁸⁵ *PG&E Appeal* at 33.

⁵⁸⁶ *PG&E Appeal* at 33.

⁵⁸⁷ *PG&E Appeal* at 33-34.

⁵⁸⁸ *PG&E Appeal* at 8.

⁵⁸⁹ See *Pacific Gas and Electric Company's Appeal of the Presiding Officer's Decision*, filed October 2, 2014 in I.11-02-016, at 14-17.

⁵⁹⁰ *Reeves, supra,* 186 Cal.App.4th at p.681 (citing *Kronish v. U.S. (2d Cir., 1998)* 150 F.3d 112, 126).

foreseeable litigation." In essence, PG&E argues that it had no duty to create or maintain records of its transmission pipeline system unless it had advance notice of the initiation of the Pipeline OIIs or civil litigation.

For a typical company which may or may not face litigation at any given time, the focus on whether litigation is reasonably foreseeable is generally an appropriate standard. The relationship of a regulated utility to its regulator, however, is different than the relationship of a company to the courts. A company may become subject to the authority of the courts in the context of litigation, or it may not. A regulated utility is <u>always</u> under the authority of its regulatory agency. Thus, it is entirely foreseeable that the records of the installation, testing and maintenance of PG&E's gas transmission pipeline system would be the routine subject of administrative proceedings and necessary to ensure the safe operation of its system and the safety of the public. Courts have held that destruction of evidence in violation of a regulation that requires its retention can give rise to an inference of spoliation.⁵⁹¹

As relevant here, utilities such as PG&E have a statutory duty to maintain records under Pub. Util. Code §§ 313 and 314. These provisions would be rendered meaningless if PG&E could destroy or discard any records at its discretion. In addition, 49 CFR § 192 requires PG&E to maintain and retain records concerning the design, installation, maintenance and operation of its gas transmission pipeline system.⁵⁹² In other words, PG&E is always under a duty to

⁵⁹¹ See, e.g. *Byrnie v. Town of Cromwell*, 243 F.3d 95, 108-109 (2nd Cir. 2001); *Hicks v. Gates Rubber Co.*, 833 F.2d 1406, 1409 (10th Cir. 1987).

⁵⁹² See, e.g., 49 CFR § 192.709, which specifies the record to be maintained for transmission lines and the retention period.

maintain records relevant to the safe and reliable operation of its natural gas transmission pipeline system.

PG&E further argues that the Violations PODs could not rely on adverse interest to decide issues against PG&E because "the record did not contain any evidence that PG&E actually failed to create or maintain records, or that the lack of a particular record impacted PG&E's operations."⁵⁹³ PG&E argues that even if adverse inference were permissible, CPSD still bore the burden of "introducing evidence tending affirmatively to prove [its] case."⁵⁹⁴

PG&E is essentially arguing that CPSD must present some evidence that the non-existence of relevant documents was because PG&E intentionally or inadvertently destroyed or discarded records, failed to create the records at issue, or if PG&E did create such records, lost them without knowing it had lost them. Regardless of the reason, the result is the same: relevant evidence is missing. It would not be fair for PG&E to benefit in this litigation as a result of the absence of records that PG&E was under a duty to maintain, whether that absence is the result of intentional destruction, inadvertent loss, or failure to create those records.

The effect of the missing evidence on this proceeding is fundamentally identical to the effect of spoliation on a court proceeding. There are a number of potential remedies that are available under such circumstances.⁵⁹⁵ Thus, we properly exercised our discretion in determining that the application of the

⁵⁹³ *PG&E Appeal* at 35-36.

⁵⁹⁴ *PG&E Appeal* at 36 (citation omitted).

⁵⁹⁵ See, Cedars-Sinai Medical Center v. Superior Court (1998) 18 Cal.4th 1, 11-13 (listing remedies for spoliation of evidence).

traditional remedy for spoliation would be appropriate and applied an adverse inference to the lack of evidence that PG&E was under a duty to maintain.

11.6. California Pipeline Safety Trust

CSB's appeal argues that the POD's denial of its proposed Pipeline Safety Trust is in error because (1) the denial is based on the POD's holding CSB to a higher standard of proof than CPSD, (2) the fact that the Trust could intervene before the Commission in future proceedings is not grounds for rejecting the creation of a trust, and (3) the POD's reliance on a lack of evidence of community support is factually and legally erroneous.⁵⁹⁶ Joint Parties state that as an alternative to an independent monitor, "a California Pipeline Safety Trust would provide many of the same benefits as an Independent Monitor: a safety advocate with guaranteed independence that could complement the efforts of CPSD by acting as a watchdog for utility compliance with safety regulations and decisions."⁵⁹⁷

CSB argues that the POD placed a higher burden of proof on CSB regarding its Trust proposal than it placed on CPSD regarding its proposal for increased duties of the Aerial Patrol Program Manager.⁵⁹⁸ CSB notes that in making its proposal, CPSD had not discussed how the Aerial Patrol Program Manager's role would be organized.⁵⁹⁹ We do not find that this example upholds CSB's argument that it was held to a higher burden of proof than CPSD. As the

⁵⁹⁶ CSB Appeal at 17-21.

⁵⁹⁷ Joint Parties' Response at 16.

⁵⁹⁸ *CSB Appeal* at 18. While CSB does not explicitly identify the proposed CPSD remedy, it is clear that it is referring to Proposed Remedy 4.D.6 (POD at 132).

⁵⁹⁹ CSB Appeal at 18, referring to the CPSD Opening Brief at 68.

POD stated, all of CPSD's proposed remedies in the Class Location OII were contained in CPSD's Investigative Report for that proceeding.⁶⁰⁰ Thus, unlike CSB's contested Trust proposal, CPSD's proposal was vetted through the evidentiary hearing process.

CSB objects to the POD's reference to the fact that the Trust could intervene before the Commission in future proceedings and could be subject to intervenor compensation requirements.⁶⁰¹ We clarify here that this reference was intended to illuminate the discussion of the lack of specifics in CSB's proposal and was not intended as sufficient grounds for denial of CSB's Trust proposal.

Finally, CSB argues that the POD's reference to a lack of evidence of community support is factually and legally erroneous.⁶⁰² We find that the reference to community support is not needed and therefore delete it.

As noted in the POD, we do not disagree that an organization such as the proposed Trust could provide a unique voice and perspective promoting safety in Commission proceedings. We are open to the institution of independent advocacy for safety before this Commission, whether that advocacy resides within the Commission, outside the Commission, or both. Still, at this time we are not persuaded that CSB's Trust proposal represents the best way to meet the goals of such advocacy. Nor are we persuaded that payment by PG&E shareholders is the most equitable means of funding such advocacy, which we regard as a statewide function not restricted to PG&E or its service territory. CSB has proposed that PG&E shareholders pay at least \$100 million for the Trust.

⁶⁰⁰ POD at 131.

⁶⁰¹ CSB Appeal at 19-20.

⁶⁰² CSB Appeal at 20-21.

While it is appropriate to impose significant penalties on PG&E, as this decision does, we are not persuaded that it is appropriate to require PG&E's shareholders to provide \$100 million for advocacy and oversight that benefits all California citizens.

11.7. Independent Monitor

CSB has appealed the POD's denial of its proposal for establishment of a PG&E shareholder-funded independent monitor that would evaluate and review PG&E's compliance with the PSEP Decision and any fines and remedies ordered in the POD.⁶⁰³ Joint Parties support CSB on this issue.⁶⁰⁴ Most of the grounds relied upon by CSB in its appeal represent policy disagreements that do not require further discussion here.⁶⁰⁵

CSB argues that the POD placed a higher burden of proof on CSB regarding the effectiveness of an independent monitor than it placed on CPSD regarding the effectiveness of its request that PG&E reimburse CPSD for contracts for independent industry experts for verification audits and inspections to ensure compliance with other remedies and inspectors as well as experts to provide expertise with PG&E's hydrostatic testing program.⁶⁰⁶

The evidentiary basis for the POD's denial of an independent monitor can be distilled to the following points:

⁶⁰³ CSB Appeal at 1-16.

⁶⁰⁴ Joint Parties' Response at 13-16.

⁶⁰⁵ For example, we find that CSB's call for more transparency than CPSD can offer in its oversight process (CSB Appeal at 14-15) to be a policy rather than a legal question.

⁶⁰⁶ CSB Appeal at 7-8, referring to the request of CPSD in its Fines and Remedies Opening Brief at 58 and its Fines and Remedies Reply Brief at 4, 7-8, Appendix B at 1, 4.A.1.

- Prior to the 2010 San Bruno disaster, CPSD was at times ineffective in its safety oversight of PG&E's natural gas transmission system; however, there is no evidence that, going forward, CPSD will be ineffective.⁶⁰⁷
- Independent monitors have been used elsewhere, but their effectiveness is not in evidence.⁶⁰⁸

We do not find that the POD's reliance on this evidence is based on holding CSB to a higher standard of proof than CPSD. Rather, the decision not to establish an independent monitor is based on the POD's weighing of the evidence.

CSB argues that the POD "unlawfully concludes it can disregard other jurisdictions' fines and penalties in response to energy industry disasters because any party subject to an Independent Monitor 'was not subject to comprehensive regulatory oversight such as this Commission exercises.'"⁶⁰⁹ While we do not fully accept CSB's argument, we find that the language in question does not add to the discussion. We therefore modify the POD to delete it.

CSB argues that the POD ignored its request to establish an independent financial monitor that would oversee PG&E's expenditures and follow each dollar the Commission directs PG&E shareholders to spend.⁶¹⁰ Compliance with this decision means that PG&E, at shareholder expense, will have paid a fine of \$950 million to the State of California General Fund, issued a \$400 million bill credit to ratepayers, paid reasonably incurred litigation expenses of certain

⁶⁰⁷ POD at 142.

⁶⁰⁸ POD at 142-43.

⁶⁰⁹ CPSD Appeal at 7, quoting the POD at 143.

⁶¹⁰ CSB Appeal at 15.

named intervenors, and fully and faithfully implemented approximately 75 other remedies described in Section 7 and Appendix E of this decision. Since compliance with the first three of those penalty elements is straightforward and readily verifiable, the remaining concern is with full implementation of the other remedies listed in Appendix E. The first adopted "other remedy" provides for verification audits and inspections by CPSD-selected independent experts to ensure compliance with the other remedies.⁶¹¹ We not find that the financial aspects of compliance with the other remedies are readily separable from the nonfinancial aspects such that separate auditing or review process is justified. Stated differently, we expect that when CPSD retains independent experts pursuant to the first remedy, it will do so to ensure compliance with both the financial and non-financial aspects of the adopted remedies. Finally, CSB has not persuaded us that establishment of an independent financial monitor is necessary and appropriate to ensure compliance with the PSEP decision. Accordingly, we do not find that establishment of an independent financial monitor is required.

11.8. Reimbursement of Litigation Expenses

11.8.1. Legal Authority to Order Shareholders to Reimburse Intervenors' Litigation Expenses

Commissioner Picker requests review of "the Commission's legal authority to order a public utility's shareholders to compensate parties in a Commission proceeding outside of the Intervenor Compensation framework under [Public Utilities Code] Section 701, as well as the policy implications of

⁶¹¹ POD, Appendix E, page 1.

allowing such an order."⁶¹² PG&E, CPSD, CSB and Joint Parties responded on this issue.

PG&E states: "The order is expressly prohibited by Pub. Util. Code § 1802(b)."⁶¹³ Further, PG&E argues that, consistent with *Assembly v. Pub. Util. Comm'n* (1995) 12 Cal. 4th 87, "the Commission cannot use [Pub. Util. Code] § 701 to fashion a remedy that is prohibited by other sections of the Public Utilities Code."

CPSD, Joint Parties and CSB, on the other hand, maintain that the Commission has authority to order shareholders to pay for intervenor compensation instead of ratepayers and that ordering PG&E's shareholders to do so is warranted in this instance.⁶¹⁴ CPSD notes: "the Commission has broad equitable powers under the California Constitution, Art. XII, and under § 701 of the Cal. Pub. Util. Code to supervise utilities particularly when the utility has violated Commission regulations, statutory provisions or orders."⁶¹⁵ In particular, CPSD cites to *Consumers' Lobby Against Monopolies v. Public Utilities Com. (CLAM)* (1979) 25 Cal. 3d 891, 908-909, which found that the Commission had equitable power to award attorney's fees under the common fund doctrine

⁶¹² Request for Review [of Commissioner Picker] at 3.

⁶¹³ Pacific Gas and Electric Company's Response to Appeals and Requests for Review of the Presiding Officers' Decision on Fines and Remedies, filed October 27, 2015, at 10, fn. 17. All of PG&E's arguments are contained in this single footnote.

⁶¹⁴ Response of the Consumer Protections and Safety Division to Request for Review of Commissioner Picker (CPSD Response to Request for Review), filed October 27, 2014, at 9-11; Joint Parties' Response to Appeals and Requests for Review of the Presiding Officers' Decisions in the Pipeline Investigations, filed October 27, 2014, at 7-9; Response of the City of San Bruno to Request for Review of Commissioner Picker (CSB Response to Request for Review), filed October 27, 2014.

⁶¹⁵ CPSD Response to Request for Review at 10.

in quasi-judicial proceedings.⁶¹⁶ CPSD further argues that while the intervenor compensation statutes (Pub. Util. Code §§ 1801 et seq.) have limits on the award of attorney's fees using ratepayer funds, "it does not address the Commission's authority to supervise the wrongdoings of a utility by making its shareholders pay penalties."⁶¹⁷

Joint Parties echo CPSD's arguments, noting that in *Order Denying Rehearing of Decision 10-08-008* [D.11-03-049], the Commission rejected arguments that an agreement by a water utility to loan up to \$2.7 million to pay the legal costs of a local agency party who intervened in support of the utility in the proceeding was contrary to the intervenor compensation statutes.⁶¹⁸ In particular, D.11-03-049 rejected the proposition that the Commission could only authorize funding of intervenors through the intervenor compensation statutes, stating:

Nothing in the [intervenor compensation] statutes support such a conclusion. It is true that state, federal and local agencies are not considered utility customers for purposes of funding authorized under those provisions. However, nothing in the statutes prohibits funding for such entities or restricts the Commission's authority to do so.⁶¹⁹

Joint Parties advance various reasons why the Commission should exercise its authority under Pub. Util. Code § 701 to require PG&E to pay the legal costs of intervenors in these proceedings. Among other things, Joint Parties state that

⁶¹⁶ CPSD Response to Request for Review at 10.

