

Decision _____

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 Density.

Investigation 11-11-009
(Filed November 10, 2011)

(Not Consolidated)

**DECISION DIFFERENT OF PRESIDENT PICKER 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**

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**DECISION DIFFERENT 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. Executive Summary

On September 9, 2010, a segment of Pacific Gas and Electric Company's (PG&E) 30-inch gas transmission line exploded in San Bruno, claiming the lives of eight people, injuring 58 people, destroying 38 homes and damaging 70 other homes. The Commission's investigations into the San Bruno gas transmission pipeline explosion, PG&E's recordkeeping practices and PG&E's pipeline classification related to higher density populations have brought to light the characteristics and consequences of PG&E's longstanding failure to heed federal and state regulations governing the safe operation of natural gas transmission pipelines throughout its system.

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 pipelines in areas of higher population density. The Commission hereby imposes a fine and other penalties and remedies totaling \$1.6 billion.

This consists of:

- \$850 million in future gas infrastructure improvements related to transmission pipeline safety to be paid for by PG&E shareholders;
- \$300 million fine payable to the General Fund;
- \$400 million bill credit to PG&E's gas ratepayers in the form of a one-time bill credit; and

- Approximately \$50 million to implement over 75 remedies proposed by the Commission's Safety and Enforcement Division previously called the Consumer Protection and Safety Division (CPSD)¹ and other intervenors to enhance pipeline safety.

The total of \$1.6 billion in penalties and remedies imposed on PG&E in this decision, to be paid for by PG&E shareholders, when added to the disallowances already 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 \$2.2 billion.

These penalties and remedies are based on our findings – in our companion decisions issued today, Decision (D).15-XX-XXX, (D).15-XX-XXX and (D).15-XX-XXX – 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 decades, for a total of 18,447,803 days in violation.² In some cases, the violations lasted for nearly 60 years. PG&E identified some violations in prior years, and some later violations prevented the identification and/or correction of prior violations. Records indicating the deficient materials, installation techniques, and pipeline locations were lost, in some cases with PG&E's knowledge that records were missing, PG&E deferred

¹ 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.

² "Days in violation" refers to the number of violations multiplied by the number of days that violation continued.

some needed pipeline integrity investments, even though the Commission had authorized rate recovery for gas transmission safety investments. Where violations accumulate in the manner PG&E allowed, the accumulation compounds the risk to the safety of the public and to workers.

Our decision to use a mix of penalties and remedies is based on our intention to penalize PG&E for its violations and to deter similar behavior and violations in the future. This decision differs from the Presiding Officers' Decision (POD) on Fines and Remedies as follows: 1) the overall amount of penalties and remedies is increased by \$200 million, from \$1.4 billion to \$1.6 billion; 2) the amount of future gas infrastructure improvements related to transmission pipeline safety to be paid for by PG&E shareholders is increased from zero to \$850 million; 3) PG&E will pay a fine to the General Fund of \$300 million instead of \$950 million; and 4) intervenor compensation will be processed through our statutory intervenor compensation program as is standard practice.

We believe that a significant portion of the total penalty should be committed to making PG&E's gas transmission system as safe as possible for the public, ratepayers, utility workers, and the environment. Thus we will require PG&E shareholders to pay an \$850 million penalty to be spent on these safety improvements. Most of the \$850 million penalty will be spent on capital investments which PG&E will not add to its rate base and thus will not earn any profit on them.

At the same time, we recognize both the statutory tool for penalties (i.e., fines to the state General Fund) and the Commission's long-standing policy and practice of imposing fines on IOUs as a means of penalizing and deterring, and therefore require PG&E to pay \$300 million of the total penalties and remedies in the form of a fine to the state General Fund.

We also order that PG&E provide a bill credit of \$400 million. This portion of the penalties and remedies recognizes that, when PG&E committed these violations, it breached the trust between a regulated utility with an exclusive franchise and its customers that PG&E would maintain and operate a safe gas transmission system. We accordingly believe a bill credit provided directly to PG&E's gas customers is an appropriate part of the total penalties and remedies.

Finally, we order PG&E shareholders to fund approximately \$50 million to implement over 75 remedies proposed by CPSD and other intervenors to enhance pipeline safety.

This decision recognizes that some of these 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, 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.

Investigations (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.³

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, CPSD 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

³ 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.

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.

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 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,

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

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
Penalty Proposals

Party	Fine to be Paid to General Fund	Other Disallowances/Remedies
CPSD ¹²	Minimum \$300 million	<ul style="list-style-type: none"> - \$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. - Specific remedies to address violations in each proceeding
DRA ¹³	\$550 million	<ul style="list-style-type: none"> - 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
TURN ¹⁴	\$670 million	<ul style="list-style-type: none"> - \$785 million already or to be paid by PG&E shareholders for PSEP work ordered in D.12-12-030 - \$1.0 billion of PSEP costs apportioned to PG&E's ratepayers

¹¹ CARE is a party in only the Recordkeeping OIL.

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

¹⁴ *Opening Brief of The Utility Reform Network on Fines and Remedies (TURN Opening Brief)*, filed May 6, 2013, at viii – x.

		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 ¹⁵	\$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 - 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 structure.
CCSF ¹⁶	Total amount of at least \$2.25	

¹⁵ *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.)

¹⁶ *Opening Brief of the City and County of San Francisco on Penalties (CCSF Opening Brief)*, filed May 6, 2013, at 15-17 & 47-50.

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

1. 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.”¹⁷ (Section 4 Questions)

PG&E filed its response to the Section 3 Questions on August 21, 2013.¹⁸ Responses to the Section 4 Questions were filed on September 20, 2013 by CPSD, PG&E, TURN and CSB.¹⁹ 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*).²⁰ The violations found in these

¹⁷ *Administrative Law Judges’ Ruling Requesting Additional Comment*, filed July 30, 2013, at 4.

¹⁸ Pursuant to an ALJ Ruling issued on September 16, 2013, PG&E filed an amended response on September 17, 2013.

¹⁹ Pursuant to an ALJ Ruling issued on October 9, 2013, PG&E and CSB filed amended responses on October 11, 2013.

²⁰ These three decisions are the Modified Presiding Officer (ModPod) Decisions in these three OIIs.

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. 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:

1. 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.
2. 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.
 18. 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.
31. 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.
3. 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.
4. 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.
7. 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.
 12. 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.
16. 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.
20. 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.
28. 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

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.

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

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

²³ PG&E Remedies Brief at 39.

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 C.F.R § 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, likewise resulting in a violation of Pub. Util. Code § 451.²⁴ Based on the facts presented, it appears that alleged San Bruno Violation 30 is included in Felts Violation 5, both of which are § 451 violations. 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*

²⁴ The same course of conduct may result in the violation of both federal regulations and § 451.

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 OIL.²⁵ Accordingly, PG&E's assertions of duplication among these violations are moot.

4. Legal Framework for Fines and Remedies

The Commission adopted General Order (GO) 112 pursuant to state law to establish certain state pipeline safety standards during the 1960's.²⁶

²⁵ *Class Location Violations Decision*, Section 6.

²⁶ 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
(Footnote continued on next page)

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 pipeline safety rules in 49 CFR 192.²⁷ 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 199.²⁸ 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 has specific statutory authority to impose fines under 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.²⁹

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

(Footnote continued from previous page)

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."

²⁷ See Recordkeeping Exh. PG&E-5 (D.78513, with GO 112-C attached).

²⁸ See Recordkeeping Exh. PG&E-7 (D.95-08-053, as modified by D.95-12-065, with GO 112-E attached).

²⁹ See, e.g., *Pacific Bell Wireless, LLC v. Public Utilities Com. (Cingular)* (2006) 140 Cal. App. 4th 718.

hundred dollars (\$500), nor more than fifty thousand dollars (\$50,000) for each offense.³⁰

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 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 some disagreement between CPSD/Intervenors and PG&E over the use of fines or penalties imposed pursuant to these Code sections. CPSD and Intervenors maintain that fines and penalties imposed under Pub. Util. Code §§ 2107 and 2108 must be paid to the General Fund.³¹ 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."^{32 33} Later, CPSD explained how the Commission can both impose a fine under Section 2017 and require an investment in pipeline safety under Section 701:

³⁰ Between 1994 and 2012, the maximum fine was \$20,000 per offense. Prior to 1994, the maximum fine was \$2,000 per offense.

³¹ 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.

³² *PG&E Remedies Brief* at 19.

³³ 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.

“The Commission’s powers under § 2107 are not exclusive. Notably, PG&E does not contest the Commission’s “broad authority” under § 701 to impose equitable remedies. (*See, e.g., Assembly, supra*, 12 Cal. 4th, at 736).³⁴ As recognized by the California Supreme Court, § 701 is “supplemented by additional specific fine authority...” as set forth in § 2107. (*Id.* at 737). (CPSD Response to PG&E’s Appeal of the Penalties POD at 11.)

We agree that the California Constitution, along with Pub. Util. Code § 701, confer broad authority on the Commission to regulate public utilities, in particular the fashioning of remedies in addition to those specifically set forth in the Public Utilities Code. (*See, Southern California Edison Co. v. Peevey*, (2003) 31 Cal. 4th 781, 792, citing *Assembly v. Public Utilities Commission* (1995) 12 Cal. 4th 87, 103.)

Unlike the POD, however, we conclude that we do not need to resolve here the issue of whether penalties under Section 2107 must be paid to the General Fund. This decision imposes a penalty payable to the General Fund pursuant to Pub. Util. Code § 2107. In addition, we impose equitable remedies pursuant to our authority under the California Constitution and Pub. Util. Code § 701.³⁵ There is no conflict or inconsistency in our doing so.

We note, however, that 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

³⁴ The correct citation appears to be to *Pacific Bell Wireless, LLC, v. Public Utilities Commission (Cingular)* (2006) 140 Cal. App. 4th 718, 737.

³⁵ See also, Pub. Util. Code §§ 728 and 761.

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 that are needed to redress violations found in these proceedings, i.e., 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 § 728 confers ratemaking authority³⁶ upon the Commission and states:

Whenever the commission, after a hearing, finds that the rates or classifications, demanded, observed, charged, or collected by any public utility for or in connection with any service, product, or commodity, or the rules, practices, or contracts affecting such rates or classifications are insufficient, unlawful, unjust, unreasonable, discriminatory, or preferential, the commission shall determine and fix, by order, the just, reasonable, or sufficient rates, classifications, rules, practices, or contracts to be thereafter observed and in force.

Similarly, § 761 confers authority on the Commission to require a utility to maintain proper facilities. It provides in pertinent part:

Whenever the commission, after a hearing, finds that the rules, practices, equipment, appliances, facilities, or service of any public utility, or the methods of manufacture, distribution, transmission, storage, or supply employed by it, are unjust,

³⁶ 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, unsafe, improper, inadequate, or insufficient, the commission shall determine and, by order or rule, fix the rules, practices, equipment, appliances, facilities, service, or methods to be observed, furnished, constructed, enforced, or employed.

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 Pipeline Safety Enhancement Plan (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 adjustments may be adopted in those investigations; thus all ratemaking recovery authorized in today's decision is subject to refund.³⁷

This determination is reiterated in Ordering Paragraph 3 of the *PSEP Decision*.³⁸ Thus, CPSD and Intervenors have urged that some or all of the PSEP costs authorized to be recovered from ratepayers be disallowed.³⁹ DRA further argues that even without these provisions in the *PSEP Decision* "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."⁴⁰

³⁷ *PSEP Decision* at 4 (slip op.).

³⁸ *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, I.11-11-009, and I.12-01-007.").

³⁹ *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.

⁴⁰ *DRA Opening Brief* at 16.

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."⁴¹ It therefore contends that since the costs to test or replace pipeline is the result of this imprudence, those costs should be disallowed from recovery under Pub. Util. Code §§ 451 and 463.⁴²

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.⁴³ However, the Commission's exercise of these additional powers and jurisdiction "must be cognate and germane to the regulation of public utilities. . ."⁴⁴ 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 and 728, 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.

⁴¹ TURN Opening Brief at 9.

⁴² 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."

⁴³ 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 CLAM 25 Cal. 3d at 905-906 (citations omitted).

4.3. The Excessive Fines Clause

CPSD and Intervenor, 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.⁴⁵ 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."⁴⁶

We disagree with CARE's proposal that no fine be imposed under Pub. Util. Code §§ 2107 and 2108. The purpose of a fine goes 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.⁴⁷ Consequently, according to PG&E, the Commission must consider the penalties assessed in other fatal pipeline accidents, not just

⁴⁵ *Californians for Renewable Energy Rebuttal to the Amended Reply Brief of the Consumer Protection and Safety Division*, filed August 26, 2013, at 6.

⁴⁶ *CARE Rebuttal to Amended Reply* at 5.

⁴⁷ *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.

penalties previously assessed by the Commission.⁴⁸ 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.⁴⁹ 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.⁵⁰

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 *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. More specifically, *Lockyer* cited the factors used by the U.S. Supreme Court in *United States v. Bajakajian* (1998) 524 U.S. 321, 334, where the U.S. Supreme Court determined that the forfeiture of more than \$350,000 for failure to report taking more than \$10,000 cash out of the country was an excessive fine. 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."⁵¹ These considerations are similar to

⁴⁸ PG&E Remedies Brief at 24-25.

⁴⁹ PG&E Remedies Brief at 22 – 24.

⁵⁰ PG&E Response to Amended Reply at 9.

⁵¹ *People ex rel. Lockyer v. R.J Reynolds Tobacco Company*, *supra*, 37 Cal. 4th at 728.

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.⁵² “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 court and other enforcement agencies in connection with natural gas pipeline accidents in other jurisdictions.”⁵³

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.⁵⁴ PG&E

⁵² *PG&E Remedies Brief* at 24.

⁵³ *PG&E Remedies Brief* at 26.

⁵⁴ *PG&E Remedies Brief* at 27-29.

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.”⁵⁵ PG&E states that despite the parallels between the Carlsbad accident and the San Bruno explosion, CPSD’s proposed penalty is “approximately 20 times the penalty and other relief imposed for the Carlsbad accident.”⁵⁶

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’”⁵⁷ There, PG&E states: (1) there were five fatalities, three injuries and the 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.⁵⁸ 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.⁵⁹ PG&E states that CPSD’s proposed \$2.25 billion penalty is about 90 times larger than what had been imposed on UGI Corporation.⁶⁰ PG&E contends that in light of the similarities between the Carlsbad and Allentown accidents to San Bruno, the

⁵⁵ *PG&E Remedies Brief* at 29.

⁵⁶ *PG&E Remedies Brief* at 29.

⁵⁷ *PG&E Remedies Brief* at 30.

⁵⁸ *PG&E Remedies Brief* at 30.

⁵⁹ *PG&E Remedies Brief* at 30.

⁶⁰ *PG&E Remedies Brief* at 31.

disproportionate penalty proposed by CPSD and Intervenor raises constitutional concerns.⁶¹

Finally, PG&E notes that CPSD's proposed recommendation not only exceeds the "largest penalty ever imposed", but also exceeds the statutory cap on penalties fixed by 48 other states and the District of Columbia.⁶² 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."⁶³

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).⁶⁴ 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

⁶¹ PG&E Remedies Brief at 32.

⁶² PG&E Remedies Brief at 31; PG&E Response to Amended Reply at 9.

⁶³ PG&E Response to Amended Reply at 8-9.

⁶⁴ CPSD Amended Reply at 8.

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 regulations ... which were very lengthy in time and endangered many other high consequence areas in PG&E's service territory."⁶⁵ 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.⁶⁶ 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 argument 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."⁶⁷ Unlike other jurisdictions, the California legislature has given the Commission broad discretion to determine the appropriate level of fines, rather than establish the

⁶⁵ CPSD Amended Reply at 8.

⁶⁶ 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.

⁶⁷ CPSD Amended Reply at 9.

maximum amount of fines that may be imposed on a continuing violation or a related series of violations.

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.”⁶⁸ 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.⁶⁹ 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”⁷⁰ and provides that for continuing violations, each day “shall be a separate and distinct offense.” Accordingly, as this case involves a statutory fine, and not punitive damages, it is not essential to consider the statutory penalties in other states.

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 evicting 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:

⁶⁸ *Gore*, 517 U.S. at 583.

⁶⁹ *Gore*, 517 U.S. at 584. The defendant in *Gore* was a national distributor of autos, thus making 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. (517 U.S. at 584.) Here, of course, PG&E is well aware of the potential penalties under California law.

⁷⁰ 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.

[T]here 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.⁷¹

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."⁷² The thrust of *Hale* is that where a mechanical imposition of a penalty would result in an excessive penalty, the entity imposing the fine must reduce the fine to a reasonable level. As further explained below, we have done so here. 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.

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

⁷¹ *Hale*, 22 Cal. 3d at 404. In considering the constitutionality of the penalties imposed in *Hale*, the Court also considered the size of the business organization charged with the violation.

⁷² *Hale*, 22 Cal. 3d at 404.

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 followed by a trial court (e.g., *United States v. Bajakajian* (1998) 524 U.S. 321 ...), the 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.”⁷³

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.”⁷⁴ 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’...”⁷⁵ In this instance, CPSD is proposing a \$2.25 billion penalty for over 18.4 million days of violations. If we were to impose a fine for each day of violation this would equate to approximately \$122 per day of violation, well below the minimum fine specified in Pub. Util. Code § 2107. Consequently, while we do not dispute that

⁷³ *Wilmshurst*, 68 Cal. App. 4th at 1350 (citing *U.S. v. Hines* (8th Cir. 1996) 88 F.3d 661, 664). (Emphasis in original.)

⁷⁴ *Wilmshurst*, 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.]’.”)

⁷⁵ *Reply Brief of the City and County of San Francisco on Penalties* (CCSF Reply), filed June 6, 2013, at 8.

CPSD's proposed \$2.25 billion penalty is significant, we do not find that it violates the Excessive Fines Clause.

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:⁷⁶

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.⁷⁷

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

⁷⁶ *Standards of Conduct Governing Relationships Between Energy Utilities and Their Affiliates* (D.98-12-075), 84 Cal.P.U.C.2d 155 186-190.

⁷⁷ 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.

or Commission directive, regardless of the effects on the public, will be accorded a high level of severity.”⁷⁸

5.1.1. CPSD and Intervenor’s 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.*”⁷⁹

In addition to this physical harm, CPSD and Intervenor’s 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 the amounts needed to earn its authorized returns for a number of years.⁸⁰ Consequently, CPSD contends that many of the safety-related projects ordered in the *PSEP Decision* are to correct these deficiencies.⁸¹ Moreover, CPSD asserts these violations relate to the

⁷⁸ *Standards of Conduct Governing Relationships Between Energy Utilities and Their Affiliates*, 84 Cal. P.U.C.2d at 188.

⁷⁹ *DRA Opening Brief* at 20 (emphasis in original).

⁸⁰ *CPSD Opening Brief* at 42.

⁸¹ *CPSD Opening Brief* at 43.

safety of PG&E's entire system, not just Segment 180, and many of the violations began over 40 years ago.⁸²

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."⁸³

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."⁸⁴ As TURN points out, "the sheer number and scope of the ongoing violations is unprecedented."⁸⁵ Moreover, PG&E had more than adequate prior notice of recordkeeping problems, yet failed to take any actions.⁸⁶ Consequently, "PG&E will be doing remedial work *for decades*, much of it at the expense of ratepayers."⁸⁷ 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.⁸⁸

⁸² CPSD Opening Brief at 44.

⁸³ TURN Opening Brief at 26.

⁸⁴ CCSF Opening Brief at 5.

⁸⁵ TURN Opening Brief at 25.

⁸⁶ TURN Opening Brief at 26; DRA Opening Brief at 20-21; CCSF Opening Brief at 5.

⁸⁷ CPSD Opening Brief at 44 (emphasis in original).

⁸⁸ 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.⁸⁹

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.”⁹⁰ 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.⁹¹ PG&E therefore contends “the conduct underlying alleged violations was not intentional and is unrelated to the cause of the [Segment 180] rupture.”⁹² 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.”⁹³ PG&E argues that this methodology not only results in a total potential penalty that is unrealistic, but also is contrary to Commission precedent.

Finally, PG&E contends that the Commission should group violations “by category for the purpose of finding violations and calculating any penalties.”⁹⁴ It

⁸⁹ 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.

⁹⁰ PG&E Remedies Brief at 36.

⁹¹ PG&E Remedies Brief at 36.

⁹² PG&E Remedies Brief at 38.

⁹³ PG&E Remedies Brief at 39 & 41.

⁹⁴ PG&E Remedies Brief at 41.

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.⁹⁵” 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.”⁹⁶

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.

...

Such compliance is absolutely necessary to the proper functioning of the regulatory process. For this reason, disregarding a statutory or Commission directive, regardless of

⁹⁵ *PG&E Remedies Brief* at 41 (citing D.08-08-017 at 37-38 (slip op.)).

⁹⁶ *PG&E Remedies Brief* at 40.

the effects on the public, will be accorded a high level of severity.⁹⁷

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.⁹⁸ 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.⁹⁹

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.

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.¹⁰⁰ Although PG&E has argued that the failure to maintain the proper class location did not necessarily present a serious risk to public

⁹⁷ *Standards of Conduct Governing Relationships Between Energy Utilities and Their Affiliates*, 84 Cal. P.U.C.2d at 188.

⁹⁸ *TURN Opening Brief* at 26.

⁹⁹ *PSEP Decision* at 87 (slip op.).

¹⁰⁰ See, e.g., Class Location Exh. PG&E-1 at 1-1 – 1-2 (PG&E/Yura); *PG&E Remedies Brief* at 1.