⁶¹⁷ CPSD Response to Request for Review at 11.

⁶¹⁸ Joint Parties' Response at 8.

⁶¹⁹ Order Denying Rehearing of Decision 10-08-008 [D.11-03-049], issued March 24, 2011, at 10 (slip op.).

the public entities participated in these proceedings "to further the public interest in safety, not to seek financial gain or to protect their personal economic interests."⁶²⁰ Further, "requiring PG&E shareholders to pay the litigation costs of these intervenors is an appropriate equitable remedy under Public Utilities Code § 701 because the litigation, with its associated costs, has a direct nexus to the violations demonstrated in the Pipeline Investigations."⁶²¹

Finally, CSB argues that in *Re Pacific Tel. and Tel. Co.* [D.86-01-032] 1986 Cal. PUC LEXIS 29, the Commission affirmed that it "has the power to award attorney's fees based on all doctrines of equitable fee awards: common fund, substantial benefit, and private attorney general doctrines."⁶²² In applying these doctrines, CSB concludes:

Should the Commission adopt the POD, Intervenors' contribution will result in a fine of almost \$1 billion to be paid to the California general fund, which benefits all Californians. Their efforts will also result in \$400 million in refunds to PG&E ratepayers. This is an unprecedented result: the fine (i.e., "fund") will benefit many. Therefore, this case satisfies the "common fund" equitable doctrine of litigation fee awards discussed in CLAM.⁶²³

We have considered the arguments presented by parties and conclude that the Commission does have legal authority to order utility shareholders to reimburse intervenors for their reasonably-incurred litigation expenses. This reimbursement is an equitable remedy under Pub. Util. Code § 701. As we have

⁶²⁰ Joint Parties' Response at 9.

⁶²¹ Joint Parties' Response at 9.

⁶²² CSB Response to Request for Review at 6 (citation omitted).

⁶²³ CSB Response to Request for Review at 8 (citations omitted).

discussed in Section 7.2.9, the Commission has broad authority under Pub. Util. Code § 701 to "do all things, whether specifically designated in this part or in addition thereto, which are necessary and convenient" in the supervision and regulation of public utilities" provided that its exercise of these powers are "cognate and germane to the regulation of public utilities."⁶²⁴ In evaluating whether to adopt an equitable remedy and reimburse intervenors for their reasonable litigation expenses, we concluded that the testimony and evidence they provided assisted the Commission in reaching decisions in the Pipeline OIIs to ensure the provision of safe utility service.

PG&E concludes that the order to reimburse intervenor litigation expenses is "expressly prohibited by Pub. Util. Code § 1802(b)," yet provides no analysis to support this statement. Although PG&E is correct that a state, federal or local government agency is not a "customer" (and thus not eligible for compensation) under the intervenor compensation program, it does not explain why this provision would apply to an equitable remedy. Moreover, this remedy is not prohibited by other sections of the Public Utilities Code. While Pub. Util. Code § 1802(b) defines "customer" for purposes of receiving compensation using *ratepayer* funds, it makes no determination regarding whether *shareholder* funds may be used to reimburse intervenor's litigation expenses as part of an equitable remedy. There is no dispute that the Commission has authority to order equitable remedies in the form of monetary payments. The fact that the monetary payments, in this instance, are to reimburse litigation expenses

⁶²⁴ *CLAM*, *supra*, 35 Cal. 3d at 905-906.

incurred by state and local government agencies in these proceedings does not render the remedy unlawful.

As discussed in Section 7.2.9, this equitable remedy reflects our determination that, in light of the contributions of all intervenors, it would not be equitable that only TURN would receive compensation under the intervenor compensation statutes. The remedy is within our authority under Pub. Util. Code § 701 and warranted under the circumstances. Moreover, as it will receive reimbursement for its litigation expenses as an equitable remedy, TURN will not be eligible to receive compensation for its participation in these proceedings pursuant to Pub. Util. Code §§ 1801 et seq.

Finally, we acknowledge that our use of the term "compensation of intervenors" may be misread as ordering compensation under the intervenor compensation statutes. To eliminate this confusion, we modify Section 7.2.9 above to reflect that our equitable remedy is for the reimbursement of intervenors' litigation expenses.

11.8.2. Additional Guidance for Reimbursement

Joint Parties propose that Ordering Paragraph 10 be modified to clarify the procedures for determining whether the intervenors' litigation expenses are reasonably incurred. Specifically, Joint Parties do not believe this determination should be made by PG&E.⁶²⁵ Joint Parties therefore propose that method for evaluating the reasonableness of litigation expenses be similar to those used in

⁶²⁵ Joint Parties' Appeal at 22.

evaluating compensation requests under the intervenor compensation program. Thus, Joint Parties propose that Ordering Paragraph 10 be modified as follows:⁶²⁶

Pacific Gas and Electric Company's shareholders shall pay all reasonably-incurred legal fees and expenses, including without limitation the expert witness fees, in connection with the Pipeline Investigations for the City of San Bruno, the Office of Ratepayer Advocates, The Utility Reform Network and the City and County of San Francisco. This shall include all reasonably-incurred fees and expenses related to the subject matters of these proceedings incurred from September 9, 2010 through the final decision in these proceeding.

The parties listed above may file requests for compensation to be paid by PG&E's shareholders according to the procedural timelines set forth in Rules 17.3 and 17.4 of the Commission's Rules of Practice and Procedure, as follows:

Parties shall provide a summary identification of the hours worked each month by each attorney and/or expert witness. No further breakdown, such as among the different investigations, will be required;

The hourly rates approved by the Commission for payment by PG&E's shareholders shall be based on the hourly rates charged to PG&E in these cases by PG&E's outside attorneys with Orrick, Herrington, and Sutcliff, LLP (Orrick) of comparable experience to the Intervenors' attorneys. Within 15 days of the issuance of this Decision, PG&E shall provide to the named parties a list of the hourly rates charged to PG&E by Orrick attorneys in these cases and the number of years of experience of those attorneys. If PG&E or Orrick desires to keep those rates out of the public record, PG&E or Orrick shall file a motion seeking confidential treatment of that information. The assigned administrative law judge shall resolve such motion on an expedited basis after allowing the

⁶²⁶ Joint Parties' Appeal at 24-25.

named parties an opportunity to respond. In no event, shall the hourly rates approved by the Commission be lower than the applicable rates under the Commission's intervenor compensation program; and

The named parties' requests for compensation by PG&E's shareholders shall be decided by decision of the Commission. Within 15 days of any such decision, PG&E shall pay the amount determined by the Commission out of shareholder funds.

While we generally agree with the process proposed by Joint Parties, we do not agree that reimbursement should include "all reasonably-incurred fees and expenses related to the subject matters of these proceedings."⁶²⁷ Joint Parties do not specifically identify what would be included in "fees and expenses related to the subject matters of these proceedings." However, Joint Parties refer to other proceedings, such as the orders to show cause initiated in R.11-02-019 and criminal prosecutions by the U.S. Department of Justice, whether there has also been significant litigation. Given the ambiguity of the phrase, we decline to revise that portion of the order as proposed by Joint Parties.

Further, we do not agree that the hourly rates for intervenors' attorneys should be based on the hourly rates charged to PG&E in these cases by PG&E's outside attorneys. Our intent is to reimburse intervenors' reasonably-incurred litigation expenses. However, as asserted by PG&E:

The attorneys for all the Joint Parties except San Bruno are in-house, salaried attorneys. Their actual costs are a function of the time they spend on a proceeding and their respective salaries, and are unaffected by the subject matter of the proceeding or by the rates charged by other firms. By seeking to substitute an

⁶²⁷ Joint Parties' Appeal at 24.
outside firm's rates for their own, actual hourly cost, the Joint Parties seek reimbursement of costs they did not *actually* incur, let alone "reasonably incur" as the Penalties POD requires.⁶²⁸

We agree with PG&E that intervenors should not receive reimbursement of costs they did not actually incur. In particular, we do not believe that it would be appropriate for government entities to benefit financially from participating in these proceedings, which would be the result if their attorneys were compensated based on the rates of PG&E's outside attorneys. For this reason, the hourly rates for DRA and CCSF's attorneys shall be calculated as the attorney's annual salary divided by 2,080 hours. The hourly rate for CSB's attorneys shall be based on the contract between CSB and its attorneys for provision of services for these proceedings. Finally, the hourly rates for TURN's attorneys shall be based on the hourly rates established for these attorneys in our intervenor compensation program.

We further do not adopt Joint Parties' proposal that payment of any reimbursement amount should be made within 15 days of any such decision. Consistent with our practices for payment of intervenor compensation awards, PG&E shall pay the reimbursement amount ordered within 30 days of the date of any such decision.

We modify Section 7.2.9 and Ordering Paragraph 10 to reflect our discussion here.

11.8.3. Reimbursement of PG&E's Litigation Expenses

Joint Parties contend that in addition to the Pipeline OIIs, the San Bruno explosion and fire have resulted in "a myriad of legal challenges," and the cost to

⁶²⁸ *PG&E Response* at 11 (emphasis in original).

defend these challenges has been enormous.⁶²⁹ Joint Parties argue that the legal fees and expenses associated with these gas pipeline safety cases should not be paid by ratepayers and request that a new Ordering Paragraph 11 be added to the POD:⁶³⁰

PG&E shareholders shall pay all of PG&E's legal expenses incurred on or after September 9, 2010 for the purpose of defending these proceedings, and any other proceedings that can reasonably be construed to be related to the San Bruno explosion or the Pipeline Investigations, including, without limitation the National Transportation Safety Board Investigation, shareholder derivative lawsuits, lawsuits brought by the City of San Bruno or any of the explosion victims and/or their survivors, and the defense of any criminal proceedings. Legal expenses shall include, without limitation, expert witness fees, and the costs associated with PG&E employee time devoted to those proceedings.

We do not find that the issue of PG&E's employee and legal fees should be considered in these proceedings. Rather, these costs are more appropriately considered as part of PG&E's GRC proceedings. Indeed, PG&E notes, San Bruno related costs incurred in 2014, including employee costs, were considered and addressed in its most recent GRC.⁶³¹ Accordingly, we decline to adopt Joint Parties' proposed Ordering Paragraph.

⁶²⁹ Joint Parties' Appeal at 23-24.

⁶³⁰ Joint Parties' Appeal at 25-26.

⁶³¹ *PG&E Response* at 11-12.

DRAFT

11.9. Revisions to Remedies

PG&E requests revisions to two remedies.⁶³² First, it requests that adopted remedy 33 in the San Bruno OII be revised to delete the sentence: "PG&E shall revise its STIP program to make safety performance 40% of the score used to determine the total award."⁶³³ PG&E explains that setting the specific requirement that the safety component of the STIP (Short Term Incentive Program) is not necessary because PG&E is already meeting this requirement. Although CPSD had originally recommended the STIP program element that makes safety 40% of the score used to determine the award be included in this remedy, it does not oppose PG&E's proposed modification.⁶³⁴ Accordingly, adopted remedy 33 in I.12-01-007 is revised to read as follows:

PG&E's incentive plan shall include safety. PG&E shall require upper management to participate in annual training activities that enhance and expand their knowledge of safety, including exercises in which gas officers will have an opportunity to enhance their knowledge of incident command and will participate in an annual safety leadership workshop.

PG&E also requests that adopted remedy 14 in the Recordkeeping OII be amended so that its MAOP validation effort and records management improvement efforts be utilized instead of the minimum records to be included in a job file currently listed.⁶³⁵ CPSD opposes this proposed revision.⁶³⁶ As CPSD notes, we have already considered and rejected the proposed changes to adopted

 $^{^{632}}$ PG&E Appeal at 16.

⁶³³ *PG&E Appeal* at 16.

⁶³⁴ CPSD Response at 13.

⁶³⁵ *PG&E Appeal* at 16.

⁶³⁶ CPSD Response at 15.

remedy 14.⁶³⁷ We agree with CPSD that PG&E's proposed revision to adopted remedy 14 should be rejected.

11.10.Other Revisions

CPSD identifies several technical or legal errors in the POD. First, it notes that the POD incorrectly identifies the legal authority under which GO 112 was originally adopted.⁶³⁸ CPSD states that GO 112 was adopted pursuant to Pub. Util. Code § 768, not 49 U.S.C. § 60105. We agree with CPSD that the jurisdictional basis pursuant to which the Commission adopted GO 112 was misidentified. The POD is revised to correct the jurisdictional basis.

CPSD further notes that there is a mathematical error in the total number of segments (violations) identified in the Class Location POD. CPSD states the total number of segments (violations) should be 2,360, not 3,643.⁶³⁹ In the modified Class Location POD, we corrected the total number of segments (violations) to 2,360. We make the corresponding changes in the POD.

Finally, we make non-substantive edits to correct typographical errors or to clarify our discussion.

12. Assignment of Proceeding

Michael Picker is the assigned Commissioner.⁶⁴⁰ Mark S. Wetzell is the assigned ALJ in I.12-01-007 and Amy C. Yip-Kikugawa is the assigned ALJ in

⁶³⁷ See, Section 7.1.3.9.

⁶³⁸ *Consumer Protection and Safety Division's Appeal of Presiding Officers' Decision (CPSD Appeal),* filed October 2, 2014, at 2.

⁶³⁹ CPSD Appeal at 3.

⁶⁴⁰ Michael R. Peevey was the assigned Commissioner in I.12-01-007 until the proceeding was reassigned to Commissioner Picker on September 23, 2014. Michel Peter Florio was the

I.11-02-016 and I.11-11-009. The Presiding Officers in these proceedings are ALJs Wetzell and Yip-Kikugawa.

Findings of Fact

1. In response to the September 9, 2010 explosion and fire in San Bruno, the Commission opened three separate investigations. Investigation (I.) 11-02-016 (Recordkeeping), I.11-11-009 (Class Location) and I.12-01-007 (San Bruno).

2. Decisions on violations were issued in each of the investigations.

3. The decisions on violations serve as the basis for determining penalties to be imposed.

The San Bruno Violations Decision found PG&E had committed
 violations, many of them continuing for years, and a total of 59,255 separate offenses.

5. The *Recordkeeping Violations Decision* found PG&E had committed 33 violations, many of them continuing for years, and a total of 350,189 separate offenses.

6. The *Class Location Violations Decision* found PG&E had committed 2,360 violations, many of them continuing for years, and a total of 18,038,359 separate offenses.

7. There is no duplication of alleged violations regarding assumed SMYS values.

8. Adopted San Bruno violation 1 regarding hydrostatic testing is substantially similar to Felts Violation 3. Felts Violation 3 is more inclusive, as it addresses recordkeeping violations.

assigned Commissioner in I.11-02-016 and I.11-11-009 until the proceeding was reassigned to Commissioner Picker on October 16, 2014.

9. There is no duplication of alleged violations regarding establishing MAOP for Segment 180.

10. Adopted San Bruno violation 19, regarding clearance documentation, appears to be included in Felts Violation 5 and, therefore should be excluded from the total number of violations.

11. There is no duplication of alleged violations regarding the adequacy of SCADA.

12. There is no duplication of alleged violations regarding PG&E's emergency procedures.

13. There is no duplication of alleged violations regarding PG&E's GIS data.

14. There is no duplication of alleged violations regarding patrol records.

15. The Commission has been certificated pursuant to 49 U.S.C. § 60105 to enforce the Department of Transportation's minimum federal safety standards for gas pipeline facilities.

16. GO 112-E automatically incorporates all revisions to the Federal Pipeline Safety Regulations, 49 CFR Parts 190, 191, 192, 193 and 199.

17. The Commission's authority to impose fines for violations of laws and regulations are established by Pub Util. Code §§ 2107 and 2108.

18. Ordering Paragraph 3 of the *PSEP Decision* provides that all increases in revenue requirement ordered in that decision were subject to refund pending decisions in the Pipeline OIIs.

19. CPSD, TURN, DRA, CSB and CCSF propose penalties that consist of fines, disallowances and other remedies that would equal approximately \$2.25 billion after tax.

20. The penalties imposed on El Paso Natural Gas Company for the Carlsbad explosion were the result of a consent decree.

21. UGI Corporation settled the enforcement actions brought upon it for the Allentown explosion.

22. Decision 98-12-075 identified five factors to be considered in determining the level of penalties to be imposed.

23. The San Bruno explosion and fire resulted in physical harm.

24. A violation of Rule 1.1 of the Commission's Rules of Practice and Procedure is a severe offense.

25. PG&E management had been notified at various times that its pipeline records were not complete and of the impact of not having these records.

26. The *Recordkeeping Violations Decision* had found that PG&E violated Rule 1.1 on two occasions with respect to its responses to CPSD's data requests and potentially violated Rule 1.1 in another data request.

27. PG&E's market value as of January 10, 2012 was \$16.439 billion, and an aggregate value of \$29.117 billion.

28. If one were to consider PG&E's gas transmission and distribution business on a standalone basis, it would have an aggregate value of approximately
\$6.4 billion, and an equity value of approximately \$4.3 billion.

29. Between February 2012 and February 2013, various equity analysts projected fines, disallowances and other remedies range from \$500 million to \$3.65 billion (pre-tax).

30. PG&E has the financial resources to support a \$2.25 billion penalty.

31. With the exception of the investigation into the explosion of a distribution pipeline in Rancho Cordova, the Commission's past enforcement cases that resulted in large fines did not involve deaths or severe property damage.

32. The penalties under consideration are for violations found in three separate proceedings.

DRAFT

33. None of the Commission's prior enforcement cases or the other gas pipeline accidents identified in the W*ells Fargo Report* had an actual or potential impact on such a large area or number of people.

34. The \$38,000,000 penalty adopted in the *Rancho Cordova Decision* was the result of a modified settlement agreement.

35. The decision on violations in the Pipeline OIIs found that PG&E committed 2,425 violations, many of them continuing for years, for a total of 18,447,803 days in violation.

36. Based on the number of violations found, the range of fines that may be imposed pursuant to Pub. Util. Code § 2107 range from \$9.2 billion to \$254.3 billion.

37. The majority of the projects approved in the *PSEP Decision* were to correct recordkeeping shortfalls and implement safety improvements, including pipeline testing and replacement that had been neglected by PG&E.

38. The *PSEP Decision* disallowed rate recovery of \$635,000,000.

39. The San Bruno OII and the Recordkeeping OII sought participation from interested parties.

40. The Commission's Intervenor Compensation Program generally governs compensation of intervenors in Commission proceedings.

41. Under the Intervenor Compensation Program, only TURN would be eligible for compensation for its participation in these proceedings.

Conclusions of Law

1. Each violation of a regulation or statute is considered a separate offense, even if it is the result of the same underlying actions.

2. It is reasonable to eliminate duplicative and overlapping violations from the total number of days in violation used to calculate the penalties.

3. The Commission may enforce violations of 49 CFR 192 pursuant to its constitutional and statutory authority.

4. The Commission's authority to impose fines for violation of laws and regulations are established by Pub. Util. Code §§ 2107 and 2108.

5. The California Constitution, along with Pub. Util. Code § 701, confers broad authority on the Commission to regulate public utilities.

6. The Commission does not have discretion to direct how monies paid by a utility under Pub. Util. Code § 2107 are to be used.

7. Fines imposed pursuant to Pub. Util. Code § 2107 must be paid to the State's General Fund.

8. The purpose of fines is to deter further violations by the perpetrator and others.

9. PG&E's proposal that any fines or penalties be directed to invest in pipeline safety is both contrary to Pub. Util. Code § 2107 and would not serve to deter future violations.

10. The Commission has authority to fashion equitable remedies.

11. The Commission may impose disallowances in the form of a one-time bill credit pursuant to Pub. Util. Code §§ 451 and 701.

12. Any penalties imposed on PG&E in connection with the violations arising from the Pipeline OIIs should be significantly greater than those imposed on El Paso Natural Gas Company or UGI Corporation.

13. The California legislature has given the Commission broad discretion to determine the appropriate level of fines for violations, rather than establish a maximum fine amount.

14. Based on the violations presented in the Pipeline OIIs, CPSD's proposed penalty would not be considered excessive and may be necessary to deter future violations.

15. Violations that result in physical or economic harm and the failure to comply with statutes or Commission directions are considered severe violations.

16. The fact that PG&E's violations are pervasive throughout its pipeline system and result in violations of more than one regulation or law does not change the need to consider them as separate violations.

17. Misleading the Commission and impeding the staff's investigation in the Recordkeeping OII are severe offenses.

18. PG&E's offenses should be considered severe.

19. PG&E has the responsibility to ensure that its gas transmission pipeline systems are operated safely, not CPSD.

20. The fact that other gas utilities may also be violating statutes and regulations is not an excuse for PG&E to not be in compliance.

21. All utilities under the Commission's jurisdiction are expected to comply with Commission directives and orders.

22. PG&E has not acted in good faith to discover, disclose and remedy the violations.

23. The purpose of a penalty is to deter future violations by the company and others.

24. PG&E has the financial resources to support a \$2.25 billion penalty.

25. Based on the gravity and severity of the violations, PG&E's statutory obligation to provide safe and reliable gas service, the pervasive nature of PG&E's recordkeeping shortfalls, the impact of the San Bruno explosion on its

residents, and the commission's and the public interest in ensuring safe and reliable natural gas service, a severe penalty is warranted.

26. Based on the significantly greater physical impact of the San Bruno explosion and fire, the increased risk to all residents in PG&E's service territory and the duration of the violations, the potential penalty exposure to PG&E should be significantly higher than the \$97,000,000 calculated in *Rancho Cordova*.

27. Many of the allegedly unrecoverable gas transmission costs identified by PG&E are outside the scope of this proceeding or speculative and should not be given any weight.

28. Although PG&E had been authorized to collect in rates costs to replace pipeline segments as part of its Gas Pipeline and Replacement Program in 1986 and 1992, PG&E moved to performing risk assessments in the late 1990's and only replaced 25 miles of pipe between 2000 and 2010.

29. PG&E should be ordered to issue one-time bill credits totaling \$400 million to its natural gas transmission customers.

30. The additional \$400,000,000 disallowance is an equitable remedy for PG&E's failure to replace pipeline as needed to ensure the safe operation of its gas transmission pipeline system.

31. PG&E should file a Tier 3 Advice Letter within 45 days after the effective date of this decision to implement the bill credit mechanism adopted in this decision.

32. There should be no adjustment to the disallowance adopted in this decision to account for any tax benefits PG&E may receive.

33. A fine of \$950,000,000 should be imposed under Pub. Util. Code §§ 2107 and 2108.

34. PG&E should be ordered to pay a fine of \$950,000,000.

35. The remedies contained in Appendix E of this decision should be adopted.

36. CSB's proposal that PG&E be directed to provide a \$100,000,000 endowment to fund a "California Pipeline Safety Trust" should be rejected.

37. CSB's and DRA's proposal that PG&E shareholders pay for an independent monitor to evaluate and review PG&E's compliance with the *PSEP Decision* and any fines or remedies ordered in this decision should be rejected.

38. The Commission's safety jurisdictions cannot be delegated, and an independent monitor established to augment CPSD's role is no substitute for, and does not obviate the need for, a properly resourced, trained, and tasked CPSD.

39. PG&E shareholders should reimburse CPSD up to \$30,000,000 for the costs to ensure compliance with the *PSEP Decision* and all remedies ordered in this decision, including CPSD's costs for hiring qualified independent auditors to audit and issue reports for both PG&E's MAOP Validation results and Project Mariner systems.

40. CPSD should present a proposal to the Commissioners within 60 days of the effective date of this decision to perform the MAOP Validation and Project Mariner audits, and the timing for such audits to occur.

41. CSB's proposal that PG&E pay \$150,000,000 to be placed in trust for a newly established Peninsula Emergency Response Fund should be rejected.

42. CSB's proposal V.D.2.b, regarding training of Gas Service Representatives and Gas Control Operators for responding to emergencies, as modified by PG&E, should be adopted.

43. PG&E should formalize its emergency response and disclosure obligations to cities, counties and fire districts.

44. PG&E should enter into mutual assistance agreements with the individual cities, counties or fire districts by no later than December 2015. These mutual assistance agreements shall be maintained in the appropriate Division Emergency Plan.

45. Responsibility for enforcing the mutual assistance agreements lies with the Commission, not the individual cities, counties or fire districts.

46. CSB's proposed remedy for automated shutoff valves with automatic capability should be rejected.

47. CSB's proposal that PG&E revise its Long-Term Incentive Plan and its Short-Term Incentive Plan should be rejected.

48. CPSD should present a proposal to the Commission within 60 days of the effective date of this decision for a comprehensive audit of all aspects of PG&E's operations, including control room operations, emergency planning, record-keeping, performance-based risk and integrity management programs and public awareness programs, as recommended by the NTSB.

49. Given the nature of these proceedings, it would not be equitable for utility ratepayers to pay for intervenors' litigation costs, nor to limit compensation to a single intervenor, in these proceedings.

50. Ensuring the provision of safe utility services is cognate and germane to the regulation of public utilities.

51. DRA's proposal that PG&E shareholder reimburse TURN, CSB, CCSF and DRA for their litigation costs should be adopted.

52. PG&E shareholders should compensate TURN, CSB, CCSF and DRA for their reasonably-incurred litigation expenses, including the expert witness fees, in connection with these three proceedings. This will include expenses incurred from the initiation of the proceedings through the effective date of this decision.

ORDER

IT IS ORDERED that:

1. Pacific Gas and Electric Company (PG&E) must pay a fine of \$950,000,000 by check or money order payable to the California Public Utilities Commission and mailed or delivered to the Commission's Fiscal Office at 505 Van Ness Avenue, Room 3000, San Francisco, CA 94102, within 180 days of the effective date of this order. PG&E shall write on the face of the check or money order "For deposit to the General Fund per Decision 15-__-."

2. All money received by the Commission's Fiscal Office pursuant to the preceding Ordering Paragraph shall be deposited or transferred to the State of California General Fund as soon as practical.

3. If Pacific Gas and Electric Company fails to pay in full the \$950,000,000 fine ordered in Ordering Paragraph 1, the outstanding amount shall include interest at the rate earned on prime, three-month, non-financial commercial paper as reported in Federal Reserve Statistical Release H.15, beginning the 181st day after the effective date of this decision.

4. Pacific Gas and Electric Company (PG&E) shall issue one-time bill credits totaling \$400 million to its natural gas transmission customers in accordance with the following:

- a. The credit should be based on a cents per therm calculation based on the forecast for November and December 2015 gas throughout.
- b. PG&E shall apply this bill credit for every billing cycle beginning in November 2015 to apply to the actual month's consumption.
- c. PG&E shall apply this or other appropriate mechanism as it determines necessary for Non-Core customers.

d. PG&E shall calculate the exact amount refunded so that any shortfall or any excess refund may be "trued-up" to ensure that customers receive the full and exact amount of the penalty. Any shortfall or excess refund must then be proportionately applied to both the Purchase Gas Account and the Non-Core Customer Class Charge Account based on the relative throughput of core and noncore gas for the November 2015 billing cycle.

 Pacific Gas and Electric Company shall submit a Tier 3 Advice Letter to implement the bill credit mechanism adopted in Ordering Paragraph 4 within 45 days of the effective date of this decision.

6. Pacific Gas and Electric Company shall implement the remedies adopted in Appendix E of this decision.

7. Within 60 days of the effective date of this decision, Pacific Gas and Electric Company shall file a Compliance Filing in these dockets, which:

- a. Identifies the remedies ordered in this decision that have already been ordered elsewhere, where that remedy (decision, report, etc.) was ordered, and PG&E's progress to date in complying with that remedy.
- b. Identifies any remedy ordered in this decision that modifies or eliminates any remedies ordered elsewhere.

8. The Compliance Filing ordered in Ordering Paragraph 7 shall also include a timeframe for completion of each of the remedies adopted in Appendix E of this decision.

9. Within 60 days of the effective date of this decision, the Safety and Enforcement Division shall present a proposal to the Commissioners for the MAOP Validation and Project Mariner audits, and the timing for such audits to occur.

10. Within 60 days of the effective date of this decision, the Safety and Enforcement Division shall present a proposal to the Commissioners to perform

DRAFT

the comprehensive audit recommended by the National Transportation and Safety Board, and the timing for such audit to occur. This audit will include all aspects of PG&E's operations, including control room operations, emergency planning, record-keeping, performance-based risk and integrity management programs and public awareness programs.