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....¹⁰¹

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 OIL, 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 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

¹⁰¹ *Resolution ALJ-277* at 6-7.

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 OIL, PG&E cites two examples where, it contends, CPSD improperly expanded the number of violations.¹⁰² 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 1104.¹⁰³ However, CPSD had withdrawn the Section 811.27(E) violation and the *San Bruno Violations Decision* did not adopt it.¹⁰⁴ Second, PG&E contends that CPSD improperly included specific violations within the scope of a "generic" violation.¹⁰⁵ The generic alleged violation referenced by PG&E is that "By installing pipeline sections that were not suitable and safe for the conditions 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.¹⁰⁶ Accordingly, we do not find that the examples cited by PG&E

¹⁰² *PG&E Remedies Brief* at 40.

¹⁰³ *PG&E Remedies Brief* at 40.

¹⁰⁴ *San Bruno Violations Decision*, Section 5.1.8.

¹⁰⁵ *PG&E Remedies Brief* at 40.

¹⁰⁶ *San Bruno Violations Decision*, Section 5.1.10.

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.¹⁰⁷ 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.¹⁰⁸

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.

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.

¹⁰⁷ *Recordkeeping Violations Decision*, Section 7.4.

¹⁰⁸ Rules of Practice and Procedure, Rule 1.1 (emphasis added).

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.¹⁰⁹

5.2.1. CPSD and Intervenor’s 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.¹¹⁰ Additionally, CPSD notes that PG&E’s corporate culture placed profits over safety by making significant cuts in its safety-related personnel and tasks.¹¹¹ 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.”¹¹²

CPSD further maintains that although PG&E was required to actively monitor all activities concerning its transmission pipeline system, it did not take

¹⁰⁹ *Standards of Conduct Governing Relationships Between Energy Utilities and Their Affiliates*, 84 Cal. P.U.C.2d at 188-189.

¹¹⁰ *CPSD Opening Brief* at 45-46.

¹¹¹ *CPSD Opening Brief* at 46.

¹¹² *CPSD Opening Brief* at 46.

any actions to detect violations.¹¹³ 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."¹¹⁴

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."¹¹⁵ CPSD and TURN further note that all the actions PG&E has taken since the San Bruno explosion to rectify the disclosed violations were mandated by PHMSA or the Commission, not initiated by the company.¹¹⁶ 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.¹¹⁷

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.¹¹⁸ CSB further states that while PG&E has admitted to two minor violations, it "cannot prove that [it]

¹¹³ CPSD Opening Brief at 47.

¹¹⁴ CPSD Opening Brief at 48-49.

¹¹⁵ CPSD Opening Brief at 49.

¹¹⁶ CPSD Opening Brief at 49; TURN Opening Brief at 27.

¹¹⁷ CPSD Opening Brief at 50.

¹¹⁸ CSB Opening Brief at 33; CCSF Opening Brief at 6.

will fix the numerous and egregious deficiencies in its system.”¹¹⁹ 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.”¹²⁰

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.¹²¹ Thus, PG&E argues that even if CPSD’s audits were not thorough or comprehensive, “that is not a valid aggravating factor in penalizing PG&E.”¹²² PG&E further states “while PG&E had room for improvement, its practices met regulatory requirements and were consistent with accepted industry practices.”¹²³ 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.¹²⁴

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 also lists the numerous actions it took to assist the residents and CSB immediately after the explosion.¹²⁵

¹¹⁹ CSB Opening Brief at 36.

¹²⁰ TURN Opening Brief at 28.

¹²¹ PG&E Remedies Brief at 43.

¹²² PG&E Remedies Brief at 43.

¹²³ PG&E Remedies Brief at 47.

¹²⁴ PG&E Remedies Brief at 47-48.

¹²⁵ PG&E Remedies Brief at 49 – 51.

PG&E disputes CPSD's and Intervenor's 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.¹²⁶ 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."¹²⁷ 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 and initiatives undertaken in its gas organization.¹²⁸ 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.¹²⁹

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*.¹³⁰

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

¹²⁶ *PG&E Remedies Brief* at 44.

¹²⁷ *PG&E Remedies Brief* at 51.

¹²⁸ *PG&E Remedies Brief* at 54 – 62.

¹²⁹ *PG&E Remedies Brief* at 63.

¹³⁰ *PG&E Remedies Brief* at 51-53 & 63.

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)."¹³¹ 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."¹³² Finally, PG&E asserts that CPSD's allegations were made based on hindsight. "Prior to the [San Bruno explosion], there was no indication 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."¹³³

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.¹³⁴ 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.

¹³¹ *PG&E Remedies Brief* at 45.

¹³² *PG&E Remedies Brief* at 46.

¹³³ *PG&E Remedies Brief* at 47.

¹³⁴ *PG&E Remedies Brief* at 43.

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.

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.¹³⁵

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.¹³⁶ 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

¹³⁵ *PSEP Decision* at 47 (slip op.).

¹³⁶ See, e.g., *Recordkeeping Violations Decision*, Section 9.1.

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. 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. 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 Intervenor's 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 requests¹³⁷ and that it potentially violated Rule 1.1 in another.¹³⁸ Finally, we note that in all three OIIs, CPSD and Intervenor's have alleged that PG&E has delayed and failed

¹³⁷ *Recordkeeping Violations Decision*, Section 7.4.

¹³⁸ See *Recordkeeping Violations Decision*, Section 9.3.

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.

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."¹³⁹

Consequently, the Commission must "adjust fine levels to achieve the objective of deterrence, without becoming excessive, based on each utility's financial resources."¹⁴⁰ We have addressed the Excessive Fines Clause 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 Intervenor's 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 PG&E's actual revenues from GT&S services exceeded revenue requirements by at least \$435 million at a time when PG&E was underspending on safety.¹⁴¹ 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.¹⁴² CPSD states that this

¹³⁹ *Standards of Conduct Governing Relationships Between Energy Utilities and Their Affiliates*, 84 Cal. P.U.C. 2d at 189.

¹⁴⁰ *Standards of Conduct Governing Relationships Between Energy Utilities and Their Affiliates*, 84 Cal. P.U.C. 2d at 189.

¹⁴¹ *CPSD Opening Brief* at 51.

¹⁴² *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 & (Footnote continued on next page)

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.”¹⁴³

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.¹⁴⁴ CSB cites to various PG&E reports and concludes that PG&E has conveyed increasing confidence in the company’s financial outlook to investors.¹⁴⁵ CSB argues 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.¹⁴⁶ 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.¹⁴⁷

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,

(Footnote continued from previous page)

Electric is the utility subsidiary regulated by the CPUC, we mainly focused on the holding 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.) In fact, Overland actually calculated that PG&E could sustain penalties up to \$2.45 billion, including the \$2.25 billion “threshold amount” of “incremental equity” discussed in Overland’s testimony, plus the \$200 million of non-revenue producing equity that PCG had included in its 2012 forecasts. (See Overland Rebuttal Testimony, Exh. JT 54, at page 7.)

¹⁴³ CPSD Opening Brief at 53.

¹⁴⁴ CSB Opening Brief at 29.

¹⁴⁵ CSB Opening Brief at 29.

¹⁴⁶ CSB Opening Brief at 29-31.

¹⁴⁷ 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.¹⁴⁸

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.¹⁴⁹ 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.¹⁵⁰ 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.”¹⁵¹ 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.”¹⁵² Finally, TURN notes that the \$2.25 billion “threshold” level of penalties estimated by Overland included both fines and

¹⁴⁸ CCSF Opening Brief at 7.

¹⁴⁹ TURN Opening Brief at 29.

¹⁵⁰ TURN Opening Brief at 30.

¹⁵¹ TURN Opening Brief at 31.

¹⁵² TURN Opening Brief at 38.

other potential disallowances.¹⁵³ It asserts “[t]his number is absolutely within the range of forecasts by equity analysts of the total ‘fines and penalties.’”¹⁵⁴

5.3.2. PG&E’s Position

PG&E disputes Overland’s analysis, arguing 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.”¹⁵⁵ 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.”¹⁵⁶

PG&E argues that Overland’s analysis fails to take into account PG&E’s planned equity issuances to fund capital expenditures.¹⁵⁷ 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.¹⁵⁸ Further, it argues that an equity offering to fund a penalty would likely be less well-received by investors.¹⁵⁹ 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,

¹⁵³ *TURN Opening Brief* at 40 (referencing Exh. Joint-52 at 6).

¹⁵⁴ *TURN Opening Brief* at 40.

¹⁵⁵ *PG&E Remedies Brief* at 64. The two metrics used are the price to book and dividend payout ratios.

¹⁵⁶ *PG&E Remedies Brief* at 71 (emphasis in original).

¹⁵⁷ *PG&E Remedies Brief* at 65.

¹⁵⁸ *PG&E Remedies Brief* at 66 – 67.

¹⁵⁹ *PG&E Remedies Brief* at 69.

such as “reduce financial risk, increase future investment flexibility and reduce interest expense.”¹⁶⁰ PG&E goes on to warn that if CPSD’s or Intervenor’s proposed penalties are approved, it may result in “a less favorable perception of the regulatory climate in California.”¹⁶¹

PG&E next criticizes Overland’s methodology to calculate the \$2.25 billion threshold level. It contends that neither of the metrics used by Overland to calculate this threshold amount – neither 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.”¹⁶² 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.”¹⁶³

Finally, PG&E maintains that CPSD and Intervenor’s 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.”¹⁶⁴ PG&E asserts that PG&E has already incurred and will incur 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 way management costs and contributions to the City of San Bruno.¹⁶⁵ Further, PG&E argues that investors do not distinguish between equity to fund an explicit disallowance or utility expenditures that exceeded the

¹⁶⁰ *PG&E Remedies Brief* at 69.

¹⁶¹ *PG&E Remedies Brief* at 68.

¹⁶² *PG&E Remedies Brief* at 75.

¹⁶³ *PG&E Remedies Brief* at 75.

¹⁶⁴ *PG&E Remedies Brief* at 81.

¹⁶⁵ *PG&E Remedies Brief* at 82.

amounts adopted in its rate case.¹⁶⁶ 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.”¹⁶⁷

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.¹⁶⁸ 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.¹⁶⁹ 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.¹⁷⁰

Despite PG&E’s disagreement with Overland’s methodology for arriving at the \$2.25 billion “threshold level,” the record supports a conclusion that PG&E has the financial resources to support a penalty of up to \$2.45 billion.

Overland’s witnesses testified that PG&E’s parent corporation, PG&E Corporation (PCG), should be able to issue approximately \$2.45 billion in equity to fund fines or penalties associated with the outcome of proceedings arising from the San Bruno incident. PCG owns all of PG&E’s stock. When PG&E needs additional investor equity, that equity is raised by issuing additional PCG

¹⁶⁶ *PG&E Remedies Brief* at 84.

¹⁶⁷ *PG&E Remedies Brief* at 84.

¹⁶⁸ 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.)

¹⁶⁹ Exh. Joint-70 at 13.

¹⁷⁰ Exh. Joint-70, PG&E Corporation Discussion Materials, dated January 24, 2012, at 2.

stock. (This figure consists of the \$2.25 billion “threshold amount” of “incremental equity” discussed in Overland’s testimony, plus the \$200 million of non-revenue producing equity¹⁷¹ that PCG had included in its 2012 forecasts. See Overland Rebuttal Testimony, Exh. JT 54, at page 7.) The thrust of Overland’s testimony was that PCG could issue \$2.45 billion of non-revenue producing equity without unfavorably impacting ratepayers or PG&E’s ability to raise the revenue-producing capital it needs to invest in projects to provide safe and adequate service. See, e.g., Overland Rebuttal Testimony, Exhibit Joint 54, at p. 17. PG&E has attempted to discredit this testimony by arguing that the key factors that Overland relied on in making this calculation are not the factors that an investment banker would use in determining how much equity the stock market could absorb. See, e.g., PG&E’s Coordinated Remedies Brief at pp. 64, 71, 73. An investment banker, however, does not typically look at the maximum level of non-revenue producing equity that a company could issue to cover the cost of penalties as this is a highly unusual situation. Rather, an investment banker is typically looking at how much equity a company can issue for other purposes, and when it should be issued. Thus, the mere fact that Overland relied on different factors does not detract from the credibility of Overland’s testimony. PG&E has also pointed out that the price-to-book ratio figures included in Overland’s testimony are erroneous and do not support Overland’s conclusion. See PG&E’s Coordinated Remedies Brief at pp. 75-76.

Nevertheless, we find Overland’s testimony concerning the amount of equity that PGC could issue to fund the penalties in these proceedings to be credible, for the following reasons: Both Overland and PG&E’s opposing

¹⁷¹ By “non-revenue producing equity” we mean equity that will not be spent on revenue-producing investments.

witness (from Wells Fargo) generally agreed that investors in utility stocks are looking for: dividends that are relatively stable (i.e., with limited volatility); and increased earnings over time.¹⁷² Therefore, Overland looked at how much non-revenue producing equity PGC could issue while maintaining its existing dividend per share. Furthermore, in making its calculations, Overland kept the dividend payout ratio (i.e., the percentage of earnings paid out to shareholders in the form of dividends) within the range approved by PGC.¹⁷³ In addition, in order to determine how many shares of stock PGC would have to sell to raise the needed amount of equity. Overland used the conservative assumption of full dilution, i.e., that PGC's total market capitalization would remain constant before

¹⁷² See, e.g., Wells Fargo testimony, Exhibit Joint 67, at pp. 6-7.

¹⁷³ In its Coordinated Remedies Brief at pp. 76-77, PG&E argues that an equity issuance as large as Overland's threshold figure would cause its dividend payout ratio to exceed PG&E's internal guidelines in 2013, citing the earnings per share guidance in its Fourth Quarter Earnings Call Presentation, February 21, 2013. However, as explained by Overland, PG&E's projected earnings per share for 2013 were lower than those in 2012 and those projected for subsequent years because of PG&E's plan to write off a lot of its costs in 2013. (JT TR p. 1422 (March 4, 2013).) Presumably such a large write-off would include San Bruno related costs.

(JT TR p. 1422 is in a portion of the transcript that has been under seal. To make the basis for this and other portions of our Decision more transparent, we will unseal pages 1421-29 of the Joint Transcript, but not any of the confidential exhibits discussed in that portion of the transcript.)

Indeed, if PG&E were to write off San Bruno costs equal to the threshold amount in a single year, PCG would apparently show a loss for that one year. See, JT Exh. 57 (Fourth Quarter Earnings Call Presentation, February 21, 2013) at p. 18, showing PCG's total "Earnings from Operations" and "Earnings on a GAAP basis" for 2011 and for 2012 in amounts lower than Overland's threshold amount. In that case, there would be no earnings per share, and any distribution of earnings in the form of dividends would necessarily exceed PCG's dividend payout ratio guideline. However, we do not find this conclusion troubling or undermining of Overland's calculation of the threshold level. PG&E has stated that it expects PGC to issue equity to fund the full amount of the penalties imposed in these proceedings. Thus, PG&E will not need any cash from its ongoing operations to fund the penalties, and its earnings from operations will therefore be available to fund dividends. Even if the penalties are written-off over several years, as we expect will be the case under this decision, the issuance of off-setting equity will mean that PG&E will have cash from its ongoing operations to maintain (or even increase) its dividend.

and after the issuance of the incremental equity.¹⁷⁴ Based on these inputs and requirements, as well as financial information it received from PG&E, Overland calculated that PGC could issue up to approximately \$2.25 billion in incremental equity¹⁷⁵ while still allowing PGC to maintain its per-share dividend. PG&E projects a substantial increase in rate base going forward,¹⁷⁶ which would result in increased earnings over time.¹⁷⁷ Furthermore, PG&E plans to fund the penalties in these proceedings by issuing additional PGC equity. Therefore, once that equity has been issued it would be expected that PG&E's earnings per share will increase (albeit the amount of those earnings per share will be less than before the issuance of the non-revenue producing equity)¹⁷⁸ and that PG&E will therefore be able to increase its dividend over time as well. Thus, we conclude

¹⁷⁴ In other words, Overland assumed the PGC's share price would fall upon issuance of the incremental equity such that the total value of all shares outstanding (the market capitalization) would be the same before and after the issuance. (See Overland Opening Testimony, Exh. JT 52, at p. 11.) This is a conservative assumption given the testimony that PGC's market capitalization has already been discounted by 1.6 to 2 billion dollars by the expectation that PG&E will be subject to substantial penalties in these proceedings. (See Overland Rebuttal Testimony, Exh. JT 54, at p. 26.) To the extent that the market price of PGC's shares has already been discounted to reflect expected penalties, the issuance of non-revenue producing stock would not cause any further fall in the market price.

¹⁷⁵ I.e., in addition to the \$200 million that PCG had included in its 2012 forecasts.

¹⁷⁶ See, e.g., slides from PGC's Fourth Quarter Earnings Call, February 21, 2013, Exh. Joint 57, p. 12. See also JT TR, p. 1422 where the Overland witness states: "And you can see that 2013 is certainly an anomaly in relation to 2012 and all other years being forecasted. 2014, '15' and '16, all indicate significant improvement over 2013 and are higher than . . . 2012 EPS. It's obvious the company intends to write off a lot of its costs for GAAP purposes in 2013, that's going to be driving down their earnings. The investment community is aware of the longer-term earnings potential of the company."

¹⁷⁷ Rate base represents PG&E's reasonable investment in revenue-earning plant, minus accrued depreciation. PG&E earns a rate of return on its rate base.

¹⁷⁸ Because PG&E funds a portion of its capital investment with retained earnings, only a portion of the equity needed to fund its investment in additional rate-based plant has to be raised by issuing additional PGC stock. Thus, as PG&E's rate base increases, the earnings per share will also increase (all other things being equal), as a portion of the increased earnings are due to investment for which no additional shares of PGC stock had to be issued. See also JT TR p. 1422 (March 4, 2013), where Overland describes PG&E's projection that earnings per share in 2014, 2015, and 2016 will exceed its earnings per share in 2012.

from the Overland testimony, that despite issuing a very substantial amount of non-revenue producing equity, PG&E will be able to maintain its per share dividend, and increase that dividend over time, thus meeting the expectations of those who invest in utility stocks. From this, we further conclude that PGC should be able to continue to issue equity to fund needed revenue-producing investments, while also issuing equity to fund the non-revenue producing penalties imposed in this decision.

A review of equity analyst reports introduced into the record similarly shows that PG&E should be to continue to raise equity even after funding the penalties imposed in this decision. 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 Penalties¹⁷⁹

Equity Analyst	Date of Report	Projected Fine	Other unrecoverable expenses
Bank of America Merrill Lynch	Oct. 31, 2012	\$300 million	\$1.039 billion ¹⁸⁰
Barclays	Jan. 4, 2013	\$500 million	
Bernstein Research	Nov. 29, 2012	\$400 million - \$500 million	\$3.1 billion ¹⁸¹
BGC	Jan. 2, 2013	\$600 million	
Citi Research	Oct. 24, 2012	\$400 million	\$625 million ¹⁸²
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 PSEP Decision.
Goldman Sachs	Aug. 7, 2012	\$500 million - \$700 million	
ISI	Nov. 1, 2012	\$750 million	\$2.9 billion
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 ¹⁸³
UBS	Dec. 31, 2012	\$500 million	
Wells Fargo	Oct. 24, 2012	\$750 million	Costs from PSEP Decision

¹⁷⁹ Exh. Joint-79, PG&E Data Responses to OCHP_005-1013, Excerpts from Equity Analyst Reports re Level of Penalty.

¹⁸⁰ Exh. Joint-79 at 1 (estimated unrecoverable expenses of \$514M in 21013, \$435M in 2014 and \$90M in 2015).

¹⁸¹ 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).

¹⁸² Exh. Joint-79 at 7 (\$225 million in 2012, \$250 million in 2013, \$75 million in 2014 and \$75 million in 2015).

¹⁸³ 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.").

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.”¹⁸⁴ 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:

1. BernsteinResearch concluded that even after incorporating its estimates of unrecoverable San Bruno-related costs 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).¹⁸⁵
2. ISI stated that its “forecast now assumes that PCG shareholders incur total unrecoverable costs *before* fines and penalties totaling \$2.9 billion dollars, and assumes additional fines and penalties of \$750 million dollars. Despite our frustration with the continue [sic] degradation of value at PGC, the stock still looks undervalued to this punitive outcome, and we retain our Buy rating.”¹⁸⁶

Thus even analysts who have estimated a range of unrecoverable San Bruno related costs and penalties far in excess of the Overland calculation, express confidence in PG&E’s stock performance once the uncertainty surrounding these proceedings is resolved. Therefore, there appears to be confidence by the financial community that PG&E has the financial resources to pay the penalty proposed by CPSD and will still be able to raise capital for other needed investments.

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 place PG&E “in a world

¹⁸⁴ *TURN Opening Brief* at 39.

¹⁸⁵ Exh. Joint-79 at 3.

¹⁸⁶ Exh. Joint-79 at 10 (emphasis in original).

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 and its shareholders, but rather, whether the adopted penalty has a deterrent effect without adversely impacting ratepayers.