11. Pacific Gas and Electric Company's shareholders shall reimburse the City of San Bruno, the Office of Ratepayer Advocates, The Utility Reform Network and the City and County of San Francisco for all reasonably-incurred litigation expenses, including the expert witness fees, in connection with these three proceedings. This would include expenses incurred from the initiation of the proceedings through the effective date of this decision.

12. The City of San Bruno (CSB), the Office of Ratepayer Advocates (DRA), The Utility Reform Network (TURN) and the City and County of San Francisco (CCSF) may file requests for compensation to be paid by Pacific Gas and Electric Company's shareholders according to the procedural timelines set forth in Rules 17.3 and 17.4 of the Commission's Rules of Practice and Procedure, as follows:

- Parties shall provide a summary identification of the hours worked each month by each attorney and/or expert witness. No further breakdown, such as among the different investigations, will be required.
- b. A summary identification of the hours worked each month by each attorney and/or expert witness. No further breakdown, such as among the different investigations, will be required.
- c. The hourly rates approved by the Commission for payment by PG&E's shareholders shall be established as follows:

- The hourly rates for DRA and CCSF attorneys shall be calculated as the attorney's annual salary divided by 2,080 hours.
- The hourly rate for CSB's attorneys shall be based on the contract between CSB and its attorneys for provision of services for these proceedings.
- The hourly rates for TURN's attorneys shall be based on the hourly rates established for these attorneys in our intervenor compensation program.
- d. Expert witness fees shall be based on the contract between the intervenor and the expert witness.
- e. CSB, DRA, TURN and CCSF's reimbursement requests shall be decided by decision of the Commission. Within 30 days of any such decision, PG&E shall pay the amount determined by the Commission out of shareholder funds.
- 13. Investigation (I.) 12-01-007, I.11-02-016 and I.11-11-009 remain open.

This order is effective today.

Dated ______, at San Francisco, California.

Appendix A List of Appearances

Traci Bone Legal Division RM. 5027 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-2048 tbo@cpuc.ca.gov For: ORA

Britt K. Strottman MEYERS NAVE 555 12TH STREET, STE. 1500 OAKLAND CA 94607 (510) 808-2083 bstrottman@meyersnave.com For: City of San Bruno

Harvey Y. Morris SED Legal Division RM. 5036 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1086 hym@cpuc.ca.gov For: SED

Theresa L. Mueller, Chief Energy & Telecom. Deputy OFFICE OF THE CITY ATTY. DENNIS HERRERA CITY HALL 1 DR. CARLTON B. GOODLETT PL., RM. 234 SAN FRANCISCO CA 94102 (415) 554-4640 theresa.mueller@sfgov.org For: City and County of San Francisco

Joseph M. Malkin ORRICK HARRINGTON EMAIL ONLY CA 00000 (415) 773-5505 jmalkin@orrick.com For: Pacific Gas & Electric

Thomas J. Long, Legal Dir. THE UTILITY REFORM NETWORK 785 MARKET ST., STE. 1400 SAN FRANCISCO CA 94103 (415) 929-8876 X303 TLong@turn.org For: The Utility Reform Network

********** STATE EMPLOYEE **********

Niki Bawa Executive Division RM. 5038 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-2049 nb2@cpuc.ca.gov

Kenneth Bruno Safety and Enforcement Division AREA 2-D 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-5265 kab@cpuc.ca.gov

David Peck Ora CALIFORNIA PUBLIC UTILITIES COMMISSION EMAIL ONLY EMAIL ONLY CA 00000 (415) 703-1213 DBP@cpuc.ca.gov

Karen Paull Interim Chief Counsel CALIFORNIA PUBLIC UTILITIES COMMISSION EMAIL ONLY EMAIL ONLY CA 00000 (415) 703-2630 kpp@cpuc.ca.gov

Christine Hammond CPUC - LEGAL EMAIL ONLY EMAIL ONLY CA 00000 (415) 703-1461 cjh@cpuc.ca.gov

Michael Minkus Legislative Liaison CPUC - OFFICE OF GOV'T AFFAIRS EMAIL ONLY CA 00000 (916) 905-7364 michael.minkus@cpuc.ca.gov

Christopher Chow Executive Division 505 Van Ness Avenue, RM. 5301 San Francisco CA 94102 3298 (415) 703-2234 crs@cpuc.ca.gov

Michelle Cooke Administrative Services RM. 2004 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-2163 mlc@cpuc.ca.gov

Elizabeth Dorman Legal Division RM. 4300 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1415 edd@cpuc.ca.gov

Maryam Ebke Administrative Law Judge Division RM. 5112 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-2271 meb@cpuc.ca.gov

Julie A. Fitch Executive Division RM. 5214 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-3134 jf2@cpuc.ca.gov

Julie Halligan Administrative Law Judge Division RM. 5041 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1587 jmh@cpuc.ca.gov

Andrew Kotch Executive Division RM. 5301 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1072 ako@cpuc.ca.gov

Kelly C. Lee Office of Ratepayer Advocates RM. 4108 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1795 kcl@cpuc.ca.gov Richard A. Myers Energy Division AREA 4-A 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1228 ram@cpuc.ca.gov

Tony Marino OFFICE OF SENATOR JERRY HILL EMAIL ONLY EMAIL ONLY CA 00000 (916) 651-4013 tony.marino@sen.ca.gov

Marion Peleo Legal Division RM. 4107 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-2130 map@cpuc.ca.gov

Terrie D. Prosper Executive Division RM. 5301 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-2160 tdp@cpuc.ca.gov

Jonathan J. Reiger Legal Division RM. 5035 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 355-5596 jzr@cpuc.ca.gov

Raffy Stepanian Safety and Enforcement Division RM. 500 320 West 4th Street Suite 500 Los Angeles CA 90013 (213) 576-5772 rst@cpuc.ca.gov

Mark S. Wetzell Administrative Law Judge Division RM. 5003 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1491 msw@cpuc.ca.gov

********* INFORMATION ONLY *********

David Marcus ADAMS BROADWELL & JOSEPH EMAIL ONLY EMAIL ONLY CA 00000-0000 (510) 528-0728 dmarcus2@sbcglobal.net

Marc D. Joseph Attorney At Law ADAMS BROADWELL JOSEPH & CARDOZO 601 GATEWAY BLVD. STE 1000 SOUTH SAN FRANCISCO CA 94080 (650) 589-1660 mdjoseph@adamsbroadwell.com

Rachael Koss ADAMS BROADWELL JOSEPH & CORDOZO 601 GATEWAY BLVD., STE. 1000 SOUTH SAN FRANCISCO CA 94080 (650) 589-1660 rkoss@adamsbroadwell.com

Randall Li Analyst AEGEAN OIL USA, LLC 20 SIGNAL RD STAMFORD CT 06902-7909 (664) 722-2007 randall@nexusamllc.com

Michael J. Aguirre, Esq. MARIA C. SEVERSON Attorney AGUIRRE MORRIS & SEVERSON LLP 444 WEST C STREET, SUITE 210 SAN DIEGO CA 92101 (619) 876-5364 maguirre@amslawyers.com For: Ruth Henricks

John Mcintyre ALCANTAR & KAHL 33 NEW MONTGOMERY STREET, SUITE 1850 SAN FRANCISCO CA 94105 (415) 421-4143 X-109 jfm@a-klaw.com Karen Terranova ALCANTAR & KAHL 33 NEW MONTGOMERY STREET, SUITE 1850 SAN FRANCISCO CA 94105 (415) 403-5542 filings@a-klaw.com

Nora Sheriff ALCANTAR & KAHL LLP 33 NEW MONTGOMERY ST., STE. 1850 SAN FRANCISCO CA 94105 (415) 421-4143 nes@a-klaw.com

Mike Cade ALCANTAR & KAHL, LLP EMAIL ONLY EMAIL ONLY OR 00000 (503) 402-8711 wmc@a-klaw.com

John Apgar, Cfa BANK OF AMERICA MERRILL LYNCH RESEARCH ONE BRYANT PARK, 15TH FL. NEW YORK NY 10036 (646) 855-3753 John.Apgar@baml.com

K. Konolige BGC FINANCIAL, LP EMAIL ONLY EMAIL ONLY CA 00000 kkonolige@bgcpartners.com

Peter Battaglia BGC FINANCIAL, LP EMAIL ONLY EMAIL ONLY CA 00000 (201) 787-9386 pbattaglia@bcgpartners.com

Mark Chediak Energy Reporter BLOOMBERG NEWS EMAIL ONLY CA 00000 (415) 617-7233 mchediak@bloomberg.net

Andrew Greenberg CADWALADER WICKERSHAM & TAFT LLP ONE WORLD FINANCIAL CENTER NEW YORK NY 10281 (212) 504-6077 andrew.greenberg@cwt.com

Kenneth W. Irvin CADWALADER WICKERSHAM & TAFT LLP 700 SIXTH STREET, N.W. WASHINGTON DC 20001 (202) 862-2315 ken.irvin@cwt.com

Terence T. Healey CADWALADER WICKERSHAM & TAFT LLP 700 ISXTH ST., N.W. WASHINGTON DC 20001 (202) 862-2335 terence.healey@cwt.com

Deborah Slon Deputy Attorney General CALIFORNIA DEPARTMENT OF JUSTICE 1515 CLAY STREET, STE. 2000 OAKLAND CA 94612 (510) 622-2112 deborah.slon@doj.ca.gov

CALIFORNIA ENERGY MARKETS 425 DIVISADERO ST. STE 303 SAN FRANCISCO CA 94117-2242 (415) 963-4439 cem@newsdata.com

Jack D'Angelo CATAPULT CAPITAL MANAGEMENT LLC 666 5TH AVENUE, 9TH FLOOR NEW YORK NY 10019 (212) 320-1059 jdangelo@catapult-llc.com

Melissa Kasnitz Attorney CENTER FOR ACCESSIBLE TECHNOLOGY 3075 ADELINE STREET, STE. 220 BERKELEY CA 94703 (510) 841-3224 X2019 service@cforat.org

Sophie Karp CITIGROUP 388 GREENWICH ST. NEW YORK NY 10013 (212) 816-3366 sophie.karp@citi.com Austin M. Yang Deputy City Attorney CITY AND COUNTY OF SAN FRANCISCO OFFICE OF THE CITY ATTORNEY, RM. 234 1 DR. CARLTON B. GODDLETT PLACE SAN FRANCISCO CA 94102-4682 (415) 554-6761 austin.yang@sfgov.org

Keith Helmuth. P.E. CITY OF MADERA 205 W. FOURTH STREET MADERA CA 93637 (559) 661-5418 khelmuth@cityofmadera.com

Jessica Mullan Senior Deputy City Attorney CITY OF PALO ALTO PO BOX 10250 PALO ALTO CA 94303 (650) 329-2577 jessica.mullan@cityofpaloalto.org

Connie Jackson City Manager CITY OF SAN BRUNO 567 EL CAMINO REAL SAN BRUNO CA 94066-4299 (650) 616-7056 cjackson@ci.sanbruno.ca.us

Jim Von Riesemann Managing Director CRT CAPITAL GROUP LLC EMAIL ONLY EMAIL ONLY CT 00000 (203) 569-4336 jvonriesemann@crtllc.com

Sarah Grossman-Swenson DAVIS COWELL & BOWE, LLP 595 MARKET STREET, STE. 1400 SAN FRANCISCO CA 94105 (415) 497-7200 sgs@dcbsf.com

Ann Trowbridge Attorney DAY CARTER & MURPHY LLP 3620 AMERICAN RIVER DR., STE. 205 SACRAMENTO CA 95864 (916) 570-2500 X103 ATrowbridge@DayCarterMurphy.com

Jonathan Arnold DEUTSCHE BANK 60 WALL STREET NEW YORK NY 10005 (212) 250-3182 jonathan.arnold@db.com

Lauren Duke DEUTSCHE BANK SECURITIES INC. EMAIL ONLY EMAIL ONLY NY 00000 (212) 250-8204 lauren.duke@db.com

Adam Miller DRW 540 W. MADISON , STE. 2600 CHICAGO IL 60661 (312) 542-3478 filings@drw.com

Andrew B. Brown ELLISON, SCHNEIDER & HARRIS LLP 2600 CAPITOL AVENUE, SUITE 400 SACRAMENTO CA 95816-5905 (916) 447-2166 abb@eslawfirm.com

Travis Foss Legal Division RM. 5026 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1998 ttf@cpuc.ca.gov For: SED (formerly CPSD)

Paul Patterson GLENROCK ASSOCIATES LLC EMAIL ONLY EMAIL ONLY NY 00000 (212) 246-3318 ppatterson2@nyc.rr.com

Brian T. Cragg Attorney GOODIN, MACBRIDE, SQUERI, DAY & LAMPREY 505 SANSOME STREET, SUITE 900 SAN FRANCISCO CA 94111 (415) 392-7900 BCragg@GoodinMacbride.com Megan Somogyi Attorney GOODIN, MACBRIDE, SQUERI, DAY & LAMPREY 505 SANSOME ST., STE. 900 SAN FRANCISCO CA 94111 (415) 392-7900 MSomogyi@GoodinMacBride.com

Darryl J. Gruen Legal Division RM. 5133 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1973 djg@cpuc.ca.gov

Norman A. Pedersen, Esq. Attorney At Law HANNA AND MORTON, LLP 444 SOUTH FLOWER STREET, STE. 1500 LOS ANGELES CA 90071-2916 (213) 430-2510 npedersen@hanmor.com

Charlyn A. Hook Legal Division RM. 5131 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-3050 chh@cpuc.ca.gov

Christopher Turnure J.P. MORGAN CHASE SECURITIES 383 MADISON AVENUE, FLOOR 34 NEW YORK NY 10179 (212) 622-5696 Christopher.Turnure@JPMorgan.com

Anthony Crowdell Equity Research - Electric Utilities JEFFERIES LLC 520 MADISON AVENUE, 13TH FL. NEW YORK NY 10022 (212) 284-2563 acrowdell@jefferies.com

Eric Selmon JEMZAR CORP. EMAIL ONLY EMAIL ONLY IS 000 000 ISRAEL (646) 843-7200 ESelmon@Jemzar.com

Nazia Sheikh JP MORGAN CHASE 383 MADISON AVENUE, FLOOR 34 NEW YORK NY 10179 (212) 622-5696 nazia.x.sheikh@jmorgan.com