PG&E contends that a large penalty will increase its cost of equity (and possibility the cost of the debt) that it needs to raise for revenue-producing purposes, because such a penalty would cause investors to have a negative view of California’s regulatory environment, which could easily impact other utilities as well.¹⁸⁸ We find this argument unconvincing. We believe that investors will understand the difference between what we are doing here, imposing a substantial one-time penalty on PG&E for past bad behavior, and a regulatory environment that is unfavorable for investors because the regulatory system does not permit utilities to recover their costs on an ongoing basis. In fact, the regulatory system we have in place for PG&E and the other large energy utilities has numerous mechanisms designed to ensure that these utilities are able to recover their reasonable costs on a going forward basis, despite large swings in variables such as energy costs and energy usage. For example, on the electric side, PG&E has: (i) a balancing account called the Energy Resource Recovery Account, that protects PG&E against fluctuations in purchased power and fuel costs, so long as they are incurred in compliance with the procurement rules; (ii) several accounts, such as the Distribution Revenue Adjustment Mechanism and the Utility Generation Balancing Account, which ensure recovery of PG&E’s approved GRC costs (for distribution and for the power plants it owns,

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

¹⁸⁸ See, e.g., PG&E’s Coordinated Remedies Brief at 68.

respectively), regardless of fluctuations in the amount of electricity that PG&E sells; and (iii) pre-approval of the contract price included in purchased power contracts either (a) as authorized by its procurement plan (see Pub. Util. Code sec. 454.5(b)(7)), or by advance approval of other power purchase contracts. On the gas side, PG&E has, for example: (i) a balancing account called the Purchased Gas Account, which balances core gas procurement costs with procurement rate revenues and thus limits PG&E's risk for not recovering the cost of gas it purchases for core customers; and (ii) several balancing accounts that limit PG&E's risk of not recovering its approved GRC costs due to fluctuations in gas sales or amounts of gas transported, including the Core Fixed Cost Account and the Noncore Customer Class Charge Account.

Investors should be able to distinguish between a penalty and unrecoverable ongoing 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 operating costs are associated with the ongoing general operations of the company, not expenditures for remediation of past wrongdoing.

For all the foregoing reasons, we find that PG&E has the financial resources to pay the penalty proposed by CPSD. Furthermore, PG&E should be able to pay a penalty of that magnitude without harming ratepayers or its ability raise the equity needed for revenue-producing investments required to provide adequate and safe service.

Finally, 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, are unpersuasive. 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.

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.¹⁸⁹ “In all cases, the harm will be evaluated from the perspective of the public interest.”¹⁹⁰

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.”¹⁹¹ Rather, the penalty must be “commensurate with the harm caused.”¹⁹² 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.”¹⁹³

DRA and CCSF also contend that the totality of circumstances requires a severe penalty.¹⁹⁴ 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

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

¹⁹⁰ *Id.*

¹⁹¹ *CPSD Opening Brief* at 55.

¹⁹² *CPSD Opening Brief* at 55.

¹⁹³ *CSB Opening Brief* at 37 (citations omitted).

¹⁹⁴ *DRA Opening Brief* at 34; *CCSF Opening Brief* at 7.

contrition, as evidenced by PG&E's efforts to mislead the Commission.¹⁹⁵ 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."¹⁹⁶

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."¹⁹⁷ 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."¹⁹⁸

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."¹⁹⁹ 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."²⁰⁰

¹⁹⁵ *DRA Opening Brief* at 34.

¹⁹⁶ *CCSF Opening Brief* at 7.

¹⁹⁷ *PG&E Remedies Brief* at 84.

¹⁹⁸ *PG&E Remedies Brief* at 84 – 85.

¹⁹⁹ *PG&E Remedies Brief* at 86.

²⁰⁰ *PG&E Remedies Brief* at 87.

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 either the severity of the San Bruno explosion or the extent of the recordkeeping shortfalls presented by CPSD.

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."²⁰¹

5.5.1. CPSD and Intervenor's Positions

CPSD and Intervenor 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.²⁰²

²⁰¹ *Standards of Conduct Governing Relationships Between Energy Utilities and Their Affiliates*, 84 Cal. P.U.C. 2d at 190.

²⁰² CPSD Opening Brief at 57; CSB Opening Brief at 38.

Additionally, CSB maintains that the \$38 million fine assessed for the Rancho Cordova explosion was the result of a revised settlement, where the ALJ “estimated that PG&E faced up to \$97 million in penalties for stipulated violations.”²⁰³

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.²⁰⁴ CSB notes that, unlike Line 132, the other pipeline explosions involved either pipelines that were significantly smaller in diameter or occurred in rural areas.²⁰⁵

Moreover, CPSD argues that the magnitude of PG&E’s “failure to keep traceable, verifiable, complete and accurate gas transmission records” is unprecedented.²⁰⁶ 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.”²⁰⁷ 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.”²⁰⁸

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,

²⁰³ 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.).)

²⁰⁴ CSB Opening Brief at 39-40.

²⁰⁵ CSB Opening Brief at 40.

²⁰⁶ CPSD Opening Brief at 58.

²⁰⁷ CPSD Opening Brief at 58.

²⁰⁸ CCSF Opening Brief at 8.

2012 or any penalty imposed in any other jurisdiction.²⁰⁹ 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.”²¹⁰

5.5.3. Discussion

CPSD and Intervenors are correct that none of the Commission’s prior enforcement proceedings are comparable with these proceedings. 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.”²¹¹ None of the Commission’s prior enforcement cases or the other gas pipeline accidents identified in the *Wells Fargo Report* had an impact on such a large area or number of people.

²⁰⁹ *PG&E Remedies Brief* at 89.

²¹⁰ *PG&E Remedies Brief* at 93 – 94 (citing D.11-11-001 at 41.)

²¹¹ *CSB Opening Brief* at 28.

Nonetheless, the 2008 Rancho Cordova explosion and fire does provide some limited 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.²¹² 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."²¹³

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. In addition, the scope of the three OIIs here is significantly broader than the one OII for the *Rancho Cordoba* incident. Here we are looking at broader, systemic safety failures on the part of PG&E, not just the accident itself. Based on the determinations in *Rancho Cordova*, and in consideration of the significantly greater physical impact of the San Bruno explosion and fire, the broader scope of these proceedings and the increased risk to all residents in PG&E's service territory, along with the duration of the

²¹² *Rancho Cordova* at 3 (slip op.).

²¹³ *Rancho Cordova* at 41-42 (slip op.) (citations omitted, emphasis added).

violations,²¹⁴ 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.²¹⁵

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), 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:

²¹⁴ 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.).)

²¹⁵ 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.

Table 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	12,085,264264	18,447,803803

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:

Table 4
Revised Number of Violations

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	12,079,167167	18,428,191191

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 based on the number of days in violation is from \$9.2 billion to \$254.3 billion.²¹⁶ Nonetheless, we realize that the amount of the penalty to be imposed must be significantly decreased from that potential level 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 General Fund, a disallowance of rate recovery of certain costs associated with improving PG&E's gas transmission pipeline system and recordkeeping systems, shareholder-funded improvements to PG&E's gas pipeline system, and other remedies. As CSB argues, 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.²¹⁷ 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."²¹⁸ Consequently, CPSD and Intervenors propose that the recommended \$2.25 billion penalty consist of: (1) fines ranging from

²¹⁶ This range is calculated as follows: 18,428,191 violations x \$500 = \$9,214,095,500, to (6,349,024 violations x \$2,000) + (12,079,167 violations x \$20,000) = \$254,281,388,000.

²¹⁷ 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.")

²¹⁸ CCSF *Opening Brief* at 16.

\$300 million to \$900 million, and (2) disallowances and other remedies for 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 the PSEP (D.12-12-030), 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 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.²¹⁹ As such, TURN proposed a \$670 million fine to be paid to the General Fund which would “*more than* cover the lost revenue to the state General Fund resulting from PG&E's reduced tax liability for unrecovered costs.”²²⁰ 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” assuming \$2.333 billion of investment and a 40% combined federal and state income tax rate.²²¹ In light of the tax benefits received by PG&E

²¹⁹ TURN Opening Brief at 9.

²²⁰ Reply Brief of The Utility Reform Network on Fines and Remedies (Public Version), filed June 7, 2013, at 8 (emphasis added).

²²¹ CSB Reply Brief at 7.

for unrecovered costs, CPSD and Intervenors have proposed that all costs incurred under the *PSEP Decision* be recovered from PG&E shareholders.²²²

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.²²³ 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 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.11-02-019.²²⁴

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.²²⁵ 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 §§ 701 and 728. The fact that these

²²² 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.

²²³ PG&E *Remedies Brief* at 12.

²²⁴ PG&E *Response to Amended Brief* at 4.

²²⁵ See, e.g., *PSEP Decision* at 55 & 99 (slip op.).

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 is subject to refund.”²²⁶ There is no requirement that any further disallowances be based on a finding of imprudence. Rather, we may adopt disallowances as an equitable remedy pursuant to our authority under Pub. Util. Code §§ 701 and 728.

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 disallowances were approximately \$635 million.²²⁷ 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.²²⁸ 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.

In PG&E’s Appeal of the Presiding Officer’s Decision on Fines and Remedies [Penalties POD Appeal] PG&E continues to argue that, in determining an appropriate penalty, the Commission should take into account allegedly unrecoverable gas safety related costs. (Appeal, pp. 4-8.) It thus renews

²²⁶ *PSEP Decision* at 4 (slip op.)

²²⁷ CPSD estimates that the disallowances adopted in Decision 12-12-030 in R.11-02-019 to be \$635,000,000. (*CPSD Amended Reply Brief* at 3-4.) 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.).)

²²⁸ *PG&E Remedies Brief* at 12.

arguments earlier made in its Coordinated Remedies Brief. The Penalties POD rejected PG&E's argument that, in setting a penalty in this decision, we must consider amounts shareholders have spent and plan to spend on gas system safety, beyond the \$635 million in disallowed PSEP expenditures recognized in the Penalties POD. We continue to reject this argument, and believe it worthwhile to further explain why.

First, as pointed out in the examination of Overland, PG&E has chosen to characterize as an unrecovered shareholder cost "any dollar that . . . wasn't specifically approved by the Commission."²²⁹ Thus, PG&E seeks to have us consider as part of its penalty not only those amounts that the Commission has expressly ordered shareholders to pay, but also: (i) any costs for which it never sought recovery; (ii) categories of costs for which it spent more than the amount included in its revenue requirement; or (iii) any costs which the Commission did not include in PG&E's revenue requirement because PG&E failed to carry its burden of proof.²³⁰ However, given that the utility has some discretion to shift spending from one area to another, as necessary, the mere fact that a given cost was not expressly recognized in calculating its revenue requirement does not mean that the utility did not recover those costs. As explained by Overland, the real test is whether the utility earns approximately its authorized rate of return.²³¹ If, during the period in question the utility earns nearly its authorized rate of return, despite spending money on costs not expressly included in its revenue requirement, the utility has in fact succeeded in recovering those costs,

²²⁹ JT TR p. 1424 (March 4, 2013). This portion of the transcript has been under seal. To make the basis for this and other portions of our Decision more transparent, we are unsealing pages 1421-29 of the Joint Transcript, but not any of the Confidential Exhibits discussed in that portion of the transcript.

²³⁰ With regard to item (iii) see JT TR pp. 1424-25.

²³¹ JT TR pp. 1425-26; see also JT TR pp. 1369-70.

and there are not any unrecovered costs being paid by shareholders. PG&E does not argue, nor cite to any evidence, that it has failed to earn nearly its authorized rate of return for any past period.

With regard to future periods, of course there can be no evidence as to whether or not PG&E has earned approximately its authorized rate of return. That is why we find much of PG&E's argument to be speculative.²³² For future periods, PG&E's argument necessarily relies on forecasts of the amounts that it will spend on various categories of costs and its ability to find revenues to fund those costs. Furthermore, the costs beyond those disallowed in the PSEP Decision are neither costs that the Commission has required PG&E to incur nor that the Commission has found to be reasonable;²³³ therefore there is no record as to whether PG&E ought to incur those costs, thus making PG&E's argument that such future costs ought to be considered in setting the penalty here even more speculative.

The majority of PG&E's argument on this point relies on matters that are not in the record or for which an adequate foundation has not been established, as evidenced by the motions to strike portions of PG&E's Coordinated Remedies Brief and Appeal that have been granted.²³⁴ Furthermore, to the extent PG&E's Coordinated Remedies Brief cites to matters that are in the record, those sources are so lacking in detail about the basis of the cost and cost-forecast figures they contain that we cannot consider those numbers to be reliable. If we were to accept PG&E's argument that in setting a penalty we must consider amounts

²³² See, e.g., Heading II.A. of PG&E's Consolidated Brief on Penalties (p. 12) where it addresses amounts that shareholders allegedly "will pay" for Gas Transmission Safety-Related Work.

²³³ Similarly, the Commission has also not found whether other allegedly unrecovered *past* costs were reasonably incurred.

²³⁴ See Section 10 of this Decision granting CPSD's Motion to Strike Portions of PG&E's Appeal.

shareholders have spent and plan to spend on gas system safety, beyond the \$635 million in disallowed PSEP expenditures, then we would effectively be allowing PG&E to unilaterally determine what expenditures are reasonable and how the penalty should be structured. We will not thus abdicate our responsibilities to determine the reasonableness of PG&E's expenditures and what penalties should be imposed as a consequence of PG&E's violations of safety requirements.

We have considered CPSD and Intervenors' arguments regarding further disallowances and find that an additional \$400 million bill credit, as an equitable remedy associated with PG&E's Pipeline Modernization Program, is both warranted and supported by the record. For example, DRA recommended that PG&E be disallowed rate recovery of all approved costs of Phase I of the PSEP, including the \$1.169 billion approved in D.12-12-030 (DRA Opening Brief at 4-5), while CSB recommended that \$2.333 billion in PSEP investments be made at shareholder expense (Rebuttal Brief of CSB at 7-8). TURN and CCSF also argue for similarly large-scale disallowances. (See Table 1, *supra*.) At the other end of the spectrum, PG&E (as described above) essentially argues that any such disallowance should be considered already paid, as PG&E would have us subtract other unrecoverable gas costs from any such disallowance we impose here.

This presents us with support for possible disallowances ranging from zero to over \$2 billion. We have rejected PG&E's argument for zero; a disallowance of over \$2 billion would be excessive in light of the other remedies we are imposing; accordingly, the appropriate amount should fall well between those two extremes. \$400 million does so.

In addition, this amount approximates the amount of revenues earned by PG&E's GT&S group in excess of revenue requirements between 1999 and

2010.²³⁵ As CPD 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."²³⁶ Our determination that a \$400 million bill credit is warranted is based in part on the evidence that PG&E's revenues exceeded the amount needed to earn its authorized return on equity by over \$435 million from 1999 to 2010, during a time when PG&E was reducing its gas safety expenditures. We note that this bill credit 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 a bill credit of \$400 million to PG&E's ratepayers.²³⁷

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.²³⁸

²³⁵ CPD Opening Brief at 42. CPD examined the GT&S revenues between 1999 and 2010 and found that revenues were at least \$435 million higher than the amounts needed to earn PG&E's authorized return. (*Id.*)

²³⁶ CPD Opening Brief at 42.

²³⁷ See, *Wise v. Pacific Gas & Electric Co.* (1999) 77 Cal. App.4th 287, 300.

²³⁸ *Re Pacific Gas and Electric Company* [D.86-12-095] (1986) 23 Cal.P.U.C. 2d 149, 198.

In 1986, and again in 1992,²³⁹ 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.”²⁴⁰ Consequently, as noted by CPSD, “[i]nstead of replacing 165 miles of HCA transmission pipeline from 2000-2010, PG&E replaced only 25 miles.”²⁴¹

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.²⁴² 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. Accordingly, PG&E must provide a bill credit of \$400 million 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 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 total actual billed gas throughput during the November and December 2015 billing cycles. For example, if PG&E’s actual customer billing for its November and December 2015 billing cycles gas volume is 600,000,000 therms, the billing credit would be \$0.666667/therm (600 million therms divided by \$400 million equals

²³⁹ *Re Pacific Gas and Electric Company* [D.92-12-057] (1992) 47 Cal.P.U.C. 2d 143.

²⁴⁰ Recordkeeping PG&E’s June 20, 2011 Response at 6C-1.

²⁴¹ CPSD Opening Brief at 46 (citation omitted).

²⁴² TURN Opening Brief at 7-8.

\$0.666667/therm). November and December should be used as those are traditionally the months with the highest volumetric throughput. PG&E shall apply this mechanism for all its natural gas customers. Each customer shall receive a bill credit based on their billed usage during their November and December billing cycles on their February 2016 PG&E bill. If PG&E finds that it is impossible to provide the bill credits on its February 2016 bills, PG&E shall propose the earliest possible dates for providing the bill credits in the Advice Letter required by Ordering Paragraph 5. We recognize this methodology may result in PG&E issuing bill credits that do not exactly equal the \$400 million penalty. If the total amount of bill credits distributed is more or less than \$400 million PG&E shall, at the same time as it submits its report, submit a Tier 2 advice letter proposing a method of truing up the \$400 million using existing balancing accounts. PG&E shall file a Tier 2 Advice Letter within 45 days after the effective date of this decision to implement the \$400 million bill credit in accordance with this guidance and direction. We are directing PG&E to provide this bill credit to all of its gas customers using the same methodology. We do so because we prefer a simple and clear methodology that can be implemented as soon as possible and without controversy. Accordingly, we are requiring the use of a Tier 2 Advice Letter process, as we envision that the implementation of the bill credit should be ministerial. This Advice Letter shall provide a mechanism to inform master meter customers at mobile home parks and other residential complexes of their obligation to pass the bill credit on to their submetered customers in the manner required by Public Utilities Code Section 739.5(b).²⁴³

²⁴³ Section 739.5(b) provides "Every master-meter customer of a gas or electrical corporation
(Footnote continued on next page)

. This decision differs from the Penalties POD, which would impose a \$950 million fine on PG&E to be paid to the General Fund under PU Code section 2107. We prefer to allocate more resources to infrastructure improvements, and doing so is supported by the record in this proceeding. CPSD, in its litigation position, argued that the amount paid to the General Fund should be at least \$300 million, with up to \$1.950 billion to be applied to PSEP safety-related costs and expenses (and other remedies) in order to “decrease the burden on ratepayers.” (CPSD Amended Reply Brief on Fines and Remedies at 1-3.)²⁴⁴

The Joint Parties support a similar result, reducing the size of the fine PG&E would pay to the General Fund while increasing PG&E shareholder responsibility for the cost of pipeline safety improvements; the Joint Parties argue that doing so would “alleviate the burden on PG&E customers” who will be paying for improvements to the safety of PG&E’s gas system. (Joint Parties Appeal at 14.) Even PG&E, in its Appeal of the Penalties POD, states: “However, PG&E strongly believes that the monetary penalty set forth in the Penalties POD should be reduced and reoriented toward future pipeline safety enhancements to be made at shareholder cost.” (PG&E Appeal at 3.)

As a policy matter, we agree with CPSD, the Joint Parties and PG&E. We want to do all we can to improve the safety of PG&E’s gas transmission system.

(Footnote continued from previous page)

subject to subdivision (a) who, . . . receives any rebate from the corporation shall distribute to, or credit to the account of, each current user served by the master-meter customer that portion of the rebate which the amount of gas or electricity, or both, consumed by the user during the last billing period bears to the total amount furnished by the corporation to the master-meter customer during that period.

²⁴⁴ CPSD chose not to appeal this part of the Penalties POD, but in its Response to the Request for Review of Commissioner Picker, it noted that the Commission could use its equitable powers to order PG&E to pay for a greater share of the expense for replacing or testing PG&E’s transmission system. CPSD argued that if the Commission did this, it should also increase the amount of ratepayer relief from that provided in the Fines and Remedies POD. (CPSD Response to Request for Review of Commissioner Picker at 5.)

Sending money to the General Fund (while it may have other salutary effects) does not further that goal, nor does it reduce the cost to ratepayers of the necessary improvements. Accordingly, in comparison to the Penalties POD, we will reduce the fine that PG&E is to pay to the General Fund but require PG&E shareholders to provide future pipeline safety enhancements.

This Commission has the legal authority to require PG&E shareholder funding of future pipeline safety enhancements. The parties concur that the Commission has broad authority to craft equitable remedies (in addition to express statutory remedies such as the penalties set forth in section 2107). For example, PG&E argues that the Commission, under section 701, can “direct PG&E to spend a certain amount on pipeline safety costs rather than paying those monies to the General Fund, which would do nothing to enhance gas pipeline safety.” (PG&E Appeal at 11.) In response to the Appeal of the Joint Parties, PG&E reiterated: “PG&E does not challenge the authority of the Commission to order a penalty in the form of a disallowance under Public Utilities Code § 701 and, in fact, encourages the Commission to order that any financial penalty be used to improve gas transmission safety rather than be paid to the General Fund.” (PG&E Response to Appeals at 3.)

The Commission does in fact have broad authority under P.U. Code section 701, which 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.” This allows the Commission to craft equitable remedies, as long as those remedies are not barred by a specific statutory limit or restriction. The California Supreme Court has stated: “If PUC lacked substantive authority to propose and enter into the rate settlement agreement at issue here, it was not for lack of inherent authority, but because this

rate agreement was barred by some specific statutory limit on PUC's power to set rates." (*Southern California Edison Co. v. Peevey*, supra, 31 Cal. 4th at 792, citing *Assembly v. Public Utilities Commission*, supra, 12 Cal. 4th at 103.)

PG&E describes the California case law as follows:

In *Assembly v. Public Utilities Commission*, for example, the court explained that Public Utilities Code § 701 authorizes the Commission to shape appropriate remedies so long as the remedy does not contravene "express legislative directives and restrictions." The Court reaffirmed this principle in *Southern California Edison Co. v. Peevey*, stating that, where the Commission has authority under § 701, only "specific statutory limit[s] on [its] power" bar it from acting. (PG&E Appeal at 9.)

The proposed remedy here – directing PG&E to make future pipeline safety enhancements at shareholder cost – is not barred by any such statutory limit or restriction.

The concept that regulatory agencies have broad discretion, particularly in fashioning equitable remedies, is consistent with and supported by Federal law as well:

Finally, we observe that the breadth of agency discretion is, if anything, at zenith when the action assailed relates primarily not to the issue of ascertaining whether conduct violates the statute, or regulations, but rather to the fashioning of policies, remedies and sanctions, including enforcement and voluntary compliance programs in order to arrive at maximum effectuation of Congressional objectives. [citation omitted] This source of discretion is available not only where an agency has the explicit power to impose penalties..." (*Niagara Mohawk Power Corp. v. Federal Power Commission*, (DC Cir. 1967) 379 F.2d 153, 159.

Accordingly, consistent with our authority to craft equitable remedies, and our policies of enhancing the safety of PG&E's gas transmission system and minimizing costs to ratepayers, we will change the amount of the fine that PG&E

is to pay to the General Fund to \$300 million. This change will allow for \$650 million to be redirected to improving the safety of PG&E's gas transmission system.

PG&E implies that a large penalty payment would have a negative effect upon safety, because a large fine "could force PG&E to postpone planned infrastructure improvements." (PG&E Brief at 67.) PG&E's argument is that they simply cannot pay for both a large fine and capital expenditures (such as significant gas transmission system upgrades), and would accordingly postpone "as much capex as possible going forward." (Id. at 70.) We have already rejected this PG&E argument, for the reasons explained in Section 5.3.3, above.

Nevertheless, we note that the \$650 million that the POD would have had PG&E pay to the General Fund will instead be used for capital expenditures on its gas transmission system. In other words, that \$650 million would no longer be unavailable for use for capital expenditures, and in fact is earmarked for capital expenditures to improve pipeline safety.

In any event, the record supports increasing further the amount of money that PG&E shareholders should pay for future pipeline safety enhancements.²⁴⁵ Accordingly, we will require PG&E shareholders to pay \$850 million towards future pipeline safety enhancements. This increase of \$200 million from the POD's total penalties and remedies of \$1.4 billion brings the total penalties and remedies here to \$1.6 billion. This amount is consistent with the record, and is within PG&E's ability to raise equity capital, as discussed at Section 5.3.

²⁴⁵ For example, the Joint Parties argue that PG&E can and should pay \$877 million towards pipeline safety enhancements (Appeal of Joint Parties at 13-15), and CPSD argued that PG&E should pay \$1.515 billion (out of a total disallowance of \$1.950 billion) to decrease the cost to ratepayers of pipeline safety enhancements. (Rebuttal Brief of CPSD at 1.)

The \$850 million should be applied to the cost of future pipeline safety improvements to be approved in the pending Gas Transmission and Storage (GT&S) proceeding (A.13-12-012) and any subsequent GT&S proceeding, if necessary. Some pipeline safety improvements have already been made, pursuant to our previous PSEP decision (D.12-12-030). The issue of how much PG&E's shareholders have spent on pipeline safety improvements has been an extremely contentious one in this proceeding, and the record is neither clear nor complete.²⁴⁶ Rather than attempt to unravel the question of how much PG&E may have spent in the past, and whether or not that spending was related to improvement of pipeline safety, we will focus on what they spend in the future. In this way we can establish criteria to ensure that the moneys that are spent legitimately contribute to improved pipeline safety, making it clearer what should (or should not) count towards the \$850 million.

Accordingly, instead of looking back to our PSEP decision and PG&E's past spending, this remedy will be based on the GT&S proceeding and PG&E's future spending. Only costs that PG&E would have been granted rate recovery for in the GT&S - but for this decision - will count towards the \$850 million. Work that PG&E has chosen to do at shareholder expense (i.e. not approved in the GT&S proceeding or a similar subsequent proceeding)) will not count towards the \$850 million total.

Finally, we decline to make any adjustments to account for any tax benefits that PG&E may receive. In response to Intervenor's comments regarding tax impacts, we had requested further briefing on this issue.²⁴⁷ The comments highlight, however, that it would be difficult to project actual tax impacts and

²⁴⁶ See e.g. Section 10 below, discussing CPSD Motion to Strike.

²⁴⁷ *Administrative Law Judges' Ruling Requesting Additional Comment*, filed July 30, 2013, at 4-7.

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. Adjusting for tax treatments could result in further litigation and uncertainty that would not achieve that objective.

6.1. Allocation and Tracking of the \$850 Million

While the majority of these funds to be spent on improving pipeline safety will be capital expenditures, certain expensed items are likely to further pipeline safety as well. Accordingly, we will allow PG&E to count some expenses towards the \$850 million total.

In the PSEP decision (D.12-12-030), we authorized total capital expenditures for 2013 and 2014 in the amount of \$696.2 million (Table E-3), and for the same period we authorized expenses in the amount of \$162.5 million (Table E-2), for a combined total of \$858.7 million, so expenses were about 19% of the total.²⁴⁸ We will apply that same proportion here. Accordingly, of the \$850 million, up to 19% (\$161.5 million) may be devoted to items that are expensed for projects, or programs authorized in its currently pending GT&S proceeding (A.13-12-012). The remainder (at least 81%, or \$688.5 million) shall be devoted to capital expenditures.

The amounts to be expensed that will be funded by shareholders shall be excluded from the expenses used to calculate PG&E's retail revenue requirements in A.13-12-012. As a number of the parties have suggested, the amounts of capital expenditures to be funded by shareholders shall be excluded from PG&E's rate base to be determined in A.13-12-012, and in all PG&E

²⁴⁸ We use 2013 and 2014 figures because 2011 and 2012 expenses were largely paid by shareholders while capital expenditures were not, so using 2011 and 2012 figures would skew the relative levels of expenses and capital expenditures.

proceedings thereafter. As noted by the Joint Parties in their Appeal, if PG&E were allowed to collect a rate of return on capital expenditures that its shareholders are required to fund as part of the penalties imposed in these proceedings, this would mute the financial impact of the disallowance over many decades. “The result would be to unnecessarily undermine the deterrence effect of the financial penalties and reduce the ratepayer value of the disallowance.”²⁴⁹

In A.13-12-012, we will determine which expenses and capital expenditures authorized in that proceeding are for safety-related gas transmission projects or programs that should be funded by shareholders, subject to the expense and capital expenditure requirements noted above. If the total amount to be funded by shareholders is not exhausted by designated safety-related projects or programs authorized in the GT&S proceeding, we will make a determination of additional capital projects or programs to be funded by shareholders in future proceedings, as necessary to ensure that PG&E ultimately spends the full \$850 million designated for safety-related projects and programs.

In order to avoid unproductive litigation in the GT&S proceeding, we will specify here which kinds of expenses and capital expenditures shall be considered “safety-related” for purposes of fulfilling the requirement that shareholders fund \$850 million of such costs. For purposes of the capital expenditures, “safety-related” will mean any capital expenditure to replace, repair, or upgrade transmission lines, unless the work is for the purpose of serving new load. We adopt this definition because replacement of old pipelines

²⁴⁹ *Joint Parties’ Appeal* at 16. When ratepayers pay for a rate of return (ROR) on undepreciated capital expenditures, they also pay a tax gross-up on the portion of the ROR that is a return on equity. *Id.* At 16-17.

and upgrading of existing pipelines should have a favorable impact on safety. Only expenditures authorized by the Commission in the GT&S (or other) proceeding will count towards the shareholder funding requirement. For purposes of items that are properly expensed, rather than capitalized, “safety-related” will mean: (i) costs for safety inspections and testing of transmission pipeline; (ii) any costs for repairing or replacing transmission lines that are properly expensed, and (iii) projects or programs to improve transmission line record-keeping, including GIS equipment and systems, but excluding any items that shareholders were required to fund by the PSEP Decision (D. 12-12-030, in R.11-02-019).

To track the recorded expenditures on designated safety-related projects or programs to be funded by shareholders, we will direct PG&E to establish a deferred liability account, to be called the Shareholder-Funded Gas Transmission Safety Account (Shareholder-Funded Account) with two sub-accounts. Our intention is that PG&E’s books will show this account as a liability obligating PG&E to implement designated safety-related projects and programs to be funded by shareholders over time. One sub-account, in a total amount not to exceed \$161.5 million, will be for tracking the costs, of designated projects or programs authorized in the GT&S proceeding, that are to be expensed, to be called the Shareholder-Funded Gas Transmission Safety Expense Sub-Account. The other sub-account, to be called the Shareholder-Funded Gas Transmission Safety Capital Sub-Account, in an amount of at least \$688.5 million, will be for tracking capital expenditures as plant is placed into service. The total of the two subaccounts shall equal \$850 million.

Once a decision has been issued in PG&E’s pending GT&S proceeding determining which expensed costs qualify as “safety-related,” and therefore could be recorded in the Shareholder Funded Account, PG&E shall cap the

amount included in the Expense Sub-Account at the lesser of \$161.5 million or the amount of such “safety-related” costs designated in that decision. If that amount is less than \$161.5 million, the amount to be included in the Capital Sub-Account shall be adjusted above \$688.5 million, so that the two sub-accounts total \$850 million.

With regard to expensed costs for safety-related gas transmission projects or programs designated in the GT&S proceeding, PG&E shall record these expenses as a debit entry into the Expense Sub-Account when PG&E spends money for the authorized projects or programs. In order to ensure that the Expense Sub-Account only includes amounts for these expensed costs that are prudently incurred, for each project or program PG&E shall record no more than the amount authorized for that project or program (including any contingency, if authorized).²⁵⁰ If PG&E is able to complete any particular project or program for less than the authorized amount, only the amount actually expended shall be recorded in the Expense Sub-Account.

With regard to capital expenditures for safety-related gas transmission projects or programs designated in the GT&S (or another) proceeding, PG&E shall record these capital expenditures as a debit entry into the Capital Sub-Account when PG&E places the plant or facilities in service. As with expensed amounts, PG&E shall record the lesser of the authorized expenditure (plus contingency, if any) or the actual expenditure as a debit entry to the Capital Sub-Account. PG&E shall not include amounts recorded in the Capital Sub-Account

²⁵⁰ If the GT&S proceeding authorizes expenses on a program (rather than project) basis, the Commission may choose to state the amount authorized as so many dollars per unit of work accomplished, in order to help ensure that the expenses recorded in the Shareholder-Funded Account are prudently incurred.

in its rate base, such that ratepayers will not ever be responsible for any depreciation, or rate of return on these capital amounts.²⁵¹

The \$850 million may only be spent on projects or programs that are approved by this Commission in the GT&S, or other proceeding; and amounts that may be recorded in the Shareholder-Funded Account are limited to the lesser of (i) the amount authorized (including any contingency) or (ii) the amount actually expended. Accordingly if this Commission disallows, or limits, any proposed safety-related expenditure by PG&E, in the current GT&S or subsequent proceeding, for any reason other than that the amount is to be paid out of the Shareholder-Funded Account, such disallowed amounts may not be booked into the Shareholder-Funded Account, i.e., may be paid for out of the \$850 million.

The following steps should be taken to ensure that the amounts to be paid by shareholders via the Shareholder-Funded Account are not recovered from ratepayers. For items to be included in the Expense Sub-Account, the GT&S proceeding will adopt a forecast of when those expenses will be incurred, and those expenses shall be excluded in calculating the ratepayer-funded revenue requirement for the applicable year. Similarly, the GT&S proceeding will exclude from its forecast of rate base those capital projects or programs to be funded by shareholders and tracked through the Capital Sub-Account, and therefore shall exclude from its rate-payer funded revenue requirement all related fixed capital charges for those projects or programs, such as depreciation and rate of return. Because shareholders will ultimately be responsible for paying the full amounts included in the two sub-accounts, there should be no

²⁵¹ Ratepayers, will, however, be responsible for ongoing operation and maintenance of these facilities, unless those costs are otherwise required to be funded by shareholders, or disallowed.

need to adjust customer rates to account for differences between forecast and actual expenses and dates of plant in service. A key effect of excluding from rate base plant placed in service that is funded by shareholders via the Capital Sub-Account will be that, throughout the expected useful life of that plant, ratepayers will never be charged for depreciation or a rate of return on the excluded plant in future general rate cases.

To ensure that amounts debited to the Shareholder-Funded Account are properly recorded, after the end of each calendar year, and no later than May 1 of the following year, PG&E shall submit a detailed accounting to the Commission as an information-only filing, pursuant to Section 6 of General Order 96-B. This information-only filing shall also be served on all parties to these proceedings, all parties to A.13-12-012, and any other persons as directed by the Commission's Energy Division (collectively, the "Relevant Parties"). For each project or program recorded in the Shareholder-Funded Account, PG&E shall include at least the following: the precise location of the authorization to include the project or program in the Shareholder-Funded Account; the maximum amount it was authorized to include for that project or program; the actual cost of that project or program up to authorized spending limits (with reference to where detailed supporting accounting can be found); the scope of work actually

accomplished;²⁵² and for capital projects or programs, the date the plant was placed into service. In case of doubt, PG&E should provide more, rather than less, detail about how the monies were expended. PG&E shall also include any additional information as directed by the Energy Division.

Elsewhere in this Decision (Section 7.1.1 and Appendix E), we require PG&E's shareholders 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's accountings of its Shareholder-Funded Account should likewise be audited by an independent auditor. Accordingly, we will similarly require PG&E's shareholders to reimburse the Commission for the cost of an independent auditor, to be selected by Commission Staff, to conduct audits of the Shareholder-Funded Account. The Commission-selected independent auditor shall review each of PG&E's detailed annual accountings and prepare a report. The auditor's report shall be served on all the Relevant Parties.

In order to ensure that this shareholder-funding remedy is fully implemented, PG&E shall continue recording costs into each sub-account until the total amount designated for funding through each sub-account has been utilized. If PG&E is unable to utilize the full amount designated for funding through the Expense Sub-Account, (because the lesser of its authorized or actual expenses for projects or programs designed in the GT&S proceeding for funding through this subaccount do not in total reach the amount originally recorded in

²⁵² For example, if the GT&S proceeding authorizes replacement of certain pipeline segments to be funded via this mechanism, a listing of those pipeline segments actually replaced. For another example, if the GT&S proceeding authorizes installing a certain number of automated valves to be funded via this mechanism, the number of valves actually installed. Similarly, if the cost of certain pipeline inspections were authorized to be recovered via this mechanism, the length of pipeline inspected and by what method.

the account) then the amount not utilized shall be transferred to the Capital Sub-Account, to be spent on capital projects or programs.

If the GT&S proceeding designates for funding via the Shareholder-Funded Account projects or programs whose costs are projected to equal or exceed \$850 million, but thereafter PG&E determines that the total of its actual costs for these projects and programs will not exhaust the \$850 million, PG&E shall file an information-only filing, informing the Commission of that conclusion and showing the applicable amounts actually spent (or expected to be spent), and serve it on all Relevant Parties.

When both sub-accounts have been fully utilized (i.e. PG&E's spending obligations have been exhausted), PG&E shall submit a final accounting to the Commission, as an information-only filing, to be served on all Relevant Parties. This final accounting shall be filed within 180 days of the date when the Shareholder-Funded Account was exhausted. This final accounting may be combined with PG&E's annual information-only filing if this timing requirement can be met. Thereafter, the independent auditor shall prepare a final audit and serve its audit report on all Relevant Parties. Thereafter, PG&E shall file an advice letter to close out the Shareholder-Funded Account, with service on all Relevant Parties.

Within 60 days of today's decision, PG&E shall submit an Advice Letter, with service on all Relevant Parties, setting up the Shareholder-Funded Account and its two sub-accounts, and in the Advice Letter PG&E shall specify any additional accounting measures that will be necessary to carry out the intent of this Decision with regard to the Shareholder-Funded Account.

6.2. Summary of Remedies

Finally, we adopt additional, 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 \$1.6 billion, consisting of the following:

Fines (Pub. Util. Code §§ 2107 & 2108)	\$300 million
Bill Credit (Pub. Util. Code §§ 701 and 728)	\$400 million
Shareholder funding of gas infrastructure	\$850 million
Other Remedies	\$50 million

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, except as specified in this decision.

7. Other Remedies

7.1. CPSD Proposed Remedies

CPSD proposes 75 separate remedies in these proceedings: 2 applicable to all three proceedings,²⁵³ 38 applicable to I.12-01-007, 22 applicable to I.11-02-016, and 13 applicable to I.11-11-009.²⁵⁴ PG&E agrees with many of CPSD’s recommended remedies and has “identified operational commitments to achieve

²⁵³ 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.

²⁵⁴ *CPSD Opening Brief* at 58-70.

them.”²⁵⁵ CPSD accepted certain of PG&E’s proposed modifications to the recommended remedies.²⁵⁶

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.”²⁵⁷ Clearly, remedies such as those proposed by CPSD are both necessary and appropriate in addition to the fine we are imposing on PG&E. The remedies adopted here are based on the record in these proceedings. This decision does not limit the Commission’s ability to require additional changes to PG&E’s business practices or governance in any subsequent proceeding, as supported by the record in that proceeding.

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*

²⁵⁵ *PG&E Remedies Brief* at 94.

²⁵⁶ *CPSD Amended Reply* at 10, Appendixes A and B.

²⁵⁷ *CPSD Amended Reply* at 10.

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 Oils

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

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 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 conducting their audits."²⁵⁸ 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.

²⁵⁸ *PG&E Remedies Brief* at 101-102, Appendix B.

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.²⁵⁹ 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.²⁶⁰

CPSD opposes this proposed requirement.²⁶¹ CPSD notes that the Government Auditing Standards are designed to audit the government and that they do not contemplate recordkeeping audits.²⁶² CPSD further notes that “it is within this Commission’s discretion to choose whatever audits it wishes to employ.”²⁶³

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.

²⁵⁹ *PG&E Remedies Brief* at 101-102.

²⁶⁰ *PG&E Remedies Brief* at 102.

²⁶¹ *CPSD Amended Reply* at 10-11, Appendix A.

²⁶² *CPSD Amended Reply* at 11.

²⁶³ *CPSD Amended Reply* at 11.

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.²⁶⁴ PG&E states it has implemented many of the proposals or is taking steps to do so.²⁶⁵ 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 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.

²⁶⁴ 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.

²⁶⁵ *PG&E Remedies Brief*, Appendix B at B-1.

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.”²⁶⁶

PG&E would qualify this remedy by adding “relevant” before “legal requirements and industry standards.”²⁶⁷ We concur with CPSD’s contention that the term “relevant” is subjective and unnecessary, and we therefore exclude the term.

²⁶⁶ CPSD Amended Reply, Appendix A at B-4.

²⁶⁷ PG&E Remedies Brief, Appendix B at B-2.

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."²⁶⁸

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"²⁶⁹ However, CPSD also proposes without explanation another revision to the remedy so that it reads "PG&E should revise its GTIMRMP"²⁷⁰ 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.

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.²⁷¹ 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."²⁷²

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

²⁶⁸ CPSD Amended Reply, Appendix B at 1.

²⁶⁹ CPSD Amended Reply, Appendix A at B-5.

²⁷⁰ CPSD Amended Reply, Appendix A at B-5.

²⁷¹ PG&E Remedies Brief, Appendix B at B-3.

²⁷² PG&E Remedies Brief, Appendix B at B-3.

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."²⁷³

CPSD proposes to add the following sentence to this remedy: "Each assessment should be documented and retained for the life of the facility."²⁷⁴ We concur with CPSD that such documentation is necessary. This added requirement is reasonable and will therefore be adopted.

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)."²⁷⁵ PG&E agrees with implementing this recommendation

²⁷³ CPSD Amended Reply, Appendix A at B-9.

²⁷⁴ CPSD Amended Reply, Appendix A at B-9.

²⁷⁵ CPSD Amended Reply, Appendix A at B-10.

but proposes to delete “that have had their MAOP increased” following “HCA pipeline segments.”²⁷⁶

CPSD states that it accepts PG&E’s proposed edit.²⁷⁷ However, CPSD’s final recommended remedies do not reflect this agreement.²⁷⁸ 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.”²⁷⁹

PG&E states that it is implementing this recommendation and reviewing its inspection, testing, and maintenance procedure applicable to stations to ensure the integrity of electrical equipment, wiring, documentation, and identification of electrical components.²⁸⁰ PG&E proposes several edits to CPSD’s proposed language, including deletion of reference to the Milpitas Terminal and deletion of the last sentence.²⁸¹

²⁷⁶ *PG&E Remedies Brief*, Appendix B at B-7.

²⁷⁷ *CPSD Amended Reply*, Appendix A at B-10.

²⁷⁸ *CPSD Amended Reply*, Appendix B at 2.

²⁷⁹ *CPSD Opening Brief* at 60.

²⁸⁰ *PG&E Remedies Brief*, Appendix B at B-9.

²⁸¹ *PG&E Remedies Brief*, Appendix B at B-9.

CPSD states that it accepts PG&E's proposed edits.²⁸² However, CPSD's final recommended remedies do not reflect this agreement.²⁸³ 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.²⁸⁴ 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."²⁸⁵

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.²⁸⁶ However, PG&E does not agree that all 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.²⁸⁷

CPSD opposes PG&E's proposed edits.²⁸⁸ CPSD asserts that even with the Valve Automation Program, redundant pressure sensor data will be available

²⁸² CPSD Amended Reply, Appendix A at B-12.

²⁸³ CPSD Amended Reply, Appendix B at 3.

²⁸⁴ CPSD Amended Reply, Appendix A at B-12.

²⁸⁵ CPSD Amended Reply, Appendix A at B-13.

²⁸⁶ PG&E Remedies Brief, Appendix B at B-10.

²⁸⁷ PG&E Remedies Brief, Appendix B at B-10.