C. Susie Berlin LAW OFFICES OF SUSIE BERLIN 1346 THE ALAMEDA, STE. 7, NO. 141 SAN JOSE CA 95126 (408) 778-8478 berlin@susieberlinlaw.com For: Northern California Generation Coalition (NCGC)

Brendan Naeve LEVIN CAPITAL STRATEGIES 595 MADISON AVENUE, 17TH FLR NEW YORK NY 10022 (212) 259-0841 bnaeve@levincap.com

Neil Stein LEVIN CAPITAL STRATEGIES 595 MADISON AVENUE NEW YORK NY 10022 (212) 259-0823 NStein@LevinCap.com

Michael Goldenberg LUMINUS MANAGEMENT 1700 BROADWAY, 38TH FLOOR NEW YORK NY 10019 (212) 615-3427 mgoldenberg@luminusmgmt.com

Sunny Kwak MACQUARIE CAPITAL (USA) 125 WEST 55TH STREET NEW YORK NY 10019 (212) 231-1683 sunny.kwak@macquarie.com

Emilie E. De La Motte Attorney At Law MEYERS NAVE 555 12TH STREET, STE. 1500 OAKLAND CA 94607 (510) 808-2000 edelamotte@meyersnave.com Susan Griffin Paralegal MEYERS NAVE 555 12TH STREET, STE. 1500 OAKLAND CA 94607 (510) 808-2000 sgriffin@meyersnave.com

Steven R. Meyers Principal MEYERS, NAVE, RIBACK, SILVER & WILSON 555 12TH STREET, STE. 1500 OAKLAND CA 94607 (510) 808-2000 smeyers@meyersnave.com

Gregory Reiss MILLENNIUM MANAGEMENT LLC 666 FIFTH AVENUE, 8TH FLOOR NEW YORK NY 10103 (212) 320-1036 Gregory.Reiss@mlp.com

Rajeev Lalwani MORGAN STANLEY EMAIL ONLY EMAIL ONLY NY 00000 (212) 761-6978 rajeev.lalwani@morganstanley.com

Stephen Byrd MORGAN STANLEY 1585 BROADWAY, 38TH FLOOR NEW YORK NY 10036 (212) 761-6978 stephen.byrd@morganstanley.com

Phillip Moskal EMAIL ONLY EMAIL ONLY CA 00000 thnxvm@gmail.com

Tom Bottorff PACIFIC GAS & ELECRIC COMPANY 77 BEALE STREET, MC B32 SAN FRANCISCO CA 94105 teb3@pge.com

Attn.: Agent For Service Of Process PACIFIC GAS & ELECTRIC COMPANY 77 BEALE ST., STE. 100 SAN FRANCISCO CA 94105

Bruce Smith PACIFIC GAS & ELECTRIC COMPANY EMAIL ONLY EMAIL ONLY CA 00000 BTS1@pge.com

Dionne Adams PACIFIC GAS & ELECTRIC COMPANY 2700 YGNACIO VALLEY ROAD, SUITE 100 WALNUT CREEK CA 94598 (925) 459-3757 dng6@pge.com

Shilpa Ramaiya PACIFIC GAS & ELECTRIC COMPANY EMAIL ONLY EMAIL ONLY CA 00000 (415) 973-3486 SRRD@pge.com

Case Administration PACIFIC GAS AND ELECTRIC COMPANY 77 BEALE ST./ PO BOX 770000; MC B9A SAN FRANCISCO CA 94177 regrelcpuccases@pge.com

Kevin Hietbrink Regulatory Case Coordinator PACIFIC GAS AND ELECTRIC COMPANY EMAIL ONLY EMAIL ONLY CA 00000 (415) 973-0223 kxhy@pge.com

Michelle L. Wilson PACIFIC GAS AND ELECTRIC COMPANY MAIL CODE B30A 77 BEALE STREET, ROOM 1087 SAN FRANCISCO CA 94105 (415) 973-6655 mlw3@pge.com

Henry W. Pielage, P.E. Ratepayer Advocate 2860 GLEN CANYON ROAD SANTA CRUZ CA 95060 henrypielage@comcast.net

Ted Heyn POINTSTATE CAPITAL 40 WEST 57TH ST., 25TH FLOOR NEW YORK NY 10019 (212) 830-7061 ted@pointstate.com William Westfield SACRAMENTO MUNICIPAL UTILITY DISTRICT 6201 S STREET SACRAMENTO CA 95817-1899 (916) 732-6123 William.Westfield@smud.org

Hugh Wynne SANFORD C. BERNSTEIN & CO. 1345 AVENUE OF THE AMERICAS, 15TH FLR NEW YORK NY 10105 (212) 823-2692 hugh.wynne@bernstein.com

Paul Schaafsma 521 WEST SUPERIOR STREET, UNIT 221 CHICAGO IL 60654 (312) 664-0906 paulschaafsma@yahoo.com

Chris King SIEMENS SMART GRID SOLUTIONS 4000 E. THIRD AVE., STE. 400 FOSTER CITY CA 94404 (650) 227-7770 X-187 chris_king@siemens.com

Kevin Fallon SIR CAPITAL MANAGEMENT 620 EIGHTH AVENUE, 22ND FLR. NEW YORK NY 10018 (212) 993-7104 kfallon@sirfunds.com

Angelica Morales Attorney SOUTHERN CALIFORNIA EDISON COMPANY 2244 WALNUT GROVE AVENUE / PO BOX 800 ROSEMEAD CA 91770 (626) 302-6160 angelica.morales@sce.com

Case Administration SOUTHERN CALIFORNIA EDISON COMPANY 2244 WALNUT GROVE AVENUE, PO BOX 800 ROSEMEAD CA 91770 (626) 302-6906 case.admin@sce.com

Douglas Porter SOUTHERN CALIFORNIA EDISON COMPANY 2244 WALNUT GROVE AVE./PO BOX 800 ROSEMEAD CA 91770 (626) 302-3964 douglas.porter@sce.com

Frank A. Mcnulty SOUTHERN CALIFORNIA EDISON COMPANY 2244 WALNUT GROVE AVE. / PO BOX 800 ROSEMEAD CA 91770 (626) 302-1499 Francis.McNulty@sce.com

Gloria Ing Attorney At Law SOUTHERN CALIFORNIA EDISON COMPANY 2244 WALNUT GROVE AVE./PO BOX 800 ROSEMEAD CA 91770 (626) 302-1999 gloria.ing@sce.com

Deana Ng SOUTHERN CALIFORNIA GAS COMPANY 555 W. FIFTH ST., GT14E7 LOS ANGELES CA 90013 dng@semprautilities.com

Jeffrey L. Salazar SOUTHERN CALIFORNIA GAS COMPANY 555 W. FIFTH STREET, GT14D6 LOS ANGELES CA 90013 jlsalazar@semprautilities.com

Michael Franco Regulatory Case Mgr SOUTHERN CALIFORNIA GAS COMPANY 555 WEST FIFTH STREET, GT14D6 LOS ANGELES CA 90013-1011 (213) 244-5839 MFranco@SempraUtilities.com

Rasha Prince Director, Regulatory Affairs SOUTHERN CALIFORNIA GAS COMPANY 555 WEST 5TH STREET, GT14D6 LOS ANGELES CA 90013-1034 (213) 244-5141 RPrince@SempraUtilities.com

Sharon Tomkins SOUTHERN CALIFORNIA GAS COMPANY 555 W. FIFTH ST., GT14E7 LOS ANGELES CA 90013 stomkins@semprautilities.com

Steven Hruby SOUTHERN CALIFORNIA GAS COMPANY 555 W. FIFTH ST., GT14D6 LOS ANGELES CA 90013 SHruby@SempraUtilities.com Catherine M. Mazzeo Associate General Counsel SOUTHWEST GAS CORPORATION 5241 SPRING MOUNTAIN ROAD LAS VEGAS NV 89150 (702) 876-7250 catherine.mazzeo@swgas.com For: Southwest Gas Corporation

Daniel D. Van Hoogstraten Legal Admin Assistant STINSON MORRISON HECKER LLP EMAIL ONLY EMAIL ONLY DC 00000-0000 (202) 572-9919 dvanhoogstraten@stinson.com

Kelly Daly STINSON MORRISON HECKER LLP 1775 PENNSYLVANIA AVE., NW, STE. 800 WASHINGTON DC 20006-4605 (202) 728-3011 kdaly@stinson.com For: Sacramento Municipal Utility District (SMUD)

Matt Fallon TALON CAPITAL 1001 FARMINGTON AVENUE WEST HARTFORD CT 06107 (860) 920-1000 mfallon@taloncap.com

Marcel Hawiger Energy Attorney THE UTILITY REFORM NETWORK 785 MARKET ST., STE. 1400 SAN FRANCISCO CA 94103 (415) 929-8876 X311 marcel@turn.org

Julien Dumoulin-Smith UBS INVESTMENT RESEARCH EMAIL ONLY NY 00000 (212) 713-9848 julien.dumoulin-smith@ubs.com

Ashar Khan, Portfolio Manager VISIUM ASSET AMANGEMENT 888 SEVENTH AVENUE, 22 FLR. NEW YROK NY 10019 (212) 474-6880 akhan@visiumfunds.com

Alex Kania WOLFE RESEARCH 420 LEXINGTON AVENUE, SUITE 648 NEW YORK NY 10170 (646) 582-9244 akania@wolferesearch.com

David Paz WOLFE RESEARCH 420 LEXINGTON AVE., STE. 648 NEW YORK NY 10170 (646) 582-9242 dpaz@wolferesearch.com

Steve Fleishman WOLFE RESEARCH 420 LEXINGTON AVENUE, SUITE 648 NEW YORK NY 10170 (646) 582-9241 sfleishman@wolferesearch.com

Naaz Khumawala Utilities & Power Research WOLFE TRAHAN 420 LEXINGTON, SUITE 648 NEW YORK NY 10170 (646) 582-9243 NKhumawala@WolfeTrahan.com

(End of I.12-01-007)

Traci Bone Legal Division RM. 5027 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-2048 tbo@cpuc.ca.gov For: ORA

Theresa L. Mueller CITY AND COUNTY OF SAN FRANCISCO CITY HALL, ROOM 234 1 DR. CARLTON B. GOODLETT PLACE SAN FRANCISCO CA 94102-4682 (415) 554-4640 theresa.mueller@sfgov.org For: City and County of San Francisco

Travis Foss Legal Division RM. 5026 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1998 ttf@cpuc.ca.gov For: SED

Martin Homec PO BOX 4471 DAVIS CA 95617 (530) 867-1850 martinhomec@gmail.com For: Californians for Renewable Energy

C. Susie Berlin LAW OFFICES OF SUSIE BERLIN 1346 THE ALAMEDA, STE. 7, NO. 141 SAN JOSE CA 95126 (408) 778-8478 berlin@susieberlinlaw.com For: Northern California Generation Coalition

Steven R. Meyers, Principal MEYERS, NAVE, RIBACK, SILVER & WILSON 555 12TH STREET, STE. 1500 OAKLAND CA 94607 (510) 808-2000 smeyers@meyersnave.com For: City of San Bruno

Appearances I.11-02-016

Harvey Y. Morris Legal Division RM. 5036 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1086 hym@cpuc.ca.gov For: SED

Joseph M. Malkin ORRICK HERRINGTON & SUTCLIFFE LLP THE ORRICK BUILDING 405 HOWARD STREET SAN FRANCISCO CA 94105-2669 (415) 773-5505 JMalkin@Orrick.com For: Pacific Gas and Electric Company

Thomas J. Long Legal Dir. THE UTILITY REFORM NETWORK 785 MARKET ST., STE. 1400 SAN FRANCISCO CA 94103 (415) 929-8876 X303 TLong@turn.org For: TURN

********** STATE EMPLOYEE **********

Niki Bawa Executive Division RM. 5038 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-2049 nb2@cpuc.ca.gov

Kenneth Bruno Safety and Enforcement Division AREA 2-D 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-5265 kab@cpuc.ca.gov

Karen Paull Interim Chief Counsel CALIFORNIA PUBLIC UTILITIES COMMISSION EMAIL ONLY EMAIL ONLY CA 00000 (415) 703-2630 kpp@cpuc.ca.gov Michael Colvin Advisor CPUC - ENERGY EMAIL ONLY EMAIL ONLY CA 00000 (415) 355-5484 michael.colvin@cpuc.ca.gov

Christine Hammond CPUC - LEGAL EMAIL ONLY EMAIL ONLY CA 00000 (415) 703-1461 cjh@cpuc.ca.gov

Michael Minkus Legislative Liaison CPUC - OFFICE OF GOV'T AFFAIRS EMAIL ONLY EMAIL ONLY CA 00000 (916) 905-7364 michael.minkus@cpuc.ca.gov

David B. Peck CPUC - ORA ELECTRICITY PRICING & CUSTOMER PROGRAM EMAIL ONLY EMAIL ONLY CA 00000 (415) 703-1213 dbp@cpuc.ca.gov

Eugene Cadenasso Energy Division AREA 4-A 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1214 cpe@cpuc.ca.gov

Michelle Cooke Administrative Services RM. 2004 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-2163 mlc@cpuc.ca.gov

Elizabeth Dorman Legal Division RM. 4300 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1415 edd@cpuc.ca.gov

Appearances I.11-02-016

Maryam Ebke Administrative Law Judge Division RM. 5112 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-2271 meb@cpuc.ca.gov

Julie A. Fitch Executive Division RM. 5214 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-3134 jf2@cpuc.ca.gov

Darryl J. Gruen Legal Division RM. 5133 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1973 djg@cpuc.ca.gov

Julie Halligan Administrative Law Judge Division RM. 5041 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1587 jmh@cpuc.ca.gov

Catherine A. Johnson Legal Division RM. 4300 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1385 caj@cpuc.ca.gov

Sepideh Khosrowjah Executive Division RM. 5201 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1190 skh@cpuc.ca.gov

Andrew Kotch Executive Division 505 Van Ness Avenue, RM. 5301 San Francisco CA 94102 3298 (415) 703-1072 ako@cpuc.ca.gov Kelly C. Lee Office of Ratepayer Advocates RM. 4108 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1795 kcl@cpuc.ca.gov

Richard A. Myers Energy Division AREA 4-A 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1228 ram@cpuc.ca.gov