²⁸⁸ CPSD Amended Reply, Appendix A at B-13.

and should be incorporated into systems including SCADA.²⁸⁹ CPSD asserts that redundant information from alternate sources is both important and relevant in emergency situations.²⁹⁰

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 Remedy 4.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.”²⁹¹

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 line break detection using SCADA information.²⁹² PG&E states that it will review the results of the pilot program before proposing the installation of more pressure sensors system-wide.²⁹³ CPSD responds with the assertion that the remedy has merit because PG&E has already begun the pilot program.²⁹⁴

CPSD’s recommendation calls for more sensors and for closer spacing of them but does not include specific, quantifiable standards for doing so.²⁹⁵ This

²⁸⁹ CPSD Amended Reply, Appendix A at B-13.

²⁹⁰ CPSD Amended Reply, Appendix A at B-13.

²⁹¹ CPSD Amended Reply, Appendix A at B-14.

²⁹² PG&E Remedies Brief, Appendix B at B-10.

²⁹³ PG&E Remedies Brief, Appendix B at B-10.

²⁹⁴ CPSD Amended Reply, Appendix A at B-14.

²⁹⁵ CPSD Amended Reply, Appendix A at B-14.

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."²⁹⁶ 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."²⁹⁷

PG&E opposes this remedy.²⁹⁸ PG&E believes that the redundant pneumatic pressure limiting system is the appropriate countermeasure where regulator valves open unintentionally.²⁹⁹ PG&E does not believe that programming PLCs to disregard pressure information is a prudent practice.³⁰⁰

In response, CPSD maintains the proposed remedy is appropriate and necessary in light of the problems encountered at the Milpitas Station.³⁰¹ CPSD takes issue with PG&E's characterization that the goal is to program PLCs to disregard pressure information.³⁰² Instead, CPSD asserts, the remedy is to

²⁹⁶ San Bruno Exh. PG&E 1-A at 13A-5.

²⁹⁷ CPSD Amended Reply, Appendix A at B-14.

²⁹⁸ PG&E Remedies Brief, Appendix B at B-10.

²⁹⁹ PG&E Remedies Brief, Appendix B at B-10.

³⁰⁰ PG&E Remedies Brief, Appendix B at B-10.

³⁰¹ CPSD Amended Reply, Appendix A at B-14.

³⁰² CPSD Amended Reply, Appendix A at B-14.

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.³⁰³

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.³⁰⁴ 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.³⁰⁵ However, we do not find that this assertion is adequately substantiated or that the prudence 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."³⁰⁶ 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."³⁰⁷ PG&E therefore proposes to revise the wording of the remedy to state "PG&E should remove the three pressure controllers..."³⁰⁸

CPSD notes, however, that even though PG&E proposes changes to the Milpitas Terminal, the three controllers could potentially remain in service for

³⁰³ CPSD Amended Reply, Appendix A at B-14.

³⁰⁴ San Bruno Violations Decision, Section 5.3.2.

³⁰⁵ 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.

³⁰⁶ CPSD Amended Reply, Appendix A at B-15.

³⁰⁷ San Bruno Exh. PG&E-1A at 13-A-6.

³⁰⁸ PG&E Remedies Brief, Appendix B at B-11.

years and thereby pose a risk to safety.³⁰⁹ CPSD therefore stands by its proposed remedy as stated “unless PG&E demonstrates that the controllers have already been removed from the system.”³¹⁰

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.

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.”³¹¹ This recommended remedy enjoys PG&E’s agreement, and it reflects CPSD’s acceptance of edits proposed by PG&E.³¹²

The above-quoted language also incorporates two additional, minor clarifying edits to the last sentence that were proposed by CPSD.³¹³ 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

³⁰⁹ *CPSD Amended Reply*, Appendix A at B-15.

³¹⁰ *CPSD Amended Reply*, Appendix A at B-15.

³¹¹ *CPSD Amended Reply*, Appendix A at B-15.

³¹² *CPSD Amended Reply*, Appendix A at B-15.

³¹³ *CPSD Amended Reply*, Appendix A at B-15.

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 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.”³¹⁴

PG&E states that it agrees with and is implementing this recommendation.³¹⁵ Apart from typographical errors, the language quoted above reflects PG&E’s edits to CPSD’s originally proposed remedy with one exception.³¹⁶ CPSD otherwise accepts PG&E’s edits.³¹⁷

In the first sentence, PG&E had inserted “necessary” prior to “forms and fields therein.”³¹⁸ 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

³¹⁴ CPSD Amended Reply, Appendix A at B-16.

³¹⁵ PG&E Remedies Brief, Appendix B at B-12.

³¹⁶ CPSD Amended Reply, Appendix A at B-16.

³¹⁷ CPSD Amended Reply, Appendix A at B-16.

³¹⁸ PG&E Remedies Brief, Appendix B at B-12.

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 between fires of low-pressure natural gas, high-pressure natural gas, gasoline fuel, or jet fuel."³¹⁹

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.³²⁰ 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."³²¹

CPSD opposes PG&E's edits to its remedy, claiming that they "completely alters the purpose of the proposed remedy."³²² 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.³²³

³¹⁹ CPSD Amended Reply, Appendix A at B-17.

³²⁰ PG&E Remedies Brief, Appendix B at B-13.

³²¹ PG&E Remedies Brief, Appendix B at B-13.

³²² CPSD Amended Reply, Appendix A at B-17.

³²³ CPSD Amended Reply, Appendix A at B-17.

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.

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.”³²⁴

PG&E opposes this remedy, asserting that it has already committed substantial shareholder investments to gas transmission improvements.³²⁵ PG&E contends that there is no need to adopt an express requirement that any savings from operational efficiencies be reinvested in infrastructure improvements.³²⁶ 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.³²⁷

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

³²⁴ *CPSD Amended Reply*, Appendix A at B-23.

³²⁵ *PG&E Remedies Brief*, Appendix B at B-16.

³²⁶ San Bruno Exh. PG&E 1A at 13A-11.

³²⁷ *CPSD Amended Reply*, Appendix A at B-23.

utility's safety obligation can or should be met by linking necessary safety expenditures and investments to operational efficiencies. PG&E must spend 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 GRC decision."³²⁸ PG&E opposes this remedy, asserting that shareholders have spent and will spend significant funds to improve gas transmission safety without rate recovery.³²⁹ 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."³³⁰

We make no findings here regarding the amounts PG&E shareholders have spent or will spend on gas transmission work without rate recovery.³³¹ The Commission did not authorize a memorandum account to track expenditures that PG&E asserts to be safety-related expenditures after San Bruno. Indeed, the Commission expressly rejected PG&E's request for a memorandum account.³³² Furthermore, there is no evidence timely or properly

³²⁸ CPSD Amended Reply, Appendix A at B-24.

³²⁹ PG&E Remedies Brief, Appendix B at B-17.

³³⁰ PG&E Remedies Brief, Appendix B at B-17.

³³¹ See also Section 6, above, discussing PG&E's overly broad contentions about what costs it has allegedly not recovered.

³³² See D. 12-12-030, at. pp. 70-73.

submitted in the record of this proceeding to establish what those expenditure might be. 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 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.”³³³

PG&E responded that it agrees with this recommendation.³³⁴ 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.³³⁵ PG&E proposed edits to the remedy

³³³ CPSD Opening Brief at 62.

³³⁴ PG&E Remedies Brief, Appendix B at B-18.

³³⁵ San Bruno Exh. PG&E 1A at 13-13 to 13-14, Appendix A at 13A-12.

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.”³³⁶

CPSD recommends incorporating PG&E’s implementation plan into the remedy and proposes further language revisions to accomplish that.³³⁷ 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.”³³⁸ PG&E opposes this remedy, asserting that “the interests of the Company and the Utility are aligned.”³³⁹

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.”³⁴⁰ 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

³³⁶ *PG&E Remedies Brief*, Appendix B at B-18.

³³⁷ *CPSD Amended Reply*, Appendix A at B-25.

³³⁸ *CPSD Amended Reply*, Appendix A at B-26. CPSD is clearly referring to PG&E Corporation and its subsidiary, Pacific Gas and Electric Company.

³³⁹ *PG&E Remedies Brief*, Appendix B at B-19.

³⁴⁰ San Bruno Exh. CPSD-1 at 127.

natural gas pipeline facilities.”³⁴¹ CPSD’s rebuttal testimony went on to assert that “PG&E’s history demonstrates that PG&E Corporation cannot appropriately 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.”³⁴² The rebuttal testimony went on to assert that “[t]he Company and the Corporation each serve a conflicting purpose.”³⁴³

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.”³⁴⁴ 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.”³⁴⁵ PG&E thus opposes this remedy as unnecessary.³⁴⁶

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

³⁴¹ San Bruno Exh. CPSD-1 at 130.

³⁴² San Bruno Exh. CPSD-5 at 56.

³⁴³ San Bruno Exh. CPSD-5 at 57.

³⁴⁴ *CPSD Opening Brief* at 62.

³⁴⁵ San Bruno Exh. PG&E 1A, Appendix A at 13A-13.

³⁴⁶ *PG&E Remedies Brief*, Appendix B at B-19.

enhancing public safety and operational excellence as a core mission, and should examine whether the time and money it spends on public relations and political campaigns distracts it from this core mission.”³⁴⁷

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.”³⁴⁸ PG&E opposes this remedy and asserts it is unnecessary.³⁴⁹ The Pipeline 2020 program is no longer active and has been superseded by the PSEP. CPSD has agreed with deleting this remedy,³⁵⁰ and we therefore do so.

³⁴⁷ CPSD Amended Reply, Appendix A at B-26.

³⁴⁸ CPSD Amended Reply, Appendix A at B-26.

³⁴⁹ PG&E Remedies Brief, Appendix B at B-19.

³⁵⁰ 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.”³⁵¹ CPSD then lists several recommendations that the NTSB made to PG&E.³⁵²

PG&E agrees with and is implementing this recommendation to follow the NTSB recommendations.³⁵³ 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.”³⁵⁴ 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.”³⁵⁵

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

³⁵¹ *CPSD Amended Reply*, Appendix A at B-27.

³⁵² *CPSD Amended Reply*, Appendix A at B-28-32.

³⁵³ *PG&E Remedies Brief*, Appendix B at B-20.

³⁵⁴ *CPSD Opening Brief* at 64.

³⁵⁵ *CPSD Opening Brief* at 64.

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 policies 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."³⁵⁶ 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."³⁵⁷

CPSD argues that the ISO 30300 series is applicable to all organizations, regardless of size or location, and "is especially useful in demonstrating compliance with the documentation and records requirements of other Management System Standards."³⁵⁸ Additionally, since the standard has not yet

³⁵⁶ CPSD Opening Brief at 65.

³⁵⁷ CPSD Amended Reply, Appendix A at B-33.

³⁵⁸ CPSD Amended Reply, Appendix A at B-33.

been finalized and published, CPSD suggests “PG&E could begin working toward the ISO 15489 standard currently in place.”³⁵⁹

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.³⁶⁰

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

³⁵⁹ CPSD Opening Brief at 65, fn.32.

³⁶⁰ CPSD Opening Brief at 65.

diverse as Gas Operations, Human Resources and Regulatory Affairs, for example.”³⁶¹

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.³⁶²

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 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.

³⁶¹ CPSD Amended Reply, Appendix A at B-34 – B-35.

³⁶² CPSD Amended Reply, Appendix A at B-34.

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.”³⁶³

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).³⁶⁴ 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.³⁶⁵ PG&E opposes these recommendations on the grounds that they are duplicative of CPSD’s recommended Remedy 4.C.4.³⁶⁶ We do not agree. CPSD recommended Remedy 4.C.4 is a general recommendation for training, while CSB’s proposed remedies outline the 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

³⁶³ CPSD Amended Reply, Appendix A at B-36.

³⁶⁴ CPSD Amended Reply, Appendix A at B-36.

³⁶⁵ CPSD Amended Reply, Appendix A at B-62 – B-63.

³⁶⁶ CPSD Amended Reply, Appendix A at B-62 – B-63.

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:
 - a. 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.³⁶⁷

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."³⁶⁸ CPSD further opposes PG&E's addition to have this recommendation apply in accordance with "PG&E's records retention schedule."³⁶⁹ 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 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

³⁶⁷ CPSD Opening Brief at 65.

³⁶⁸ CPSD Amended Reply, Appendix A at B-37.

³⁶⁹ CPSD Amended Reply, Appendix A at B-37.

for purposes of implementation.³⁷⁰ 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.³⁷¹

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."³⁷² PG&E agrees with this recommendation and proposes to add the phrase "in gas transmission" at the end of the sentence.³⁷³

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

³⁷⁰ CPSD Amended Reply, Appendix A at B-38.

³⁷¹ CPSD Amended Reply, Appendix A at B-38.

³⁷² CPSD Opening Brief at 66.

³⁷³ CPSD Amended Reply, Appendix A at B-39.

traceable, verifiable and complete standard.³⁷⁴ 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.³⁷⁵

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."³⁷⁶

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 federal requirements to retain certain records for the life of the asset.³⁷⁷ 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:

³⁷⁴ CPSD Opening Brief at 66.

³⁷⁵ CPSD Amended Reply, Appendix A at B-40.

³⁷⁶ CPSD Amended Reply, Appendix A at B-40.

³⁷⁷ *Recordkeeping Violations Decision*, Section 7.2.1, 8.3 and 9.3.

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.³⁷⁸

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 3.0.³⁷⁹

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 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

³⁷⁸ CPSD Opening Brief at 66.

³⁷⁹ CPSD Amended Reply, Appendix A at B-41.

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."³⁸⁰

PG&E agrees with both recommendations. PG&E states that it is implementing recommendation 4.C.14 by creating an electronic format for job file organization and recommendation 4.C.15 through Project Mariner.³⁸¹ 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.³⁸²

³⁸⁰ CPSD Opening Brief at 66.

³⁸¹ Project Mariner is PG&E's Gas Transmission Asset Management Project which was authorized in the *PSEP Decision*.

³⁸² CPSD Amended Reply, Appendix A at B-42.

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."³⁸³ 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."³⁸⁴

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.³⁸⁵ These original documents include permits, environmental documents, x-ray reports and weld maps and inspection reports.³⁸⁶ 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.³⁸⁷ 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

³⁸³ CPSD Amended Reply, Appendix A at B-42.

³⁸⁴ CPSD Amended Reply, Appendix A at B-42.

³⁸⁵ Recordkeeping, Exh. CPSD-18, [GasTransmissionSystemRecordsOII_DR_CPUC_017-Q05Supp.pdf](#).

³⁸⁶ Recordkeeping, PG&E's June 20, 2011 Response at 2A-19 – 2A-20 (Table 2A-3) & 7-3.

³⁸⁷ Recordkeeping, 11 Joint RT at 1153:7 – 1154:26 (PG&E/Keas).

pipeline system in a safe manner.³⁸⁸ 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.³⁸⁹

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 of Job Files so the PG&E's staff would "have immediate access to relevant information and not have to wait days or months for the information to be located."³⁹⁰

As we found in the *Recordkeeping Violations Decision*, PG&E does not have a central repository or a system-wide index for Job Files.³⁹¹ 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.³⁹² 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

³⁸⁸ *Recordkeeping Violations Decision*, Section 8.1 and 8.7.

³⁸⁹ *CPSD Amended Reply*, Appendix A at B-43.

³⁹⁰ *CPSD Amended Reply*, Appendix A at B-43.

³⁹¹ *Recordkeeping Violations Decision*, Section 8.1.

³⁹² *Recordkeeping Violations Decision*, Section 8.1.

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."³⁹³ PG&E states that it is implementing this recommendation through its MAOP validation effort. It therefore proposes that this recommendation read:

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.³⁹⁴

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."³⁹⁵ 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

³⁹³ CPSD Opening Brief at 66-67.

³⁹⁴ CPSD Amended Reply, Appendix A at B-44.

³⁹⁵ CPSD Amended Reply, Appendix A at B-44.

use of assumed values.³⁹⁶ 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.

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.³⁹⁷

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.³⁹⁸ Although PG&E

³⁹⁶ CPSD Amended Reply, Appendix A at B-59.

³⁹⁷ This does not override prior Commission Orders regarding hydro testing and replacement of pipeline. Nor does it relieve PG&E of its on-going responsibility and duty going forward to keep accurate records.

³⁹⁸ CPSD Opening Brief at 67.

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.”³⁹⁹

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, CPD 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 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.”⁴⁰⁰ As highlighted in the Recordkeeping OI, 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

³⁹⁹ CPD Amended Reply, Appendix A at B-45.

⁴⁰⁰ CPD Amended Reply, Appendix A at B-45.

reconditioning program” during that time.⁴⁰¹ 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, 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.⁴⁰² 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

⁴⁰¹ Recordkeeping Exh. PG&E-48 at 2; see also, 4 RT at 498:18 – 499:9.

⁴⁰² CPSD Opening Brief at 67.

opposes recommendation 4.C.19 on the grounds that it is duplicative of recommendation 4.C.18.⁴⁰³ Similarly, PG&E states that TURN recommended Remedy 1 is duplicative of CPSD proposed remedies 4.C.18 and 4.C.19.⁴⁰⁴

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.⁴⁰⁵ In contrast, 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.⁴⁰⁶

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.

⁴⁰³ *CPSD Amended Reply*, Appendix A at B-47.

⁴⁰⁴ *CPSD Amended Reply*, Appendix A at B-58.

⁴⁰⁵ *CPSD Amended Reply*, Appendix A at B-47.

⁴⁰⁶ *CPSD Amended Reply*, Appendix A at B-47.

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."

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).”⁴⁰⁷ PG&E opposes this recommendation and states that it has already addressed the PwC recommendations in Exh. PG&E-61 of the Recordkeeping OII.⁴⁰⁸

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.”⁴⁰⁹ 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.⁴¹⁰ PG&E proposes that these audits be performed in accordance with the Government Auditing Standards. It further opposes CPSD’s proposal that audits

⁴⁰⁷ CPSD Opening Brief at 67.

⁴⁰⁸ CPSD Amended Reply, Appendix A at B-47.

⁴⁰⁹ CPSD Amended Reply, Appendix A at B-47.

⁴¹⁰ CPSD Opening Brief at 67.

be performed annually for a minimum of ten years after the final decision is issued in the Recordkeeping OII.⁴¹¹

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.

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."⁴¹² 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.

⁴¹¹ CPSD Amended Reply, Appendix A at B-48 – B-49.

⁴¹² CPSD Amended Reply, Appendix A at B-48.

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.⁴¹³ 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:

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.

⁴¹³ Class Location OII, Exh. CPSD-1, Attachment 17.

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:

Procedures: 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*.⁴¹⁴

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.⁴¹⁵ 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.⁴¹⁶

⁴¹⁴ CPSD Opening Brief at 68.

⁴¹⁵ CPSD Amended Reply, Appendix A at B-51.

⁴¹⁶ CPSD Amended Reply, Appendix A at B-51.

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.⁴¹⁷

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."⁴¹⁸ 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

⁴¹⁷ CPSD Amended Reply, Appendix A at B-51.

⁴¹⁸ CPSD Opening Brief at 69.

aids, and reflect field conditions to approximate buildings' key distances from lines."⁴¹⁹

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."⁴²⁰ Therefore it believes the exams should contain greater detail and complexity. CPSD therefore proposes to retain the 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."⁴²¹

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

⁴¹⁹ CPSD Amended Reply, Appendix A at B-55.

⁴²⁰ CPSD Amended Reply, Appendix A at B-55.

⁴²¹ CPSD Amended Reply, Appendix A at B-55.

660 feet from the right of way and would require reporting. Training should also include a WDA in the exhibit as well.⁴²²

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."⁴²³

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."⁴²⁴

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. Intervenor's Proposed Remedies

In addition to the remedies proposed by CPSD, CSB has proposed 6 additional remedies (some with multiple sub-parts), TURN has proposed

⁴²² CPSD Opening Brief at 69.

⁴²³ CPSD Amended Reply, Appendix A at B-56.

⁴²⁴ CPSD Amended Reply, Appendix A at B-56.

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.
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).⁴²⁵ 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

⁴²⁵ CSB *Opening Brief* at 41 – 42.

remedies the Commission imposes in connection with the Line 132 Investigatory Proceedings.”⁴²⁶ 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;
- 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.⁴²⁷

CSB argues that the Pipeline Trust is necessary to establish a long-term partnership between local communities, government and industry to improve pipeline safety; increase accountability for intrastate pipeline safety, and; increase awareness of pipeline safety.⁴²⁸ 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 Intervenorors that regularly appear before the Commission” and “there is not one Intervenor in these historic and unprecedented proceedings that advocates solely for public safety.”⁴²⁹

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

⁴²⁶ CSB Opening Brief at 42 – 43.

⁴²⁷ CSB Opening Brief at 43.

⁴²⁸ CSB Opening Brief at 43.

⁴²⁹ 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.

infrastructure concerns at the center of these proceedings.”⁴³⁰ PG&E therefore believes that in light of the cost of already-identified pipeline safety projects, it would be an inappropriate use of funds.

CSB correctly points out that there is no safety/advocacy counterpart to CPSD.⁴³¹ 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 a 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.⁴³² DRA makes a similar proposal.⁴³³ Both TURN and CCSF support the proposal for an independent

⁴³⁰ *PG&E Remedies Brief* at 97.

⁴³¹ *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.

⁴³² *CSB Opening Brief* at 43.

⁴³³ *DRA Opening Brief* at 38 – 39.

third-party monitor.⁴³⁴ 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 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.
3. 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.⁴³⁵

Noting that "CPSD is the Commission's staff responsible for safety enforcement," PG&E opposes this proposed remedy.⁴³⁶ 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."⁴³⁷ 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

⁴³⁴ TURN Opening Brief at 49; CCSF Opening Brief at 17.

⁴³⁵ TURN Opening Brief at 49.

⁴³⁶ PG&E Remedies Brief at 95-96, Appendix B at B-41.

⁴³⁷ PG&E Remedies Brief at 96.

consultants retained to assist CPSD in managing and overseeing PSEP activities.⁴³⁸ This would continue a practice that has been followed for two years whereby such consultants would be identified, hired, and directed by CPSD but funded by PG&E.⁴³⁹

CSB and DRA discuss their proposals for an independent monitor and the rationales therefore at length in their briefs.⁴⁴⁰ 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.⁴⁴¹ 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.⁴⁴² 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

⁴³⁸ *PG&E Remedies Brief* at 96.

⁴³⁹ *PG&E Remedies Brief* at 96.

⁴⁴⁰ *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.

⁴⁴¹ *DRA Opening Brief* at 37-38, citing the IRP Report at 8 and 18-22. The IRP Report is San Bruno Exh. CPSD-10.

⁴⁴² *DRA Opening Brief* at 38, citing the NTSB Report at xii. The NTSB Report is San Bruno Exh. CPSD-9.

management programs.⁴⁴³ CSB similarly notes the IRP finding that CPSD lacks adequate resources⁴⁴⁴ and the NTSB finding that an ineffective enforcement posture on the part of CPSD allowed PG&E's organizational failures to continue for decades.⁴⁴⁵

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,

⁴⁴³ *DRA Opening Brief* at 38, citing the NTSB Report at 126, Finding 25.

⁴⁴⁴ *CSB Opening Brief* at 44-45, citing the IRP Report at 5.

⁴⁴⁵ *CSB Opening Brief* at 45, citing the NTSB Report at 122.

or lack thereof, of such independent monitor programs or what the costs were or 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.⁴⁴⁶

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,⁴⁴⁷ the directives in this decision are remedies in

⁴⁴⁶ DRA Opening Brief at 39.

⁴⁴⁷ *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 \$15,000,000.⁴⁴⁸ 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).⁴⁴⁹ 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

⁴⁴⁸ *PSEP Decision*, Ordering Paragraph 9 at 128.

⁴⁴⁹ *CSB Opening Brief* at 50.

safety nor have an impact outside a limited area.”⁴⁵⁰ 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.⁴⁵¹

PG&E agrees with this proposed remedy except that it contends that annual auditing to ensure proper training is impractical and unnecessary.⁴⁵² PG&E also proposes clarifying wording changes so that the remedy reads as follows:

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

⁴⁵⁰ *PG&E Remedies Brief* at 97.

⁴⁵¹ *CSB Opening Brief* at 51.

⁴⁵² *PG&E Remedies Brief*, Appendix B at B-42.

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.⁴⁵³

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.⁴⁵⁴

CSB maintains that this remedy is necessary because "[l]ocal governments cannot trust PG&E to do what's necessary to protect its customers."⁴⁵⁵ 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 public welfare and effectively respond in an emergency."⁴⁵⁶ 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

⁴⁵³ PG&E Remedies Brief, Appendix B at B-42.

⁴⁵⁴ CSB Opening Brief at 52.

⁴⁵⁵ CSB Opening Brief at 52.

⁴⁵⁶ CSB Opening Brief at 53.

considered a breach of contract, and hold PG&E strictly liable for any pipe or facility failure regardless of cause.⁴⁵⁷

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."⁴⁵⁸ "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."⁴⁵⁹ 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.⁴⁶⁰

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 of an emergency and coordinate with them.⁴⁶¹ 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.⁴⁶²

⁴⁵⁷ CSB *Opening Brief* at 53-54.

⁴⁵⁸ PG&E *Remedies Brief* at 98.

⁴⁵⁹ PG&E *Remedies Brief* at 98.

⁴⁶⁰ PG&E *Remedies Brief* at 98-99.

⁴⁶¹ *San Bruno Violations Decision*, COL 44 (Violation 27).

⁴⁶² *San Bruno Violations Decision*, COL 44 (Violation 29).

Many of the reasons identified by CSB for adopting this recommendation have already been addressed in remedies proposed by CPSD.⁴⁶³ 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."⁴⁶⁴ 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.

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)⁴⁶⁵ in all HCAs and undertake an ASV pilot program within six months of the issuance of this decision.⁴⁶⁶ 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

⁴⁶³ See CPSD adopted Remedies 4.B.25, 4.B.26 and 4.B.30.

⁴⁶⁴ *CSB Reply Brief* at 29.

⁴⁶⁵ Parties have also used the term "automated safety valve" and "automatic shutoff valve" when referring to ASVs.

⁴⁶⁶ *CSB Opening Brief* at 54.

capability to be deployed by PG&E and operational in all HCAs in the utility's service territory on an expedited basis.⁴⁶⁷

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.11-02-019.⁴⁶⁸

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.⁴⁶⁹ 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 has occurred.⁴⁷⁰ 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.⁴⁷¹ 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.⁴⁷²

⁴⁶⁷ CSB *Opening Brief* at 54-55.

⁴⁶⁸ PG&E *Remedies Brief* at 99, Appendix B at B-44.

⁴⁶⁹ San Bruno Exh. CPSD-1 at 104.

⁴⁷⁰ San Bruno Exh. CPSD-1 at 104.

⁴⁷¹ San Bruno Exh. CPSD-1 at 104.

⁴⁷² San Bruno Exh. CPSD-1 at 105.

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 Omitted.] PG&E should monitor the development of this issue in the pipeline industry.⁴⁷³

CSB points to evidence that RCVs would not have been as effective as ASVs on September 9, 2010 in San Bruno.⁴⁷⁴ 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.

⁴⁷³ PSEP Decision at 76-77 (slip op.).

⁴⁷⁴ CSB Rebuttal Brief at 26-27, citing October 2, 2012 Jt. Hearing Tr. At 200-201.

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.).⁴⁷⁵

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.⁴⁷⁶ PG&E also argues, however, that it is not appropriate to modify the LTIP.⁴⁷⁷

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, 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

⁴⁷⁵ CSB Opening Brief at 55.

⁴⁷⁶ PG&E Remedies Brief, Appendix B at B-44.

⁴⁷⁷ PG&E Remedies Brief, Appendix B at B-44.

programs and public awareness programs” as recommended by the NTSB in its report on the San Bruno explosion.⁴⁷⁸

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 compensate TURN, CSB, CCSF, and DRA for their litigation costs, including expert witness fees.⁴⁷⁹ PG&E did not initially respond to this recommendation.

CSB subsequently expressed support for DRA’s proposal, arguing that the Commission has the legal authority to award compensation to CSB and other intervenors, and that the Commission should exercise that authority. [Response of the City of San Bruno to Request for Review of Commissioner Picker.] PG&E subsequently opposed DRA’s proposal, arguing that compensation should be (and legally must be) limited to the statutory intervenor compensation program. [PG&E’s Response to Appeals and Requests for Review of the Presiding Officers’ Decision on Fines and Remedies at 10-12.]

In adopted CPSD Remedy A.2, PG&E agreed that its 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.

⁴⁷⁸ 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.

⁴⁷⁹ DRA Opening Brief at 5.

Generally, compensation for participation in Commission proceedings is governed under the Commission's Intervenor Compensation Program.⁴⁸⁰ However, intervenors who are eligible to receive compensation under the program must be a "customer"⁴⁸¹ and the compensation award would be funded by utility ratepayers.⁴⁸² Accordingly, under the Intervenor Compensation Program, only organizations such as TURN would be eligible to seek intervenor compensation for their participation in these proceedings.

The POD however, departed from this standard, and found that PG&E shareholders should compensate TURN, CSB, CCSF, and DRA for their litigation expenses, including expert witness fees, for these three proceedings. (POD at 153-154.) The POD would make this award under Pub. Util. Code § 701, rather than the Intervenor Compensation Program, on the grounds that "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 do not believe it would be equitable for utility ratepayers to pay for intervenor's litigation costs, nor to limit compensation to a single intervenor." (Id. at 154.)

As a policy matter, we will not make an exception here to our standard practice of awarding intervenor compensation under our Intervenor Compensation Program. Accordingly, TURN may seek intervenor compensation pursuant to our standard processes. CSB, CCSF and DRA are not eligible for compensation for these proceedings. We acknowledge that TURN, CSB, CCSF and DRA did all actively participate in these proceeding, and did substantially

⁴⁸⁰ See, Pub. Util. Code § 1801 et seq.

⁴⁸¹ See, Pub. Util. Code § 1802(b) (defining "customer").

⁴⁸² Pub. Util. Code § 1807.

contribute to our decisions; we do not differ from the POD on this matter, but only on the policy question of whether their participation should be compensated via our equitable authority under Pub. Util. Code § 701.

CSB, CCSF, and DRA are all governmental entities, all of whom chose to participate in these proceedings. At the time they chose to participate in these proceedings, they did not have any reasonable expectation of compensation for their expenses. Under Pub. Util. Code § 1802(b)(2), state, federal and local governmental agencies are not eligible for intervenor compensation, and recent legislative attempts to expand intervenor compensation to government entities were unsuccessful. (See, Senate Bill 1364 (Huff, 2012) and Senate Bill 1165 (Wright, 2012).)

Cities, counties and other governmental agencies regularly participate in Commission proceedings with no expectation of compensation for their litigation expenses. In many cases they have made very significant contributions to important Commission decisions, and have received no compensation. (See, e.g., D. 91-05-028, denying the proposed merger of Southern California Edison and San Diego Gas & Electric; D.04-05-019, denying PG&E's proposed sale of its Kern Facility power plant; and D.13-07-018, undergrounding Southern California Edison's Tehachapi Renewable Transmission Project in the City of Chino Hills.) They participate in Commission proceedings either because they have a duty to do so (as in the case of DRA), or because they determine that it is in their or their constituents' interests that they do so, not because they need or expect compensation for doing so. In the case of DRA, we note that DRA has a statutory obligation to participate in Commission proceedings and receives state funding to do so. (Pub. Util. Code § 309.5.) TURN, on the other hand, does have a reasonable expectation of compensation for its litigation expenses in these proceedings, and the Commission has previously found that it would be a

hardship for TURN to participate in Commission proceedings absent intervenor compensation.

We agree with the POD that we have the legal authority under Pub. Util. Code § 701 to craft equitable remedies, including the equitable power to award attorneys' fees in quasi-judicial proceedings. (See, *Consumers Lobby Against Monopolies v. Public Utilities Commission* (1979) 25 Cal. 3d 891, 908 (CLAM).) But the fact that this Commission has the legal authority to craft such a remedy does not mean that the Commission should necessarily choose to do so.

DRA participated in these proceedings because doing so was consistent with its statutory responsibilities, and as an experienced participant in Commission proceedings, it presumably chose its level (and cost) of participation, with no reasonable expectation of financial compensation. Similarly, CSB and CCSF chose to actively participate in these proceedings in order to protect their interests or the interests of their constituents, again with no reasonable expectation of financial compensation. We appreciate their participation, but unlike the POD, we find that their participation does not provide an adequate basis for deviating from our standard and statutorily-authorized practices regarding intervenor compensation. Accordingly, while TURN may seek intervenor compensation for its participation in these proceedings, CSB, CCSF and DRA may not.

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 Rulemaking 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.⁴⁸³ 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

⁴⁸³ PG&E Remedies Brief, Appendix D.

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 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 CSB we believe they should be further investigated. However, we do not want to prolong these proceedings further to deal with these motions that are no longer relevant to the substance of this Decision. Accordingly, within 60 days of the date of this decision we will issue a new OII to look into the specific allegations raised by these two motions, and at that time, remove them from further consideration in these proceedings.

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 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.⁴⁸⁴ 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

⁴⁸⁴ CPSD *Motion to Strike* at 4.

finer 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 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,⁴⁸⁵ and we will also be considering in this proceeding whether further action should be taken concerning the alleged ex

⁴⁸⁵ 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).

parte communications violations. If further action is taken against PG&E for violations of the Commission's ex parte rules, it could require significant Commission resources and result in further sanctions imposed on PG&E. In light of those considerations, we do not believe that it is necessary in this instance to pursue sanctions for 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 Presiding Officers' Decision

CARE filed its appeal of the Presiding Officers' Decision (POD) on September 17, 2014.⁴⁸⁶ 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, 2014.⁴⁸⁷ 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, this decision 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."⁴⁸⁸ PG&E claims that such duplication is in

⁴⁸⁶ 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).)

⁴⁸⁷ 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.

⁴⁸⁸ *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, Recordkeeping POD, and Class Location POD, respectively; also referred to collectively as the Violations PODs) (See *PG&E Appeal* at 1, fn 2.)

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.’”⁴⁸⁹ 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.”⁴⁹⁰

However, the POD has not found 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.⁴⁹¹

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.⁴⁹² 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.”⁴⁹³ 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 violation. Violation of each regulation or statute is a separate and distinct offense. Applying PG&E’s argument would lead to absurd results as discussed

⁴⁸⁹ *PG&E Appeal* at 27, citing *De Anza Santa Cruz Mobile Estates Homeowners Ass’n v. De Anza Santa Cruz Mobile Estates*, 94 Cal. App 4th 890, 912 (2001).

⁴⁹⁰ *PG&E Appeal* at 27.

⁴⁹¹ POD at 21-24.

⁴⁹² *PG&E Appeal* at 28.

⁴⁹³ *PG&E Appeal* at 28, referring to the POD at 23.

in the three Decisions on violations.⁴⁹⁴ By considering PG&E's conduct a single course of conduct, we would be ignoring the decades of inattention and failure to comply with both state and federal regulations with regards to PG&E's duty to have accurate recordkeeping, accurate pipeline classifications and the public's expectation that PG&E is running its entire system at the minimum in accordance with all required safety practices. Indeed, this Commission expects more out of our utilities. We expect our utilities to be leaders in developing best practices in pipeline safety. 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.⁴⁹⁵ Here, PG&E is referring to San Bruno OII Violation 4, Recordkeeping Violation 21, and Class Location Violation 1.⁴⁹⁶ PG&E argues that "the fact that an assumed value – once

⁴⁹⁴ Those Decisions illustrated the problem with PG&E's argument by use of 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.

⁴⁹⁵ *PG&E Appeal* at 27.

⁴⁹⁶ *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.

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 premised on the same initial act.”⁴⁹⁷ 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 180.⁴⁹⁸ Similarly, the Recordkeeping violation concerns incorrect data in survey sheets, which was not a factor in the San Bruno or Class Location violations.⁴⁹⁹ 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.”⁵⁰⁰ 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.⁵⁰¹ 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 explanation

⁴⁹⁷ *PG&E Appeal* at 27.

⁴⁹⁸ POD at 21-22.

⁴⁹⁹ POD at 22.

⁵⁰⁰ *PG&E Appeal* at 28.

⁵⁰¹ *PG&E Appeal* at 28.

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.⁵⁰² 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.⁵⁰³ 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.⁵⁰⁴ 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 451.⁵⁰⁵

⁵⁰² POD at 22.

⁵⁰³ *PG&E Appeal* at 28.

⁵⁰⁴ *PG&E Appeal* at 28-29.

⁵⁰⁵ 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.⁵⁰⁶ 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,⁵⁰⁷ whereas San Bruno Violations 2-7 arise from a series of discrete safety-related failures that occurred in 1956.⁵⁰⁸ 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.

⁵⁰⁶ POD at 22.

⁵⁰⁷ San Bruno POD at 93.

⁵⁰⁸ San Bruno POD at 79-91.

PG&E next contends that Recordkeeping Violation 19 duplicates Recordkeeping Violation 33.⁵⁰⁹ 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."⁵¹⁰ 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."⁵¹¹ However, as we have discussed elsewhere in this POD, PG&E's "same course of conduct" consisted of 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.⁵¹²

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 included in the job files.⁵¹³ However, Recordkeeping Violation 1 relates to the lack of pipe inventory records, while Recordkeeping Violation 2 concerns the

⁵⁰⁹ *PG&E Appeal* at 29.

⁵¹⁰ Recordkeeping POD at 245-246.

⁵¹¹ *PG&E Appeal* at 29.

⁵¹² 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.)

⁵¹³ *PG&E Appeal* at 29.

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.⁵¹⁴ 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.⁵¹⁵ 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.⁵¹⁶ 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.⁵¹⁷ As we have discussed in this POD, as well as in 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.

⁵¹⁴ *PG&E Appeal* at 29.

⁵¹⁵ Class Location POD, Sections 7.2 and 12.1.

⁵¹⁶ *PG&E Appeal* at 30.

⁵¹⁷ See, 49 CFR § 192.13(c) & 49 CFR § 192.611.

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.”⁵¹⁸ 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.⁵¹⁹ 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.”⁵²⁰ 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.”⁵²¹ 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.

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

⁵¹⁸ PG&E Appeal at 30.

⁵¹⁹ PG&E Appeal at 30, fn 105.

⁵²⁰ 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.

⁵²¹ PG&E Appeal at 36, citing *Lambert v. California* (*Lambert*) 355 U.S. 225, 228 (1957).

offenses are strict liability offenses.⁵²² A strict liability offense is an unlawful act which does not require proof of mental state.⁵²³ 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.⁵²⁴ 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."⁵²⁵ 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.

11.1.3. Alleged New Charges

PG&E argues that "new charges [were] introduced after the accused [had] already made its defense."⁵²⁶ However, as explained in the San Bruno POD⁵²⁷

⁵²² San Bruno POD at 45.

⁵²³ Black's Law Dictionary, 6th Ed.

⁵²⁴ San Bruno POD at 46-48.

⁵²⁵ San Bruno POD at 45, citing D.12-12-030 at 91-92.

⁵²⁶ *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.

⁵²⁷ San Bruno POD, Section 4.5.

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 Report⁵²⁸ 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.⁵²⁹ However, the San Bruno POD explains that the OII itself is a source of notice of the violations.⁵³⁰ 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.⁵³¹ 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 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."⁵³²

PG&E claims that it must be provided with "clear and effective notice."⁵³³ However, it is well-established that due process requires "adequate notice" and an opportunity to be heard. PG&E ignores the controlling California Supreme

⁵²⁸ *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.

⁵²⁹ *PG&E Appeal* at 42-43.

⁵³⁰ San Bruno POD at 52-53.

⁵³¹ *PG&E Appeal* at 44.

⁵³² San Bruno POD at 50.

⁵³³ *PG&E Appeal* at 44.

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.”⁵³⁴ 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.⁵³⁵

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 management, written policies and procedures and emergency response, including hundreds, if not thousands, of regulatory provisions.”⁵³⁶ PG&E goes on to argue that “[a]lleging that an operator violated 49 C.F.R Part 192 (or 49 CFR Part 199, or § 451) is only slightly more meaningful than alleging that the operator ‘violated federal law.’”⁵³⁷ This distorts what was actually stated in the San Bruno POD. A fair reading of the San Bruno POD demonstrates that it was

⁵³⁴ *People v. Western Airlines, Inc.* (1954) 42 Cal. 2d 621, 632; 1954 Cal. LEXIS 193.

⁵³⁵ *Order Modifying Decision 11-12-053 and Denying Rehearing of the Decision as Modified* [D.12-08-046.] at 28 (slip op.).

⁵³⁶ *PG&E Appeal* at 43.

⁵³⁷ *PG&E Appeal* at 43-44.

not content to allow CPSD to merely allege that PG&E had violated unspecified provisions of Parts 192 and 199 of Title 49.⁵³⁸

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.⁵³⁹ 49 CFR § 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 CFR § 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.

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.⁵⁴⁰ 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 assertedly met all of the subsections of 49 CFR § 192.615. For example, 49 CFR § 192.615(a)(1) ("receiving, identifying, and classifying

⁵³⁸ San Bruno POD at 49-60.

⁵³⁹ *PG&E Appeal of San Bruno POD* at 25.

⁵⁴⁰ San Bruno Exhibit PG&E-1, Chapter 11.

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 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.⁵⁴¹

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

⁵⁴¹ Page 71 of PG&E’s Emergency Plans, San Bruno PG&E-1, Chapter 11.

violations.⁵⁴² Among other things, PG&E notes that § 451 is placed within the “Rates” article of the Public Utilities Code and argues that the language of the statute “requires a balancing of rates against the proper level of service.”⁵⁴³ 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 regulation that requires any safety measure of any kind.”⁵⁴⁴ Finally, PG&E asserts that Pub. Util. Code § 451 cannot be interpreted “to incorporate extrinsic safety standards,” particularly ASME B.31.8.⁵⁴⁵

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 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

⁵⁴² PG&E Appeal at 18.

⁵⁴³ PG&E Appeal at 19.

⁵⁴⁴ PG&E Appeal at 20.

⁵⁴⁵ PG&E Appeal at 24.

only to a prohibition of rate or service-oriented discrimination.”⁵⁴⁶ Rather, the Court found that Pub. Util. Code § 453(a) “prohibits a public utility from engaging in arbitrary employment discrimination.”⁵⁴⁷ As relevant here, Pub. Util. Code § 453 is also within the same “Rates” article of the Public Utilities Code as section 451. Thus, just as the California Supreme Court held that Pub. Util. Code § 453 is not merely a ratemaking provision, Pub. Util. Code § 451 cannot be limited to ratemaking either. Furthermore, 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. Finally, we note that the language of § 451 does not expressly grant any authority to the Commission. Rather, the express language of § 451 only imposes various requirements on the utility, e.g., that its rates be reasonable and that its facilities be safe. This fact undermines PG&E’s argument that § 451 is directed at “the factors *the Commission* must balance when determining the level of service to require in exchange for reasonable rates . . .”⁵⁴⁸

Other considerations further undermine PG&E’s attempt to frame Pub. Util. Code § 451 as a balancing of rates and service. 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

⁵⁴⁶ *Gay Law Students Ass’n v. Pac. Tel & Tel. Co.*, 24 Cal.3d at p. 478.