Terrie D. Prosper Executive Division RM. 5301 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-2160 tdp@cpuc.ca.gov

Thomas Roberts Office of Ratepayer Advocates RM. 4108 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-5278 tcr@cpuc.ca.gov

Matthew Tisdale Executive Division RM. 5202 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-5137 mwt@cpuc.ca.gov

Kan Wai Tong Safety and Enforcement Division RM. 500 320 West 4th Street Suite 500 Los Angeles CA 90013 (213) 576-5700 kwt@cpuc.ca.gov

Amy C. Yip-Kikugawa Administrative Law Judge Division RM. 5024 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-5256 ayk@cpuc.ca.gov

Appearances I.11-02-016

********* INFORMATION ONLY *********

Marc D. Joseph ADAMS BROADWELL JOSEPH & CARDOZO 601 GATEWAY BLVD., STE. 1000 SOUTH SAN FRANCISCO CA 94080-7037 (650) 589-1660 mdjoseph@adamsbroadwell.com

Rachael E. Koss ADAMS BROADWELL JOSEPH & CARDOZO 601 GATEWAY BOULEVARD, SUITE 1000 SOUTH SAN FRANCISCO CA 94080 (650) 589-1660 X20 rkoss@adamsbroadwell.com

Randall Li Analyst AEGEAN OIL USA, LLC 20 SIGNAL RD STAMFORD CT 06902-7909 (664) 722-2007 randall@nexusamllc.com

John Mcintyre ALCANTAR & KAHL 33 NEW MONTGOMERY STREET, SUITE 1850 SAN FRANCISCO CA 94105 (415) 421-4143 X-109 jfm@a-klaw.com

Karen Terranova ALCANTAR & KAHL, LLP 33 NEW MONTGOMERY STREET, SUITE 1850 SAN FRANCISCO CA 94105 (415) 421-4143 filings@a-klaw.com

Mike Cade ALCANTAR & KAHL, LLP EMAIL ONLY EMAIL ONLY OR 00000 (503) 402-8711 wmc@a-klaw.com

Nora Sheriff ALCANTAR & KAHL, LLP 33 NEW MONTGOMERY ST., STE. 1850 SAN FRANCISCO CA 94105 (415) 421-4143 nes@a-klaw.com Naaz Khumawala BANK OF AMERICA, MERRILL LYNCH 700 LOUISIANA, SUITE 401 HOUSTON TX 77002 (713) 247-7313 naaz.khumawala@baml.com

Mark Chediak Energy Reporter BLOOMBERG NEWS EMAIL ONLY EMAIL ONLY CA 00000 (415) 617-7233 mchediak@bloomberg.net

Andrew Greenberg CADWALADER WICKERSHAM & TAFT LLP ONE WORLD FINANCIAL CENTER NEW YORK NY 10281 (212) 504-6077 andrew.greenberg@cwt.com

Kenneth W. Irvin CADWALADER WICKERSHAM & TAFT LLP 700 SIXTH STREET, N.W. WASHINGTON DC 20001 (202) 862-2315 ken.irvin@cwt.com

Terence T. Healey CADWALADER WICKERSHAM & TAFT LLP 700 ISXTH ST., N.W. WASHINGTON DC 20001 (202) 862-2335 terence.healey@cwt.com

Hillary Corrigan CALIFORNIA ENERGY MARKETS 425 DIVISADERO ST. STE 303 SAN FRANCISCO CA 94117-2242 (415) 963-4439 cem@newsdata.com

Andrew Gay CARLSON CAPITAL L.P. 712 FIFTH AVE., 25 TH FLOOR NEW YORK NY 10019 (212) 994-8324 agay@carlsoncapital.com

Appearances I.11-02-016

Jack D'Angelo CATAPULT CAPITAL MANAGEMENT LLC 666 5TH AVENUE, 9TH FLOOR NEW YORK NY 10019 (212) 320-1059 jdangelo@catapult-llc.com

Melissa W. Kasnitz CENTER FOR ACCESSIBLE TECHNOLOGY 3075 ADELINE STREET, SUITE 220 BERKELEY CA 94703 (510) 841-3224 X2019 service@cforat.org

Sophie Karp CITIGROUP 388 GREENWICH ST. NEW YORK NY 10013 (212) 816-3366 sophie.karp@citi.com

Austin M. Yang Deputy City Attorney CITY AND COUNTY OF SAN FRANCISCO OFFICE OF THE CITY ATTORNEY, RM. 234 1 DR. CARLTON B. GODDLETT PLACE SAN FRANCISCO CA 94102-4682 (415) 554-6761 austin.yang@sfgov.org

Grant Kolling Senior Assistant City Attorney CITY OF PALO ALTO PO BOX 10250 PALO ALTO CA 94303 (650) 329-2171 grant.kolling@cityofpaloalto.org

Jessica Mullan Senior Deputy City Attorney CITY OF PALO ALTO PO BOX 10250 PALO ALTO CA 94303 (650) 329-2577 jessica.mullan@cityofpaloalto.org

Connie Jackson City Manager CITY OF SAN BRUNO 567 EL CAMINO REAL SAN BRUNO CA 94066-4299 (650) 616-7056 cjackson@ci.sanbruno.ca.us Klara A. Fabry Dir. - Dept. Of Public Services CITY OF SAN BRUNO 567 EL CAMINO REAL SAN BRUNO CA 94066-4247 (650) 616-7065 kfabry@sanbruno.ca.gov

Sergeant Geoff Caldwell CITY OF SAN BRUNO-POLICE DEPARTMENT POLICE PLAZA-1177 HUNTINGTON AVENUE SAN BRUNO CA 94066-1500 (650) 616-7100 gcaldwell@sanbruno.ca.gov

Jim Von Riesemann Managing Director CRT CAPITAL GROUP LLC EMAIL ONLY EMAIL ONLY CT 00000 (203) 569-4336 jvonriesemann@crtllc.com

Robert C. Cagen Legal Division RM. 4107 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1385 rcc@cpuc.ca.gov

Sarah Grossman-Swenson DAVIS, COWELL & BOWE, LLP 595 MARKET STREET, STE. 1400 SAN FRANCISCO CA 94105 (415) 977-7200 sgs@dcbsf.com

Ann L. Trowbridge DAY CARTER & MURPHY LLP 3620 AMERICAN RIVER DRIVE, SUITE 205 SACRAMENTO CA 95864 (916) 570-2500 X 103 atrowbridge@daycartermurphy.com

Scott Senchak DECADE CAPITAL EMAIL ONLY EMAIL ONLY NY 00000-0000 (212) 320-1933 scott.senchak@decade-llc.com

Appearances I.11-02-016

Lauren Duke DEUTSCHE BANK SECURITIES INC. EMAIL ONLY EMAIL ONLY NY 00000 (212) 250-8204 lauren.duke@db.com

DISABILITY RIGHTS ADVOCATES 2001 CENTER STREET, THIRD FLOOR BERKELEY CA 94704-1204 (510) 665-8644 pucservice@dralegal.org

Cassandra Sweet DOW JONES NEWSWIRES EMAIL ONLY EMAIL ONLY CA 00000 (415) 439-6468 cassandra.sweet@dowjones.com

Adam Miller DRW 540 W. MADISON , STE. 2600 CHICAGO IL 60661 (312) 542-3478 filings@drw.com

Paul Duller EMAIL ONLY EMAIL ONLY CA 00000 p.duller@btinternet.com

Andrew B. Brown Attorney At Law ELLISON SCHNEIDER & HARRIS, LLP 2600 CAPITAL AVENUE, SUITE 400 SACRAMENTO CA 95816-5905 (916) 447-2166 abb@eslawfirm.com

Brian T. Cragg Attorney GOODIN, MACBRIDE, SQUERI, DAY & LAMPREY 505 SANSOME STREET, SUITE 900 SAN FRANCISCO CA 94111 (415) 392-7900 BCragg@GoodinMacbride.com For: Engineers and Scientists of California, Local 20

Appearances I.11-02-016

Megan Somogyi Attorney GOODIN, MACBRIDE, SQUERI, DAY & LAMPREY 505 SANSOME ST., STE. 900 SAN FRANCISCO CA 94111 (415) 392-7900 MSomogyi@GoodinMacBride.com

Norman A. Pedersen, Esq. Attorney At Law HANNA AND MORTON, LLP 444 SOUTH FLOWER STREET, STE. 1500 LOS ANGELES CA 90071-2916 (213) 430-2510 npedersen@hanmor.com

Charlyn A. Hook Legal Division RM. 5131 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-3050 chh@cpuc.ca.gov

Christopher Turnure J.P. MORGAN CHASE SECURITIES 383 MADISON AVENUE, FLOOR 34 NEW YORK NY 10179 (212) 622-5696 Christopher.Turnure@JPMorgan.com

Anthony Crowdell Equity Research - Electric Utilities JEFFERIES LLC 520 MADISON AVENUE, 13TH FL. NEW YORK NY 10022 (212) 284-2563 acrowdell@jefferies.com

Eric Selmon JEMZAR CORP. EMAIL ONLY EMAIL ONLY IS 000 000 ISRAEL (646) 843-7200 ESelmon@Jemzar.com

Brendan Naeve LEVIN CAPITAL STRATEGIES 595 MADISON AVENUE, 17TH FLR NEW YORK NY 10022 (212) 259-0841 bnaeve@levincap.com Neil Stein LEVIN CAPITAL STRATEGIES 595 MADISON AVENUE NEW YORK NY 10022 (212) 259-0823 NStein@LevinCap.com

Michael Goldenberg LUMINUS MANAGEMENT 1700 BROADWAY, 38TH FLOOR NEW YORK NY 10019 (212) 615-3427 mgoldenberg@luminusmgmt.com

Margaret C. Felts M.C. FELTS COMPANY 8822 SHINER CT. ELK GROVE CA 95624 (916) 468-8443 margaret@mfelts.com

Sunny Kwak MACQUARIE CAPITAL (USA) 125 WEST 55TH STREET NEW YORK NY 10019 (212) 231-1683 sunny.kwak@macquarie.com

Britt Strottman MEYERS & NAVE 555 12TH STREET, SUITE 1500 OAKLAND CA 94607 (510) 808-2000 bstrottman@meyersnave.com For: City of San Bruno

Emilie E. De La Motte Attorney At Law MEYERS NAVE 555 12TH STREET, STE. 1500 OAKLAND CA 94607 (510) 808-2000 edelamotte@meyersnave.com

Susan Griffin Paralegal MEYERS NAVE 555 12TH STREET, STE. 1500 OAKLAND CA 94607 (510) 808-2000 sgriffin@meyersnave.com Gregory Reiss MILLENNIUM MANAGEMENT LLC EMAIL ONLY EMAIL ONLY NY 00000 (212) 320-1036 Gregory.Reiss@mlp.com

Phillip Moskal EMAIL ONLY EMAIL ONLY CA 00000 thnxvm@gmail.com For: Phillip Moskal

Tom Bottorff PACIFIC GAS & ELECRIC COMPANY 77 BEALE STREET, MC B32 SAN FRANCISCO CA 94105 teb3@pge.com

Jasmin Anes PACIFIC GAS & ELECTRIC COMPANY EMAIL ONLY EMAIL ONLY CA 00000 (415) 973-8225 jjav@pge.com

Jonathan Seager PACIFIC GAS & ELECTRIC COMPANY EMAIL ONLY EMAIL ONLY CA 00000 j7se@pge.com

Brian K. Cherry Vp, Regulatory Relations PACIFIC GAS AND ELECTRIC COMPANY 77 BEALE STREET, ROOM 1087 SAN FRANCISCO CA 94105 (415) 973-4977 BKC7@pge.com

Bruce T. Smith PACIFIC GAS AND ELECTRIC COMPANY 77 BEALE STREET, B9A SAN FRANCISCO CA 94105 (415) 973-2616 bts1@pge.com

Case Coordination PACIFIC GAS AND ELECTRIC COMPANY EMAIL ONLY EMAIL ONLY CA 00000 (415) 973-4744 RegRelCPUCCases@pge.com

Appearances I.11-02-016

Christopher P. Johns President PACIFIC GAS AND ELECTRIC COMPANY 77 BEALE STREET SAN FRANCISCO CA 94105 cpj2@pge.com

Lise H. Jordan PACIFIC GAS AND ELECTRIC COMPANY LAW DEPT. 77 BEALE STREET, MC B30A / PO BIX 7442 SAN FRANCISCO CA 94105 (415) 973-6965 LHJ2@pge.com

Edward Heyn POINTSTATE CAPITAL 40 WEST 57TH STREET, 25TH FL. NEW YORK NY 10019 (212) 830-7061 ted@PointState.com

William W. Westerfield Iii Sr. Attorney - Off. Of Gen. Counsel SACRAMENTO MUNICIPAL UTILITY DISTRICT 6201 S STREET, M.S. B402 SACRAMENTO CA 95817 (916) 732-6123 wwester@smud.org

Paul Schaafsma 521 WEST SUPERIOR STREET, UNIT 221 CHICAGO IL 60654 (312) 664-0906 paulschaafsma@yahoo.com

Chris King SIEMENS SMART GRID SOLUTIONS 4000 E. THIRD AVE., STE. 400 FOSTER CITY CA 94404 (650) 227-7770 X-187 chris_king@siemens.com

Kevin Fallon SIR CAPITAL MANAGEMENT 620 EIGHTH AVENUE, 22ND FLR. NEW YORK NY 10018 (212) 993-7104 kfallon@sirfunds.com

Appearances I.11-02-016

Angelica Morales Attorney SOUTHERN CALIFORNIA EDISON COMPANY 2244 WALNUT GROVE AVENUE / PO BOX 800 ROSEMEAD CA 91770 (626) 302-6160 angelica.morales@sce.com

Douglas Porter SOUTHERN CALIFORNIA EDISON COMPANY 2244 WALNUT GROVE AVE./PO BOX 800 ROSEMEAD CA 91770 (626) 302-3964 douglas.porter@sce.com

Frank A. Mcnulty SOUTHERN CALIFORNIA EDISON COMPANY 2244 WALNUT GROVE AVE. / PO BOX 800 ROSEMEAD CA 91770 (626) 302-1499 Francis.McNulty@sce.com

Deana Michelle Ng SOUTHERN CALIFORNIA GAS COMPANY 555 W. 5TH ST., STE. 1400, GT-14E7 LOS ANGELES CA 90013 (213) 244-3013 dng@SempraUtilities.com For: Southern California Gas Company