⁵⁴⁷ *Gay Law Students Ass’n v. Pac. Tel & Tel. Co.*, 24 Cal.3d at p. 475.

⁵⁴⁸ *PG&E Appeal* at 20 (emphasis added).

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 because no rate issue is directly presented.⁵⁴⁹ 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.”⁵⁵⁰ However, we did not rely on *Cingular* for the proposition that Pub. Util. Code § 451 serves as a basis for safety requirements.⁵⁵¹ 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 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 it provide ‘adequate, efficient, just and reasonable service’ to its customers.”⁵⁵² Similarly in this instance, PG&E can be charged with violating Pub Util. Code § 451 for not providing “instrumentalities, equipment, and

⁵⁴⁹ *Pacific Bell Wireless (Cingular) v. PUC*, *supra*, 140 Cal.App. 4th at p. 723.

⁵⁵⁰ *PG&E Appeal* at 22.

⁵⁵¹ 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.”

⁵⁵² *Cingular*, *supra*, 140 Cal.App. 4th at p. 740.

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.⁵⁵³ In *Cingular* the California Court of Appeals specifically addressed the argument that Section 451 is void for vagueness and rejected it.⁵⁵⁴ The Court examined Cingular’s alleged conduct and rhetorically asked: “how could [Cingular] have notice that this conduct would violate section 451?”⁵⁵⁵ 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 & 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.

⁵⁵³ See, e.g., *Cingular, supra*, 140 Cal.App. 4th at p. 751.

⁵⁵⁴ “We agree that section 451 is not void for vagueness on its face. (*Carey v. Pacific Gas and Electric Company* (1999) 85 Cal.P.U.C.2d 682, 689 [“it would be virtually impossible to draft Section 451 to specifically set forth every conceivable service, instrumentality and facility which might be defined as ‘reasonable’ and necessary to promote the public safety. That the terms are incapable of precise definition given the variety of circumstances likewise does not make Section 451 void for vagueness, either on its face or in application to the instant case.” (140 Cal.App. 4th at p.741, n. 10.)

⁵⁵⁵ *Id.*

We further disagree with PG&E's argument that interpreting Pub. Util. Code § 451 as imposing a stand-alone safety obligation would render superfluous entire provisions of the Public Utilities Code and Commission regulations that require any safety measure. 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..."⁵⁵⁶ 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.⁵⁵⁷ 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."⁵⁵⁸ 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 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

⁵⁵⁶ *PG&E Appeal* at 23.

⁵⁵⁷ *CPSD Response* at 21.

⁵⁵⁸ 8 RT (San Bruno OII) at 616; see also San Bruno POD at 200.

finest 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.”⁵⁵⁹ Finally, both Commissioners Picker and Sandoval seek review to determine whether the level of fines and refunds ordered in the POD is adequate.⁵⁶⁰ We have considered the arguments presented in the appeals and the requests for review of Commissioners Picker and Sandoval and conclude that there should be a noticeable increase in the level of penalties, while maintaining that level well within PG&E’s ability to pay.

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 PG&E’s financial resources. Under Pub. Util. Code §§ 2107 and 2108, if every day of violation were charged as a separate violation, the potential fine to be imposed would have been \$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. The *Overland Report* has provided guidance on the maximum level of penalties PG&E could sustain without negatively impacting its ability to raise equity for revenue-producing investments. The penalty we adopt in this decision, which is comprised of a fine paid to the General Fund, a one-time bill credit to ratepayers, shareholder funding of gas infrastructure

⁵⁵⁹ *Joint Parties’ Appeal of the Presiding Officers’ Decision on Fines and Remedies in the Pipeline Investigations* filed October 2, 2015, at 12.

⁵⁶⁰ *Request for Review [of Commissioner Picker]*, filed October 2, 2014, at 2; *Request for Review [of Commissioner Sandoval]*, filed October 2, 2014, at 2.

improvement and other remedies, will allow PG&E to provide safe and reliable gas and electric service, while still 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's argument that the Decision 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"⁵⁶¹ has been addressed in Section 6, above. Here, we merely add that, 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.

11.2.3. Allocation of Penalties

Some of the appeals seek to change how the penalties are allocated. The Joint Parties, for example, 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, which they estimate to be \$877 million, with the remainder of \$473 million still going to the General Fund. (Joint Parties Appeal at 1-2.) Joint Parties make several arguments, including one that disallowing all PSEP costs would: "... (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." (Id.)

PG&E also urges that a portion of the penalties that the POD would direct to the General Fund should be redirected toward future pipeline safety

⁵⁶¹ *PG&E Appeal* at 4.

enhancements.⁵⁶² PG&E presents various arguments why penalties should be directed towards pipeline safety, and summarizes them as follows:

The ultimate purpose of monetary penalties and other remedies in these proceedings, as the Commission explained in its Order Instituting Investigation in the San Bruno docket, is “to ensure that a catastrophe of this type does not occur again.” [citing San Bruno OII at 2-3.] The San Bruno accident has shed light on the need for not only PG&E but also other utilities across the state and country to make improvements to their gas pipeline infrastructure to reduce and minimize the risk of similar tragedies in the future. The best way to ensure that the remedies imposed in these proceedings achieve the Commission’s goal is to direct that the penalties be used to improve pipeline safety. The unprecedented size of the penalty, the overriding public importance of pipeline safety, and the fact that PG&E has finite resources to spend on pipeline improvement projects without rate recovery all weigh in favor of directing that any penalty be invested in the gas pipeline system. Requiring PG&E to spend its own money on pipeline safety without rate recovery would act as a forceful deterrent to PG&E and other California utilities and would send a strong message about the importance of gas pipeline safety.” (PG&E Appeal at 8-9.)

We generally agree with these policy arguments, and there are no legal constraints on implementing them. We accordingly grant in part the appeals of the Joint Parties and PG&E, and reallocate some of the moneys that the Fines and Remedies POD would have sent to the General Fund to instead be spent on improving the safety of PG&E’s gas pipeline system. This is a change from the Fines and Remedies POD, and we will implement it via the current GT&S proceeding, rather than the prior PSEP proceeding (which was the assumption of

⁵⁶² *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; see also, *Request for Review [of Commissioner Picker] at 2; Request for Review [of Commissioner Sandoval] at 2.*

PG&E and the Joint Parties). More details on this issue, and how our approach differs from the Fines and Remedies POD, are set forth in [Section 6] above.

PG&E further argues that the Fines and Remedies 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."⁵⁶³ PG&E misinterprets our discussion regarding the basis for this disallowance, which could more properly be called a bill credit. The \$400 million bill credit is an equitable remedy for PG&E's failure to comply with Commission orders and state and federal regulations and statutes regarding pipeline safety; it is not based on asserted cost savings on gas transmission safety-related work. 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 in a manner inconsistent with Commission orders and state and federal regulations and statutes regarding pipeline safety.⁵⁶⁴ 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.⁵⁶⁵ CPSD does not oppose this request.⁵⁶⁶ We do not agree that PG&E should be given the option to choose the method of payment of the \$400 million. A one-time bill credit would,

⁵⁶³ *PG&E Appeal* at 11-12.

⁵⁶⁴ San Bruno POD at 201-205; see also San Bruno Exh. CPSD-168 (Harpster).

⁵⁶⁵ *PG&E Appeal* at 15.

⁵⁶⁶ *CPSD Response* at 13.

however, 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 \$400 million bill credit..

11.2.4. Proportionality and Constitutionality of Penalties

PG&E's ppeal 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 and constitutionality of the penalties imposed in Sections 4.3 and 5.5.3 of this Decision. 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."⁵⁶⁷ 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."⁵⁶⁸

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 this Decision, 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 Decisions discuss in detail, even when PG&E was made aware that it was in violation of applicable laws and regulations, it took no action to correct these violations.

⁵⁶⁷ *PG&E Appeal* at 45.

⁵⁶⁸ *PG&E Appeal* at 45.

PG&E's actions immediately after the San Bruno explosion and fire do 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.⁵⁶⁹ 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 violations. 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 exceeding 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."⁵⁷⁰ 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.

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

⁵⁶⁹ *PG&E Appeal* at 45 & 46.

⁵⁷⁰ *Standards of Conduct Governing Relationships Between Energy Utilities and Their Affiliates*, 84 Cal. P.U.C.2d at 188.

Allentown, Pennsylvania.⁵⁷¹ It contends the Excessive Fines Clause “requires consideration of sanctions imposed in analogous cases.”⁵⁷²

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.⁵⁷³ 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 for 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 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. 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

⁵⁷¹ PG&E Appeal at 46.

⁵⁷² 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).

⁵⁷³ See 49 U.S.C. § 60122.

tenant of utility services for the purpose of evicting the tenant was excessive under the circumstances. Those circumstances included the fact that the tenant had moved his mobile home onto the park premises without permission and that the total amount of fines was so large that they might result in the tenant becoming the owner of the mobile home park.⁵⁷⁴ Furthermore, the Court was concerned that under the Civil Code section the trial court was *required* to impose an additional fine of \$100 for each day of violation.⁵⁷⁵ Here in contrast, we are imposing penalties that would be less than the statutory minimum *if* we were imposing the minimum fine amount for each day in violation.

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.”⁵⁷⁶ 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, there is no need to refer to other statutes, as Pub. Util. Code §§ 2107 and 2108 authorize the level of fines that the Commission may impose. Further the defendant in *Gore* was a national distributor of autos, thus making 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.⁵⁷⁷ In contrast, PG&E is aware of the potential penalties available under California law. Moreover, consistent with *Hale*, this Decision has

⁵⁷⁴ 22 Cal. 3d at 393, 405.

⁵⁷⁵ 22 Cal. 2d at 399.

⁵⁷⁶ *Gore, supra*, 517 U.S. at 583.

⁵⁷⁷ *Gore, supra*, 517 U.S. at 584.

considered evidence concerning PG&E's financial resources and has adopted a penalty that should have a deterrent effect without impacting PG&E's ability to raise the money it needs for further investment. Accordingly, the penalty adopted 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.⁵⁷⁸ 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.⁵⁷⁹ 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."⁵⁸⁰ 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."⁵⁸¹

We modify the time to pay the fine as requested by PG&E. PG&E explained that it is seeking an extension of time 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

⁵⁷⁸ *PG&E Appeal* at 14.

⁵⁷⁹ *PG&E Appeal* at 14.

⁵⁸⁰ *PG&E Appeal* at 15.

⁵⁸¹ *CPSD Response* at 13.

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).⁵⁸² 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.⁵⁸³ 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 "'mislead' ...necessarily implies a purposeful action."⁵⁸⁴ 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.

⁵⁸² 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.

⁵⁸³ *PG&E Appeal* at 26.

⁵⁸⁴ *PG&E Appeal* at 26.

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."

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."⁵⁸⁵

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,⁵⁸⁶ 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.

⁵⁸⁵ *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.

⁵⁸⁶ See, e.g., Pub. Util. Code §§ 313, 314, 581, 582, 584 and 702.

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.

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 Fines and Remedies 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.”⁵⁸⁷ Based on its interpretation, PG&E maintains that a violation may only be considered continuing “when the misconduct at issue was actually ongoing.”⁵⁸⁸ As support, PG&E cites to *People ex rel. Younger v. Superior Court* (1976) 16 Cal. 3d 30, which construed Water Code Section 13350(a)(3) by holding that a penalty for an unlawful oil deposit should be based on each day the process of deposit lasted,

⁵⁸⁷ PG&E Appeal at 31 (emphasis in original).

⁵⁸⁸ PG&E Appeal at 32.

and not each day the oil remained on the water.⁵⁸⁹ Thus, in its appeal, PG&E argues that the continued absence of a record is not a continuing violation until the record appears.⁵⁹⁰

The statute construed in *Younger* provided:

Any person who . . . (3) causes or permits any oil or any residuary product of petroleum to be deposited in or on any of the waters of the state, except in accordance with waste discharge requirements or other provisions of this division, may be liable civilly in a sum of not to exceed six thousand dollars (\$ 6,000) for each day in which such violation or deposit occurs.

The *Younger* Court examined the meaning of the word “deposit” and on that basis determined that the statutory clause under examination might refer to each day in which: (1) the act of depositing takes place or (2) the matter placed down [i.e. the oil] is found. The Court concluded that the statute imposed liability for each day that a person deposits oil in the waters of the state and not for each day during which the oil remains there. The Court reasoned that this construction of the statute was not only consistent with the ordinary meaning of the words used but also was in harmony with the overall statutory scheme, and that it additionally effectuated the legislative purpose of penalizing continuous acts of depositing oil. PG&E’s Appeal does not explain how any word in Section 2108⁵⁹¹ is like the word “deposit” that the *Younger* Court was construing. Nor does the Appeal explain how PG&E’s construction of 2108 is consistent with the ordinary

⁵⁸⁹ PG&E does not assert that Pub. Util. Code § 2108 is ambiguous.

⁵⁹⁰ *PG&E Appeal* at 32.

⁵⁹¹ Section 2108 provides: “Every violation of the provisions of this part or of any part of any order, decision, decree, rule, direction, demand, or requirement 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.”

meaning of the words used, or in harmony with the overall statutory scheme or legislative purpose. Finally, PG&E's Appeal is simply incorrect when it argues that the Younger Court construed the statute the way it did in order to avoid an "unduly punitive"⁵⁹² result. The *Younger* Court did not rely on any such reasoning.

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 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 ongoing obligations.⁵⁹³ 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:

⁵⁹² *PG&E Appeal* at 32.

⁵⁹³ 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.

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.⁵⁹⁴

Finally, as noted by Joint Parties: “Operating a gas pipeline system without legally required information is a continuing violation.”⁵⁹⁵ For these reasons, the POD and the Violations PODs correctly concluded that many of the violations were continuing in nature.

11.5. Spoliation

PG&E argues that the PODs misapply the spoliation doctrine.⁵⁹⁶ 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.’”⁵⁹⁷ 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.⁵⁹⁸ 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.”⁵⁹⁹

⁵⁹⁴ *Younger, supra*, 16 Cal. 3d at p. 44.

⁵⁹⁵ *Joint Parties Response* at 20.

⁵⁹⁶ *PG&E Appeal* at 33.

⁵⁹⁷ *PG&E Appeal* at 33.

⁵⁹⁸ *PG&E Appeal* at 33-34.

⁵⁹⁹ *PG&E Appeal* at 8.

PG&E raised these same arguments in its appeal of the Recordkeeping POD.⁶⁰⁰ 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.”⁶⁰¹ Thus, the real 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 only arises if there is “pending or reasonably 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 always 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

⁶⁰⁰ 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.

⁶⁰¹ *Reeves, supra*, 186 Cal.App.4th at p.681 (citing *Kronish v. U.S.* (2d Cir., 1998) 150 F.3d 112, 126).

held that destruction of evidence in violation of a regulation that requires its retention can give rise to an inference of spoliation.⁶⁰²

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.⁶⁰³ In other words, PG&E is always under a duty to 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 an adverse inference 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.”⁶⁰⁴ PG&E argues that even if an adverse inference were permissible, CPSD still bore the burden of “introducing evidence tending affirmatively to prove [its] case.”⁶⁰⁵

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, or failed to create the records at issue. 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

⁶⁰² 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).

⁶⁰³ See, e.g., 49 CFR § 192.709, which specifies the record to be maintained for transmission lines and the retention period.

⁶⁰⁴ *PG&E Appeal* at 35-36.

⁶⁰⁵ *PG&E Appeal* at 36 (citation omitted).

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.⁶⁰⁶ Thus, we properly exercised our discretion in determining that the application of the traditional remedy for spoliation would be appropriate here, 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.⁶⁰⁷ 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."⁶⁰⁸

⁶⁰⁶ See, *Cedars-Sinai Medical Center v. Superior Court* (1998) 18 Cal.4th 1, 11-13 (listing remedies for spoliation of evidence).

⁶⁰⁷ *CSB Appeal* at 17-21.

⁶⁰⁸ *Joint Parties' Response* at 16.

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.⁶⁰⁹ CSB notes that in making its proposal, CPSD had not discussed how the Aerial Patrol Program Manager's role would be organized.⁶¹⁰ 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 POD stated, all of CPSD's proposed remedies in the Class Location OII were contained in CPSD's Investigative Report for that proceeding.⁶¹¹ 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.⁶¹² 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.⁶¹³ 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

⁶⁰⁹ *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).

⁶¹⁰ *CSB Appeal* at 18, referring to the CPSD Opening Brief at 68.

⁶¹¹ POD at 131.

⁶¹² *CSB Appeal* at 19-20.

⁶¹³ *CSB Appeal* at 20-21.

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. 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.

Finally, we note that Pub. Util. Code § 854.5(b) discourages the Commission from establishing "nonstate entities" such as the Trust. Creating such entities with shareholder money is permitted, but is subject to a 30-day review by the Joint Legislative Budget Committee prior to creation.

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.⁶¹⁴ Joint Parties support CSB on this issue.⁶¹⁵ Most of the grounds

⁶¹⁴ CSB Appeal at 1-16.

⁶¹⁵ Joint Parties' Response at 13-16.

relied upon by CSB in its appeal represent policy disagreements that do not require further discussion here.⁶¹⁶

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.⁶¹⁷

The evidentiary basis for the POD's denial of an independent monitor can be distilled to the following points:

- 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.⁶¹⁸
- Independent monitors have been used elsewhere, but their effectiveness is not in evidence.⁶¹⁹

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

⁶¹⁶ 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.

⁶¹⁷ 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.

⁶¹⁸ POD at 142.

⁶¹⁹ POD at 142-43.

regulatory oversight such as this Commission exercises.’”⁶²⁰ 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.⁶²¹ Compliance with this decision means that PG&E, at shareholder expense, will have paid a fine of \$300 million to the State of California General Fund, issued a \$400 million bill credit to ratepayers, , established a deferred liability account (the Shareholder-Funded Gas Transmission Safety Account), track expenditures on designated safety-related projects or programs to be funded by shareholders, and fully and faithfully implement 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: the proper tracking of future expenditures on safety-related projects or programs, and the remedies listed in Appendix E. The tracking of future expenditures is already subject to independent audits, and the first adopted “other remedy” in Appendix E provides for verification audits and inspections by CPSD-selected independent experts to ensure compliance with the other remedies.⁶²² 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. Given the

⁶²⁰ CPSD Appeal at 7, quoting the POD at 143.

⁶²¹ CSB Appeal at 15.

⁶²² POD, Appendix E, page 1.

reporting and independent auditing requirements already in place for the tracking of future safety-related expenditures, CSB's proposal for an independent financial monitor is duplicative. CSB has not persuaded us that establishment of an independent financial monitor is necessary and appropriate to ensure compliance with the PSEP decision. This is reinforced by Pub. Util. Code § 854.5(b) which, as discussed above, discourages the Commission from establishing nonstate entities. Accordingly, establishment of an independent financial monitor is not required.

11.8. Reimbursement of Litigation Expenses

11.8.1. Legal Authority to Order Shareholders to Reimburse Intervenors' Litigation Expenses

PG&E, CPSD, CSB and Joint Parties responded to Commissioner Picker's request for review of the POD's proposal that would "... order a public utility's shareholders to compensate parties in a Commission proceeding outside of the Intervenor Compensation framework..."⁶²³ PG&E opposed the POD's proposal to broadly reimburse the intervenors' litigation expenses, and argued that: "The order is expressly prohibited by Pub. Util. Code § 1802(b)." ⁶²⁴

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

⁶²³ *Request for Review [of Commissioner Picker]* at 3.

⁶²⁴ *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.

do so is warranted in this instance.⁶²⁵ 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.”⁶²⁶

We have considered the legal arguments presented by parties and have concluded that the Commission does have the authority to order utility shareholders to reimburse intervenors for certain litigation expenses as an equitable remedy under Pub. Util. Code § 701. Just because we can do something, however, does not mean that we should do something.

As discussed in Section 7.2.9, the Commission has determined that policy and equity considerations do not support a departure from our standard approach to intervenor compensation. Accordingly, this decision differs from the POD and does not make a broad award of compensation to all intervenors under Pub. Util. Code § 701, but rather only provides for intervenor compensation via the intervenor compensation program, pursuant to Pub. Util. Code §§ 1801 et seq.

11.8.2. 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 defend these challenges has been enormous.⁶²⁷ Joint Parties argue that the legal fees and expenses associated with these gas pipeline safety cases should not be

⁶²⁵ *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.

⁶²⁶ *CPSD Response to Request for Review* at 10.

⁶²⁷ *Joint Parties’ Appeal* at 23-24.

paid by ratepayers and request that a new Ordering Paragraph 11 be added to the POD:⁶²⁸

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 General Rate Case (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.⁶²⁹ Accordingly, we decline to adopt Joint Parties' proposed Ordering Paragraph.

11.9. Revisions to Remedies

PG&E requests revisions to two remedies.⁶³⁰ 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."⁶³¹ PG&E explains that setting the specific requirement that the safety component of the STIP (Short Term Incentive

⁶²⁸ *Joint Parties' Appeal* at 25-26.

⁶²⁹ *PG&E Response* at 11-12.

⁶³⁰ *PG&E Appeal* at 16.

⁶³¹ *PG&E Appeal* at 16.

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.⁶³² 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.⁶³³ CPSD opposes this proposed revision.⁶³⁴ As CPSD notes, we have already considered and rejected the proposed changes to adopted remedy 14.⁶³⁵ 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.⁶³⁶ 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

⁶³² CPSD Response at 13.

⁶³³ PG&E Appeal at 16.

⁶³⁴ CPSD Response at 15.

⁶³⁵ See, Section 7.1.3.9.