Jeffery L. Salazar SOUTHERN CALIFORNIA GAS COMPANY 555 W. FIFTH STREET, GT14D6 LOS ANGELES CA 90013 (213) 244-5916 JLsalazar@SempraUtilities.com

Michael Franco Regulatory Case Mgr SOUTHERN CALIFORNIA GAS COMPANY 555 WEST FIFTH STREET, GT14D6 LOS ANGELES CA 90013-1011 (213) 244-5839 MFranco@SempraUtilities.com

Rasha Prince Director, Regulatory Affairs SOUTHERN CALIFORNIA GAS COMPANY 555 WEST 5TH STREET, GT14D6 LOS ANGELES CA 90013-1034 (213) 244-5141 RPrince@SempraUtilities.com Steven Hruby SOUTHERN CALIFORNIA GAS COMPANY 555 W. FIFTH ST., GT14D6 LOS ANGELES CA 90013 SHruby@SempraUtilities.com

Catherine Mazzeo Assoc. Gen. Counsel - Legal SOUTHWEST GAS CORPORATION 5241 SPRING MOUNTAIN ROAD LAS VEGAS NV 89150-0002 (702) 876-7250 catherine.mazzeo@swgas.com

Daniel D. Van Hoogstraten Legal Admin Assistant STINSON MORRISON HECKER LLP EMAIL ONLY EMAIL ONLY DC 00000-0000 (202) 572-9919 dvanhoogstraten@stinson.com

Kelly A. Daly STINSON MORRISON HECKER LLP 1775 PENNSYLVANIA AVE., N.W. NO. 800 WASHINGTON DC 20006-4305 (202) 728-3011 kdaly@stinson.com For: SMUD

Matt Fallon TALON CAPITAL 1001 FARMINGTON AVENUE WEST HARTFORD CT 06107 (860) 920-1000 mfallon@taloncap.com

Garance Burke Reporter THE ASSOCIATED PRESS EMAIL ONLY EMAIL ONLY CA 00000 (415) 495-1708 gburke@ap.org

Enrique Gallardo THE GREENLINING INSTITUTE EMAIL ONLY EMAIL ONLY CA 00000 (510) 926-4017 enriqueg@greenlining.org

Appearances I.11-02-016

Stephanie C. Chen Sr. Legal Counsel THE GREENLINING INSTITUTE EMAIL ONLY EMAIL ONLY CA 00000 (510) 898-0506 StephanieC@greenlining.org

Nina Suetake Staff Attorney THE UTILITY REFORM NETWORK EMAIL ONLY EMAIL ONLY CA 00000 (415) 929-8876 X 308 nsuetake@turn.org

Julien Dumoulin-Smith UBS INVESTMENT RESEARCH EMAIL ONLY EMAIL ONLY NY 00000 (212) 713-9848 julien.dumoulin-smith@ubs.com

Alex Kania WOLFE RESEARCH 420 LEXINGTON AVENUE, SUITE 648 NEW YORK NY 10170 (646) 582-9244 akania@wolferesearch.com

David Paz WOLFE RESEARCH 420 LEXINGTON AVE., STE. 648 NEW YORK NY 10170 (646) 582-9242 dpaz@wolferesearch.com

Steve Fleishman WOLFE RESEARCH 420 LEXINGTON AVENUE, SUITE 648 NEW YORK NY 10170 (646) 582-9241 sfleishman@wolferesearch.com

(End of I.11-02-016)

Appearances I.11-11-009

Traci Bone Legal Division RM. 5027 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-2048 tbo@cpuc.ca.gov For: ORA

Connie Jackson City Manager CITY OF SAN BRUNO 567 EL CAMINO REAL SAN BRUNO CA 94066-4299 (650) 616-7056 cjackson@ci.sanbruno.ca.us For: City of San Bruno

Harvey Y. Morris Legal Division RM. 5036 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1086 hym@cpuc.ca.gov For: SED

Theresa L. Mueller Chief Energy & Telecom. Deputy OFFICE OF THE CITY ATTY. DENNIS HERRERA CITY HALL 1 DR. CARLTON B. GOODLETT PL., RM. 234 SAN FRANCISCO CA 94102 (415) 554-4640 theresa.mueller@sfgov.org For: City and County of San Francisco

Joseph Malkin ORRICK, HERRINGTON & SUTCLIFFE LLP THE ORRICK BUILDING 405 HOWARD STREET SAN FRANCISCO CA 94105 (415) 773-5505 JMalkin@orrick.com For: Pacific Gas & Electric Company Thomas J. Long Legal Dir. THE UTILITY REFORM NETWORK 785 MARKET ST., STE. 1400 SAN FRANCISCO CA 94103 (415) 929-8876 X303 TLong@turn.org For: The Utility Reform Network

********** STATE EMPLOYEE **********

Niki Bawa Executive Division RM. 5038 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-2049 nb2@cpuc.ca.gov

Kenneth Bruno Safety and Enforcement Division AREA 2-D 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-5265 kab@cpuc.ca.gov

Karen Paull Interim Chief Counsel CALIFORNIA PUBLIC UTILITIES COMMISSION EMAIL ONLY EMAIL ONLY CA 00000 (415) 703-2630 kpp@cpuc.ca.gov

Christine Hammond CPUC - LEGAL EMAIL ONLY EMAIL ONLY CA 00000 (415) 703-1461 cjh@cpuc.ca.gov

Michael Minkus Legislative Liaison CPUC - OFFICE OF GOV'T AFFAIRS EMAIL ONLY EMAIL ONLY CA 00000 (916) 905-7364 michael.minkus@cpuc.ca.gov Elizabeth Dorman Legal Division RM. 4300 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1415 edd@cpuc.ca.gov

Maryam Ebke Administrative Law Judge Division RM. 5112 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-2271 meb@cpuc.ca.gov

Julie A. Fitch Executive Division RM. 5214 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-3134 jf2@cpuc.ca.gov

Travis Foss Legal Division RM. 5026 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1998 ttf@cpuc.ca.gov For: SED

Sepideh Khosrowjah Executive Division RM. 5201 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1190 skh@cpuc.ca.gov

Michele Kito Energy Division 505 Van Ness Avenue, AREA 4-A San Francisco CA 94102 3298 (415) 703-2197 mk1@cpuc.ca.gov

Andrew Kotch Executive Division 505 Van Ness Avenue, RM. 5301 San Francisco CA 94102 3298 (415) 703-1072 ako@cpuc.ca.gov

Appearances I.11-11-009

Kelly C. Lee Office of Ratepayer Advocates RM. 4108 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1795 kcl@cpuc.ca.gov

Richard A. Myers Energy Division AREA 4-A 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1228 ram@cpuc.ca.gov

David Peck Office of Ratepayer Advocates RM. 4108 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1213 dbp@cpuc.ca.gov

Amy C. Yip-Kikugawa Administrative Law Judge Division RM. 5024 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-5256 ayk@cpuc.ca.gov

********* INFORMATION ONLY *********

Marc D. Joseph, Attorney ADAMS BROADWELL JOSEPH & CORDOZO 601 GATEWAY BLVD., STE. 1000 SOUTH SAN FRANCISCO CA 94080 (650) 589-1660 mdjoseph@adamsbroadwell.com

Rachael Koss ADAMS BROADWELL JOSEPH & CORDOZO 601 GATEWAY BLVD., STE. 1000 SOUTH SAN FRANCISCO CA 94080 (650) 589-1660 rkoss@adamsbroadwell.com

Randall Li, Analyst AEGEAN OIL USA, LLC 20 SIGNAL RD STAMFORD CT 06902-7909 (664) 722-2007 randall@nexusamllc.com John Mcintyre ALCANTAR & KAHL 33 NEW MONTGOMERY STREET, SUITE 1850 SAN FRANCISCO CA 94105 (415) 421-4143 X-109 jfm@a-klaw.com

Nora Sheriff ALCANTAR & KAHL LLP 33 NEW MONTGOMERY ST., STE. 1850 SAN FRANCISCO CA 94105 (415) 421-4143 nes@a-klaw.com

Mike Cade ALCANTAR & KAHL, LLP EMAIL ONLY EMAIL ONLY OR 00000 (503) 402-8711 wmc@a-klaw.com

Mark Chediak Energy Reporter BLOOMBERG NEWS EMAIL ONLY EMAIL ONLY CA 00000 (415) 617-7233 mchediak@bloomberg.net

Patrick S. Berdge Legal Division RM. 4300 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-1519 psb@cpuc.ca.gov

Andrew Greenberg CADWALADER WICKERSHAM & TAFT LLP ONE WORLD FINANCIAL CENTER NEW YORK NY 10281 (212) 504-6077 andrew.greenberg@cwt.com

Kenneth W. Irvin CADWALADER WICKERSHAM & TAFT LLP 700 SIXTH STREET, N.W. WASHINGTON DC 20001 (202) 862-2315 ken.irvin@cwt.com

Appearances I.11-11-009

Terence T. Healey CADWALADER WICKERSHAM & TAFT LLP 700 ISXTH ST., N.W. WASHINGTON DC 20001 (202) 862-2335 terence.healey@cwt.com

Hillary Corrigan CALIFORNIA ENERGY MARKETS 425 DIVISADERO ST. STE 303 SAN FRANCISCO CA 94117-2242 (415) 963-4439 cem@newsdata.com

Jack D'Angelo CATAPULT CAPITAL MANAGEMENT LLC 666 5TH AVENUE, 9TH FLOOR NEW YORK NY 10019 (212) 320-1059 jdangelo@catapult-llc.com

Melissa Kasnitz Attorney CENTER FOR ACCESSIBLE TECHNOLOGY 3075 ADELINE STREET, STE. 220 BERKELEY CA 94703 (510) 841-3224 X2019 service@cforat.org

Sophie Karp CITIGROUP 388 GREENWICH ST. NEW YORK NY 10013 (212) 816-3366 sophie.karp@citi.com

Austin M. Yang Deputy City Attorney CITY AND COUNTY OF SAN FRANCISCO OFFICE OF THE CITY ATTORNEY, RM. 234 1 DR. CARLTON B. GODDLETT PLACE SAN FRANCISCO CA 94102-4682 (415) 554-6761 austin.yang@sfgov.org

Grant Kolling Senior Assistant City Attorney CITY OF PALO ALTO PO BOX 10250 PALO ALTO CA 94303 (650) 329-2171 grant.kolling@cityofpaloalto.org Jessica Mullan Senior Deputy City Attorney CITY OF PALO ALTO PO BOX 10250 PALO ALTO CA 94303 (650) 329-2577 jessica.mullan@cityofpaloalto.org

Jim Von Riesemann Managing Director CRT CAPITAL GROUP LLC EMAIL ONLY EMAIL ONLY CT 00000 (203) 569-4336 jvonriesemann@crtllc.com

Sarah Grossman-Swenson DAVIS COWELL & BOWE, LLP 595 MARKET STREET, STE. 1400 SAN FRANCISCO CA 94105 (415) 497-7200 sgs@dcbsf.com

Ann L. Trowbridge DAY CARTER & MURPHY LLP 3620 AMERICAN RIVER DRIVE, SUITE 205 SACRAMENTO CA 95864 (916) 570-2500 X 103 atrowbridge@daycartermurphy.com

Scott Senchak DECADE CAPITAL 666 - 5TH AVENUE NEW YORK NY 10103 (212) 320-1933 scott.senchak@decade-llc.com

Jonathan Arnold DEUTSCHE BANK 60 WALL STREET NEW YORK NY 10005 (212) 250-3182 jonathan.arnold@db.com

Lauren Duke DEUTSCHE BANK SECURITIES INC. 60 WALL STREET NEW YORK NY 10005 (212) 250-8204 lauren.duke@db.com

Appearances I.11-11-009

Adam Miller DRW 540 W. MADISON , STE. 2600 CHICAGO IL 60661 (312) 542-3478 filings@drw.com

Andrew B. Brown Attorney At Law ELLISON SCHNEIDER & HARRIS, LLP 2600 CAPITAL AVENUE, SUITE 400 SACRAMENTO CA 95816-5905 (916) 447-2166 abb@eslawfirm.com

Dave A. Weber GILL RANCH STORAGE 220 NW 2ND AVENUE PORTLAND OR 97209 (503) 220-2405 dweber.nwngs@nwnatural.com

Brian T. Cragg Attorney GOODIN, MACBRIDE, SQUERI, DAY & LAMPREY 505 SANSOME STREET, SUITE 900 SAN FRANCISCO CA 94111 (415) 392-7900 BCragg@GoodinMacbride.com

Megan Somogyi Attorney GOODIN, MACBRIDE, SQUERI, DAY & LAMPREY 505 SANSOME ST., STE. 900 SAN FRANCISCO CA 94111 (415) 392-7900 MSomogyi@GoodinMacBride.com

Norman A. Pedersen, Esq. Attorney At Law HANNA AND MORTON, LLP 444 SOUTH FLOWER STREET, STE. 1500 LOS ANGELES CA 90071-2916 (213) 430-2510 npedersen@hanmor.com

Charlyn A. Hook Legal Division RM. 5131 505 Van Ness Avenue San Francisco CA 94102 3298 (415) 703-3050 chh@cpuc.ca.gov Christopher Turnure J.P. MORGAN CHASE SECURITIES 383 MADISON AVENUE, FLOOR 34 NEW YORK NY 10179 (212) 622-5696 Christopher.Turnure@JPMorgan.com

Anthony Crowdell Equity Research - Electric Utilities JEFFERIES LLC 520 MADISON AVENUE, 13TH FL. NEW YORK NY 10022 (212) 284-2563 acrowdell@jefferies.com

Eric Selmon JEMZAR CORP. EMAIL ONLY EMAIL ONLY IS 000 000 ISRAEL (646) 843-7200 ESelmon@Jemzar.com

C. Susie Berlin LAW OFFICES OF SUSIE BERLIN 1346 THE ALAMEDA, STE. 7, NO. 141 SAN JOSE CA 95126 (408) 778-8478 berlin@susieberlinlaw.com For: Northern California Generation Coalition (NCGC)

Brendan Naeve LEVIN CAPITAL STRATEGIES 595 MADISON AVENUE, 17TH FLR NEW YORK NY 10022 (212) 259-0841 bnaeve@levincap.com

Michael Goldenberg LUMINUS MANAGEMENT 1700 BROADWAY, 38TH FLOOR NEW YORK NY 10019 (212) 615-3427 mgoldenberg@luminusmgmt.com

David Marcus EMAIL ONLY EMAIL ONLY CA 00000 (510) 528-0728 dmarcus2@sbcglobal.net

Appearances I.11-11-009

Britt K. Strottman MEYERS NAVE 555 12TH STREET, STE. 1500 OAKLAND CA 94607 (510) 808-2083 bstrottman@meyersnave.com

Emilie E. De La Motte Attorney At Law MEYERS NAVE 555 12TH STREET, STE. 1500 OAKLAND CA 94607 (510) 808-2000 edelamotte@meyersnave.com

Susan Griffin Paralegal MEYERS NAVE 555 12TH STREET, STE. 1500 OAKLAND CA 94607 (510) 808-2000 sgriffin@meyersnave.com

Steven R. Meyers Principal MEYERS, NAVE, RIBACK, SILVER & WILSON 555 12TH STREET, STE. 1500 OAKLAND CA 94607 (510) 808-2000 smeyers@meyersnave.com For: City of San Bruno

Gregory Reiss MILLENNIUM MANAGEMENT LLC 666 FIFTH AVENUE, 8TH FLOOR NEW YORK NY 10103 (212) 320-1036 Gregory.Reiss@mlp.com

MRW & ASSOCIATES, LLC EMAIL ONLY EMAIL ONLY CA 00000 (510) 834-1999 mrw@mrwassoc.com

Ray Welch Associate Director NAVIGANT CONSULTING, INC. EMAIL ONLY EMAIL ONLY CA 00000 (415) 399-2176 ray.welch@navigantconsulting.com

Appearances I.11-11-009

Tom Bottorff PACIFIC GAS & ELECRIC COMPANY 77 BEALE STREET, MC B32 SAN FRANCISCO CA 94105 teb3@pge.com

Alejandro Vallejo PACIFIC GAS & ELECTRIC COMPANY 77 BEALE STREET, MC B30A SAN FRANCISCO CA 94105 (415) 973-1611 axvu@pge.com

Jasmin Anes PACIFIC GAS & ELECTRIC COMPANY EMAIL ONLY EMAIL ONLY CA 00000 (415) 973-8225 jjav@pge.com

Laura Doll PACIFIC GAS & ELECTRIC COMPANY 77 BEALE STREET, RM. 1075 SAN FRANCISCO CA 94105

Stephen Garber Attorney PACIFIC GAS & ELECTRIC COMPANY 77 BEALE STREET, RM. 3177 SAN FRANCISCO CA 94105 (415) 973-8003 slg0@pge.com

Brian K. Cherry PACIFIC GAS AND ELECTRIC COMPANY 77 BEALE ST., MC B10C, PO BOX 770000 SAN FRANCISCO CA 94177 (415) 973-4977 bkc7@pge.com

Case Coordination PACIFIC GAS AND ELECTRIC COMPANY EMAIL ONLY EMAIL ONLY CA 00000 (415) 973-2776 RegRelCPUCCases@pge.com

Jonathan Pendleton PACIFIC GAS AND ELECTRIC COMPANY 77 BEALE STREET, B30A SAN FRANCISCO CA 94105 j1pc@pge.com Lisa K. Lieu Sr. Regulatory Case Manager PACIFIC GAS AND ELECTRIC COMPANY 77 BEALE STREET, MC B9A SAN FRANCISCO CA 94105 (415) 973-4376 LKL1@pge.com

Henry W. Pielage, P.E. Ratepayer Advocate 2860 GLEN CANYON ROAD SANTA CRUZ CA 95060 henrypielage@comcast.net

Edward Heyn POINTSTATE CAPITAL 40 WEST 57TH STREET, 25TH FL. NEW YORK NY 10019 (212) 830-7061 ted@PointState.com

Mark Gall SACRAMENTO MUNICIPAL UTILITY DISTRICT PO BOX 15830 SACRAMENTO CA 95852-1830 (916) 732-5926 Mark.Gall@smud.org

William W. Westerfield Iii Sr. Attorney - Off. Of Gen. Counsel SACRAMENTO MUNICIPAL UTILITY DISTRICT 6201 S STREET, M.S. B402 SACRAMENTO CA 95817 (916) 732-6123 wwester@smud.org

Hugh Wynne SANFORD C. BERNSTEIN & CO. 1345 AVENUE OF THE AMERICAS, 15TH FLR NEW YORK NY 10105 (212) 823-2692 hugh.wynne@bernstein.com

Paul Schaafsma 521 WEST SUPERIOR STREET, UNIT 221 CHICAGO IL 60654 (312) 664-0906 paulschaafsma@yahoo.com

Chris King SIEMENS SMART GRID SOLUTIONS 4000 E. THIRD AVE., STE. 400 FOSTER CITY CA 94404 (650) 227-7770 X-187 chris_king@siemens.com Kevin Fallon SIR CAPITAL MANAGEMENT 620 EIGHTH AVENUE, 22ND FLR. NEW YORK NY 10018 (212) 993-7104 kfallon@sirfunds.com

Angelica Morales Attorney SOUTHERN CALIFORNIA EDISON COMPANY 2244 WALNUT GROVE AVENUE / PO BOX 800 ROSEMEAD CA 91770 (626) 302-6160 angelica.morales@sce.com

Douglas Porter SOUTHERN CALIFORNIA EDISON COMPANY 2244 WALNUT GROVE AVE./PO BOX 800 ROSEMEAD CA 91770 (626) 302-3964 douglas.porter@sce.com

Frank A. Mcnulty SOUTHERN CALIFORNIA EDISON COMPANY 2244 WALNUT GROVE AVE. / PO BOX 800 ROSEMEAD CA 91770 (626) 302-1499 Francis.McNulty@sce.com

Deana Ng SOUTHERN CALIFORNIA GAS COMPANY 555 W. FIFTH ST., GT14E7 LOS ANGELES CA 90013 dng@semprautilities.com

Jeff Salazar SOUTHERN CALIFORNIA GAS COMPANY 555 W. FIFTH STREET, GT14D6 LOS ANGELES CA 90013 JLSalazar@SempraUtilities.com

Michael Franco, Regulatory Case Mgr SOUTHERN CALIFORNIA GAS COMPANY 555 WEST FIFTH STREET, GT14D6 LOS ANGELES CA 90013-1011 (213) 244-5839 MFranco@SempraUtilities.com

Rasha Prince, Director, Regulatory Affairs SOUTHERN CALIFORNIA GAS COMPANY 555 WEST 5TH STREET, GT14D6 LOS ANGELES CA 90013-1034 (213) 244-5141 RPrince@SempraUtilities.com

Appearances I.11-11-009

Sharon Tomkins SOUTHERN CALIFORNIA GAS COMPANY 555 W. FIFTH ST., GT14E7 LOS ANGELES CA 90013 stomkins@semprautilities.com

Steven Hruby SOUTHERN CALIFORNIA GAS COMPANY 555 W. FIFTH ST., GT14D6 LOS ANGELES CA 90013 SHruby@SempraUtilities.com

Catherine Mazzeo Assoc. Gen. Counsel - Legal SOUTHWEST GAS CORPORATION 5241 SPRING MOUNTAIN ROAD LAS VEGAS NV 89150-0002 (702) 876-7250 catherine.mazzeo@swgas.com For: Southwest Gas Corporation

Daniel D. Van Hoogstraten Legal Admin Assistant STINSON MORRISON HECKER LLP EMAIL ONLY EMAIL ONLY DC 00000-0000 (202) 572-9919 dvanhoogstraten@stinson.com

Kelly Daly STINSON MORRISON HECKER LLP 1775 PENNSYLVANIA AVE., NW, STE. 800 WASHINGTON DC 20006-4605 (202) 728-3011 kdaly@stinson.com For: Sacramento Municipal Utility District (SMUD)

Matt Fallon TALON CAPITAL 1001 FARMINGTON AVENUE WEST HARTFORD CT 06107 (860) 920-1000 mfallon@taloncap.com

Garance Burke Reporter THE ASSOCIATED PRESS EMAIL ONLY EMAIL ONLY CA 00000 (415) 495-1708 gburke@ap.org

Appearances I.11-11-009

Marcel Hawiger Energy Attorney THE UTILITY REFORM NETWORK 785 MARKET ST., STE. 1400 SAN FRANCISCO CA 94103 (415) 929-8876 X311 marcel@turn.org

Nina Suetake Staff Attorney THE UTILITY REFORM NETWORK EMAIL ONLY EMAIL ONLY CA 00000 (415) 929-8876 X 308 nsuetake@turn.org

Alex Kania WOLFE RESEARCH 420 LEXINGTON AVENUE, SUITE 648 NEW YORK NY 10170 (646) 582-9244 akania@wolferesearch.com

David Paz WOLFE RESEARCH 420 LEXINGTON AVE., STE. 648 NEW YORK NY 10170 (646) 582-9242 dpaz@wolferesearch.com

Steve Fleishman WOLFE RESEARCH 420 LEXINGTON AVENUE, SUITE 648 NEW YORK NY 10170 (646) 582-9241 sfleishman@wolferesearch.com

(End of I.11-11-009)

(END OF APPENDIX A)

Appendix B

Table of Violations and Offenses

Table of Violations and Offenses						
San Bruno Investigation OII 12-01-007						

Adopted No.	Alleged	Violation (abbreviated description; see applicable conclusion of law for full statement of violation)	Date (one-time violations)	Date Range (Continuing Violations)		Offenses (Pub. Util Code		
	No.					§ 2108)		
				Pre-1994	1994 & forward	Pre-1994	1994 & forward	Total
1	4	Section 451 – Violation of ASME B31.1.8- 1955 (§811.412(c)) by not conducting a hydrostatic test	-	12/31/56 - 12/31/93	1/1/94- 9/9/10	13,515	6,096	19,61 1
2	5	Section 451 – Violation of ASME B31.1.8- 1955 (§811.27(A) by failing to visually inspect segments	1956	-	-	1	0	1
3	6	Section 451 – Violation of API 5LX (§VI) by installing pups less than five feet	1956	-	-	1	0	1
4	8	Section 451 – Violation of ASME B31.1.8- 1955 (§811.27(G)) by assigning a yield strength above 24,000 psi	1956	-	-	1	0	1
5	11	Section 451 – Violation of ASME B31.1.8- 1955 (§811.27(C)) by using incomplete welds and failing to measure wall thickness	1956	-	-	1	0	1
6	10	Section 451 – Violation of Section 1.7 of API Standard 1104 (4th Ed 1956) by using defective welds	1956	-	-	1	0	1
7	12, 13	Section 451 – Violation of ASME B31.1.8- 1955 (§845.22) by failing to meet MAOP requirements	1956	-	-	1	0	1
8	1, 2, 3	Section 451 – Violation of industry standards and specifications, including ASME B31.1.8-1955 (§810.1) by installing pipe unsafe for operational conditions	-	12/31/56 - 12/31/93	1/1/94- 9/9/10	13,515	6,096	19,61 1
9	27	49 CFR 192.917(b) - Failure to use conservative assumptions	-	-	12/17/04 -9/9/10	0	2,093	2,093
10	15	49 CFR 192.917(b) - Failure to gather and integrate GIS data	-	-	12/17/04 -9/9/10	0	2,093	2,093
11	17	49 CFR 192.917(a) - Failure to analyze weld defects	-	-	12/17/04 -9/9/10	0	2,093	2,093
12	21	49 CFR 192.917(e)(2) - Failure to consider cyclic fatigue	-	-	12/17/04 -9/9/10	0	2,093	2,093
13	18	49 CFR 192.917(e)(3) - Failure to determine risk of DSAW threat	-	-	12/17/04 -9/9/10	0	2,093	2,093
14	19, 20	49 CFR 192.917(e)(3) - Failure to identify threats as unstable after pressure increase	-	-	12/17/04 -9/9/10	0	2,093	2,093
15	22	49 CFR 192.921(a) - Failure to use an appropriate assessment method	-	-	12/17/04 -9/9/10	0	2,093	2,093

I.12-01-007 et al. ALJ/POD-AYK/MSW/lil

16	26	49 CFR 192.917(c) - Use of improper risk ranking algorithm	-	-	12/17/04 -9/9/10	0	2,093	2,093
17	28	Section 451 - Creation of unsafe condition by avoiding hydrostatic testing or ILI	-	-	-9/9/10 -9/9/10	0	2,093	2,093
18	29	49 CFR 192.13(c) - Failure to follow internal work procedures	9/9/2010	-	-	0	1	1
19	30	Section 451 - Failure to follow internal work procedures	9/9/2010	-	-	0	1	1
20	31	49 CFR 192.605(c) - Failing to have adequate written procedures	9/9/2010	-	-	0	1	1
21	32	Section 451 - Unsafe conditions at Milpitas Terminal	-	-	2/28/10- 9/9/10	0	194	194
22	38	49 CFR 192.615(a)(3) - Failure to respond promptly and effectively	9/9/2010	-	-	0	1	1
23	39	49 CFR 192.615(a)(1) - Failure to receive, identify, and classify notices	9/9/2010	-	-	0	1	1
24	40	49 CFR 192.615(a)(4) - Failure to provide resources at scene	9/9/2010	-	-	0	1	1
25	41	49 CFR 192.615(a)(6) - Failure to adequately perform emergency shutdown	9/9/2010	-	-	0	1	1
26	42	49 CFR 192.615(a)(7) - Failure to make hazards safe	9/9/2010	-	-	0	1	1
27	43	49 CFR 192.615(a)(8) - Failure to notify first responders	9/9/2010	-	-	0	1	1
28	44	49 CFR 192.605(c)(1) and (3) - Failure to have adequate emergency manual	9/9/2010	-	-	0	1	1
29	45	49 CFR 192.615(a)(2) - Failure to follow adequate procedures for communication with first responders	9/9/2010	-	-	0	1	1
30	53	49 CFR199.225(a) - Failure to perform alcohol tests	9/9/2010	-	-	0	1	1
31	34	Section 451 - Unsafe condition caused by emergency response deficiencies	9/9/2010	-	-	0	1	1
32	55	Section 451 - Unsafe condition due to budget cutting	-	-	1/1/08- 9/9/10	0	983	983
				Total Offe	nses	27,036	32,219	59,255

(End of Appendix B)