⁶³⁶ Consumer Protection and Safety Division's Appeal of Presiding Officers' Decision (CPSD Appeal), filed October 2, 2014, at 2.

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 3,643.⁶³⁷ 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. Comments on the Proposed Decision Different

On March 13, 2015, a proposed Decision Different of President Picker was sent to the parties to these proceedings, who were given an opportunity to file comments, although no comment period was legally required. Comments were due on April 1, 2015, and were limited to differences between the Penalties POD and the proposed Decision Different. Parties were informed that to the extent any comments exceeded that scope, they would not be considered. Timely comments were filed by CSB, CARE, CPSD, DRA, TURN, and PG&E. Changes were made to the decision as appropriate.

In its comments, PG&E requested several changes to the Decision Different. PG&E commented on the \$850 million disallowance (the Shareholder-Funded Account).

Two of these changes would have the effect of shifting more of the disallowance away from capital investments on which the utility will never receive a rate of return or depreciation. For the reasons explained above, we believe it appropriate to devote most of the Shareholder-Funded Account to

⁶³⁷ CPSD Appeal at 3.

capital expenditures and to ensure that PG&E does not earn a rate of return or depreciation on those investments. Accordingly, we will not adopt either (i) PG&E's request to base the split of the \$850 million between expenses and capital expenditures on the ratio of those two items to be adopted in the GT&S proceeding (which covers items that are not especially safety-related); and (ii) PG&E's request to simply offset the \$850 million disallowance against its authorized GT&S revenues.

PG&E requests that the reasonableness of its expenditures out of the Shareholder-Funded Account be evaluated through audits, rather than cost caps. We reject this suggestion. Audits will be time-consuming and costly and could easily lead to further litigation at the Commission. We prefer a simpler approach that can be handled through the advice letter process, rather than a formal proceeding.

PG&E also requests that it be allowed to track expenditures out of the Shareholder-Funded Account on a program-by-program, rather than project-by-project, basis. It may well be more appropriate that some (or all) of the safety-related expenses and capital expenditures designated in the GT&S (or subsequent) proceeding will be better tracked on a program, rather than project, basis. Accordingly, we have revised the text above to allow the GT&S (or other) proceeding to determine how each category of expenditures should be tracked. That is appropriate because the details of the specific programs or projects to be funded out of the Shareholder Account are on the record in those proceedings, not these proceedings.

In its comments, TURN requests that PG&E's shareholders bear the cost of property taxes on the capital investments paid for out of the \$850 million Shareholder-Funded Account. That was not our intention, and we decline to make that change. Shareholders earn no profit on property taxes, the cost of

which is simply passed through to ratepayers. As property taxes are an ongoing cost of operating plant that is in service, the property taxes on this shareholder-funded plant should be paid by ratepayers, unless otherwise disallowed. For purposes of this part of this decision property taxes are like the ongoing operation and maintenance costs for which ratepayers will also be responsible.

DRA, TURN and PG&E all filed comments suggesting technical changes to the Decision's implementation of the \$400 million bill credit. DRA proposes that the bill credit be based on the throughput forecast that will be adopted in the 2015 Gas Transmission and Storage (GT&S) Application (A.13-12-012), and that the credit be applied to the January 2016 bill (and succeeding months) to reduce costs for core customers during the typically higher cost winter heating month(s). DRA also suggests that a different methodology may be appropriate for Non-Core customers,

TURN proposes that the bill credit be based on two months' actual consumption (November and December) to generate an equitable and adequate refund, and that any over- or under-collection of the bill credit be apportioned using the same two months of actual consumption. Additionally, TURN suggests that the Commission add language directing master-metered customers to pass the bill credit through to their submetered tenants, as required by Section 739.5(b) of the Public Utilities Code.

PG&E proposes that the bill credit be based on the most recent recorded usage data, and has particular suggestions for the proper accounting of any shortfall or excess refunds. PG&E also suggests that it submit a plan that takes into consideration the differences in customer usage and rates in its Advice Letter filing.

The Commission agrees that some technical changes and clarifications to the implementation of the \$400 million bill credit should be made, so that the

Commission's intention as to this equitable remedy is made clear. First, we agree with both TURN and PG&E that the bill credit should be based on the most recent actual consumption. Therefore, we clarify that the bill credit will be based on a cents-per-therm methodology, based on the total actual billed gas throughput during the November and December 2015 billing cycles. Each customer shall receive a bill credit based on their billed amounts during their November and December 2015 billing cycles on their February 2016 bill.⁶³⁸ We are directing PG&E to provide this bill credit to all of its gas customers using the same methodology. We do so because we prefer a simple and clear methodology that can be implemented as soon as possible. Accordingly, we are requiring the use of a Tier 2 Advice Letter process, as we envision that the implementation of the bill credit should be ministerial. Finally, we will adopt TURN's suggestion in part, and will direct residential master-metered customers to pass the bill credit through to their submetered tenants.

CSB devotes most of its comments on the Decision Different to arguments that the Decision Different should award CSB and other intervenors their litigation expenses, including attorney's fees, expert witness fees and costs.⁶³⁹ On this issue, TURN's comments support CSB, while the comments of ORA, CPSD and PG&E are silent.

⁶³⁸ If PG&E finds that it is impossible to provide the bill credits on its February 2016 bills, we direct PG&E to propose the earliest possible dates for providing the bill credits in the Advice Letter required by Ordering Paragraph 5.

⁶³⁹ *City of San Bruno's Comments on Decision Different of President Picker 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* (CSB Comments) at 2. The rest of CSB's comments address issues on which there is no substantive difference between the Penalties POD and the Decision Different.

CSB characterizes the Penalties POD's fee award as being based on evidence, arguing that there is "undisputed evidence in support of an award,"⁶⁴⁰ and that this is a "factually sensitive issue."⁶⁴¹ CSB argues that, by comparison, there is "no evidence" to support the Decision Different on this issue.⁶⁴² In fact, the Penalties POD's resolution of this issue is not based on specific evidence; just like the Decision Different, the Penalties POD made its determination based on policy and equity concerns, not on specific factual evidence.⁶⁴³ The level of evidentiary support on this issue is no different in the Decision Different than in the Penalties POD.

CSB argues that the Decision Different, by awarding compensation under the intervenor compensation statutes, is acting unfairly because PG&E ratepayers, rather than PG&E shareholders, would be bearing the burden of paying TURN's fees.⁶⁴⁴ We note that our approach here is consistent with the provisions of California's intervenor compensation statute,⁶⁴⁵ which generally governs intervenor compensation in Commission proceedings, and which the Commission believes can be fairly applied in this proceeding.

CSB argues that it was "forced" to participate in these proceedings, that its participation was "non-negotiable" and that it was "required" to expend significant resources and time in these proceedings.⁶⁴⁶ TURN makes a similar

⁶⁴⁰ *Id.* at 4.

⁶⁴¹ *Id.* at 9.

⁶⁴² *Id.* at 4 and 6.

⁶⁴³ Penalties POD at 153-154.

⁶⁴⁴ *CSB Comments* at 4 and 5.

⁶⁴⁵ Pub. Util. Code § 1801 et seq.

⁶⁴⁶ *CSB Comments* at 5-6.

argument in support of CSB on this issue.⁶⁴⁷ CSB was not a respondent or a defendant in these proceedings; only CPSD and PG&E were required to participate. CSB chose to participate because they determined that doing so was important for the City and its residents. In any event, it is unclear why the unusual importance of this proceeding to CSB supports a deviation from the intervenor compensation method spelled out in California law.

CSB claims that the Commission committed legal error in citing to three previous Commission decisions.⁶⁴⁸ According to CSB, the Commission relied upon those three decisions for its determination that CSB should not be compensated here.⁶⁴⁹ CSB mischaracterizes the Decision Different's use of those cases. The Decision Different does not rely upon those cases as precedent or legal authority, but only provides them as illustrative examples, showing that cities and counties regularly appear before the Commission (and make substantial contributions to Commission decisions) with no expectation of compensation. Providing examples to illustrate a point is not legal error.

No changes are made on the issue litigation compensation in response to comments. Other minor changes have been made in response to comments on other issues.

13. Assignment of Proceeding

Michael Picker is the assigned Commissioner⁶⁵⁰. Mark S. Wetzell is the assigned Administrative Law Judge in I.12-01-007 and Amy C. Yip-Kikugawa is

⁶⁴⁷ *TURN Comments* at 10-11.

⁶⁴⁸ *CSB Comments* at 7.

⁶⁴⁹ *Id.*

⁶⁵⁰ 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 assigned Commissioner in I.11-02-016 and I.11-11-009 until the proceeding was reassigned to Commissioner Picker on October 16, 2014.

the assigned Administrative Law Judge in I.11-02-016 and I.11-11-009. The Presiding Officers in these proceedings are Administrative Law Judges 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.

4. The *San Bruno Violations Decision* found PG&E had committed 32 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.

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. Ordering Paragraph 3 of the *PSEP Decision* provides that all increases in revenue requirement ordered in that decision are subject to refund pending decisions in these Pipeline OIIs.

18. 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.

19. The penalties imposed on El Paso Natural Gas Company for the Carlsbad explosion were the result of a consent decree.

20. UGI Corporation settled the enforcement actions brought upon it for the Allentown explosion.

21. Decision 98-12-075 identified five factors to be considered in determining the level of penalties to be imposed.

22. The San Bruno explosion and fire resulted in physical harm.

23. A violation of Rule 1.1 of the Commission's Rules of Practice and Procedure is a severe offense.

24. PG&E management had been notified at various times that its pipeline records were not complete and of the impact of not having those records.

25. The *Recordkeeping Violations Decision* 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 with respect to another data request.

26. PG&E's market value as of January 10, 2012 was \$16.439 billion, and an aggregate value of \$29.117 billion.

27. 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.

28. Between February 2012 and February 2013, various equity analysts projected fines, disallowances and other remedies ranging from \$500 million to \$3.65 billion (pre-tax).

29. PG&E has the ability to raise equity to cover penalties and remedies in the amount of \$2.45 billion, without harming ratepayers or its ability to raise the equity needed for revenue-producing investments required to provide adequate and safe service.

30. Investors should be able to distinguish between a penalty and unrecoverable ongoing operating costs.

31. The California regulatory system in place for PG&E and other large energy utilities has numerous mechanisms designed to ensure that these utilities

are able to recover their reasonable costs on a going forward basis, despite large swings in variables such as energy costs and energy usage.

32. 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.

33. The penalties under consideration are for violations found in three separate proceedings.

34. None of the Commission's prior enforcement cases or the other gas pipeline accidents identified in the *Wells Fargo Report* had an actual or potential impact on such a large area or number of people.

35. The \$38,000,000 penalty adopted in the *Rancho Cordova Decision* was the result of a modified settlement agreement.

36. 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.

37. If a fine were to be imposed based on every day in violation, the range of fines that could be imposed pursuant to Pub. Util. Code § 2107 would be from \$9.2 billion to \$254.3 billion.

38. PG&E does not cite to any evidence that it has failed to earn nearly its authorized rate of return for any past period.

39. There is no credible record evidence whether or not PG&E will earn approximately its authorized rate of return in the future.

40. The allegedly unrecoverable gas transmission costs identified by PG&E are largely outside the record of this proceeding, speculative, or lacking in foundation, and PG&E's argument that the Commission should take those costs into consideration is not credible.

41. 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.

42. 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.

43. The *PSEP Decision* (D.12-12-030) disallowed rate recovery of approximately \$635,000,000.

44. In the *PSEP Decision* (D.12-12-030), the Commission authorized total capital expenditures for 2013 and 2014 in the amount of \$696.2 million (Table E-3), and for the same period authorized expenses in the amount of \$162.5 million (Table E-2), for a combined total of \$858.7 million. Expenses were about 19% of the total.

45. Additional PG&E gas infrastructure improvements will need to be made in the future, which will require additional capital expenditures and expenses.

46. CSB, CCSF and DRA are governmental entities that are not eligible for statutory intervenor compensation under Pub. Util. Code § 1801 et. seq. for their participation in Commission proceedings..

47. CSB, CCSF and DRA chose to actively participate in these proceedings.

48. CSB, CCSF and DRA have not shown that they had a reasonable expectation of compensation for their 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. Pub. Util. Code § 451 imposes various requirements on the utility, e.g., that its rates be reasonable and that its facilities be safe, but does not expressly grant any authority to the Commission.

5. The Commission may impose fines for violation of laws and regulations pursuant to Pub. Util. Code §§ 2107 and 2108.

6. The California Constitution, along with Pub. Util. Code § 701, confers broad authority on the Commission to regulate public utilities.

7. Fines imposed pursuant to Pub. Util. Code § 2107 are paid to the State's General Fund.

8. The purpose of fines is to deter further violations by the perpetrator and others.

9. The Commission has the authority to fashion equitable remedies pursuant to the California Constitution and Pub. Util. Code §§ 701, 728 and 761.

10. The Commission may order refunds or bill credits as an equitable remedy pursuant to the California Constitution and Pub. Util. Code §§ 701 and 728.

11. 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.

12. The California legislature has given the Commission broad discretion to determine the appropriate level of fines for violations, rather than establish a maximum fine for a continuing violation or a related series of violations.

13. Based on the violations presented in the Pipeline OIIs, the penalties imposed by this decision are not excessive and are necessary to deter future violations.

14. Violations that result in physical or economic harm and the failure to comply with statutes or Commission directions are considered severe violations.

15. 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.

16. Misleading the Commission and impeding the staff's investigation in the Recordkeeping OII are severe offenses.

17. PG&E's offenses should be considered severe.

18. PG&E has the responsibility to ensure that its gas transmission pipeline systems are operated safely, not CPSD.

19. 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.

20. All utilities under the Commission's jurisdiction are expected to comply with Commission directives and orders.

21. PG&E has not acted in good faith to discover, disclose and remedy the violations.

22. The purpose of a penalty is to deter future violations by the company and others.

23. 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.

24. 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*.

25. PG&E's argument that, in determining an appropriate penalty, the Commission should take into account allegedly unrecoverable gas safety related costs is not credible, and should be given no weight.

26. PG&E should be ordered to pay a fine of \$300 million pursuant to Pub. Util. Code §§ 2107 and 2108.

27. PG&E should be ordered to issue one-time bill credits totaling \$400 million to its natural gas transmission customers.

28. The additional \$400 million bill credit 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.

29. PG&E should file a Tier 2 Advice Letter within 45 days after the effective date of this decision to implement the bill credit mechanism adopted in this decision. This Advice Letter should also provide proposed bill language that will be used to explain the bill credit to customers.

30. This Advice Letter should provide a mechanism to inform master meter customers at mobile home parks and other residential complexes of their obligation to pass the bill credit on to their submetered customers in the manner required by Public Utilities Code Section 739.5(b).

31. Ratepayer costs of PG&E's future gas infrastructure improvements should be minimized.

32. As an equitable remedy, PG&E shareholders should pay for \$850 million of the costs of PG&E's future gas transmission pipeline improvements, with expenditures to be considered and approved through the

GT&S proceeding (A.13-12-012), or subsequent proceeding, and tracked through the accounts described herein.

33. PG&E should be ordered to set up a deferred liability account, to be called the Shareholder-Funded Gas Transmission Safety Account (Shareholder-Funded Account) with two sub-accounts.

34. PG&E's books should show this account as a liability obligating PG&E to implement designated safety-related projects or programs to be funded by shareholders over time.

35. PG&E should apply that same proportion of expenses to capital expenditures that were authorized by the Commission in the PSEP decision (D.12-12-030) for 2013 and 2014. Accordingly, of the \$850 million, up to 19% (\$161.5 million) may be devoted to items that are expensed for projects or programs authorized in its currently pending GT&S proceeding (A.13-12-012). The remainder (at least 81%, or \$688.5 million) should be devoted to capital expenditures.

36. One sub-account, to be called the Shareholder-Funded Gas Transmission Safety Expense Sub-Account in a total amount not to exceed \$161.5 million, should be for tracking the costs of designated projects or programs authorized in the GT&S proceeding that are to be expensed.

37. The other sub-account, to be called the Shareholder-Funded Gas Transmission Safety Capital Sub-Account, in an amount of at least \$688.5 million, should be for tracking capital expenditures authorized in the GT&S (or subsequent proceeding) as plant is placed into service. The total of the two subaccounts should equal \$850 million.

38. Once a decision has been issued in PG&E's pending GT&S proceeding determining which expensed costs qualify as "safety-related" (as defined in this Decision), and therefore could be recorded in the Shareholder Funded Account,

PG&E should cap the amount included in the Expense Sub-Account at the lesser of \$161.5 million or the amount of such “safety-related” costs designated in that decision. If that amount is less than \$161.5 million, the amount to be included in the Capital Sub-Account should be adjusted above \$688.5 million, so that the two sub-accounts total \$850 million. Similarly, if PG&E does not spend the full amount originally authorized to be recorded in the Expense Sub-Account, then the amount not utilized should be transferred to the Capital Sub-Account, so that the total of the two sub-accounts remains \$850 million.

39. In the Expense Sub-Account, PG&E should record no more than the amount authorized for any project or program (including any contingency, if authorized). If PG&E is able to complete any particular project or program for less than the authorized amount, only the amount actually expended should be recorded in the Expense Sub-Account.

40. In the Capital Sub-Account, PG&E should record only those capital expenditures that the GT&S (or subsequent) proceeding determines to be “safety-related” (as defined in this Decision). PG&E should record these capital expenditures as a debit entry into the Capital Sub-Account when PG&E places the plant or facilities in service. As with expensed amounts, PG&E should record the lesser of the authorized expenditure (plus contingency, if any) or the actual expenditure as a debit entry to the Capital Sub-Account. PG&E should not include amounts recorded in the Capital Sub-Account in its rate base, such that ratepayers will not be responsible for any depreciation, or rate of return on these capital amounts.

41. Ratepayers should be responsible for the ongoing operation and maintenance costs of the facilities funded from the Capital Sub-Account, as well as property taxes on these capital facilities, unless those costs are otherwise required to be funded by shareholders, or disallowed.

42. If this Commission disallows, or limits, any proposed safety-related expenditure by PG&E, in the current GT&S or subsequent proceeding, for any reason other than that the amount is to be paid out of the Shareholder-Funded Account, such disallowed amounts should not be booked into the Shareholder-Funded Account, and should not be paid for out of the \$850 million.

43. If the GT&S proceeding designates for funding via the Shareholder-Funded Account projects or programs whose total costs are projected to equal or exceed \$850 million, but thereafter PG&E determines that the total of its actual costs for these projects and programs will not exhaust the \$850 million, PG&E should file an information-only filing, informing the Commission of that conclusion and showing the applicable amounts actually spent (or expected to be spent).

44. If the current GT&S proceeding does not designate enough capital projects or programs to exhaust the Shareholder-Funded Account of \$850 million, additional capital projects or programs should be authorized in a subsequent proceeding(s) such that the capital investments and expenses total \$850 million before the Shareholder-Funded Account is closed.

45. PG&E should submit an annual accounting of the Shareholder-Funded account, as an information-only filing, no later than May 1 of the following year.

46. PG&E's shareholders should pay the costs of a Commission-selected independent auditor to audit PG&E's accounting of the Shareholder-Funded Account. The independent auditor will prepare a report on each of PG&E's annual accountings.

47. When both sub-accounts have been fully utilized, PG&E should submit a final accounting to the Commission, as an information-only filing. This final accounting should be filed within 180 days of the date when the Shareholder-Funded Account was exhausted.

48. The independent auditor should prepare a final audit report. Thereafter, PG&E should file an advice letter to close out the Shareholder-Funded Account..

49. There should be no adjustment to the bill credit or other remedies adopted in this decision to account for any tax benefits PG&E should receive.

50. The remedies contained in Appendix E of this decision should be adopted.

51. The remedies adopted in this decision should not limit the Commission's ability to require additional changes to PG&E's business practices or governance in a future proceeding.

52. 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.

53. 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.

54. 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.

55. 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.

56. 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.

57. 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.

58. 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.

59. PG&E should formalize its emergency response and disclosure obligations to cities, counties and fire districts.

60. 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.

61. Responsibility for enforcing the mutual assistance agreements lies with the Commission, not the individual cities, counties or fire districts.

62. CSB's proposed remedy for automated shutoff valves with automatic capability should be rejected.

63. CSB's proposal that PG&E revise its Long-Term Incentive Plan and its Short-Term Incentive Plan should be rejected.

64. 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.

65. The Commission has the authority under Pub. Util. Code § 701 to craft equitable remedies, including the awarding of attorneys' fees in quasi-judicial proceedings, but the Commission is not required to do so.

66. The Commission should not deviate from the statutory intervenor compensation program in these proceedings.

67. CSB, CCSF and DRA should not be awarded compensation for their litigation costs in these proceedings.

68. TURN may seek intervenor compensation for its litigation costs in these proceedings.

69. To make the basis for portions of our Decision more transparent, pages 1421-1429 of the Joint Transcript should be unsealed, pursuant to PU Code Section 583; but the confidential Exhibits discussed in that portion of the transcript shall remain under seal.

O R D E R

IT IS ORDERED that:

1. Pacific Gas and Electric Company (PG&E) must pay a fine of \$300 million 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-XX-XXX."

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 does not pay in full the \$300 million 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 customers in accordance with the following:

- a. PG&E shall calculate the gas customer bill credit using a cents per therm methodology based on the total actual billed gas throughput during the November and December 2015 billing cycles.
- b. Each customer shall receive a bill credit based on their billed amounts during their November and December billing cycles on their February 2016 PG&E bill. If PG&E finds that it is impossible to provide the bill credits on its February 2016 bills, PG&E shall propose the earliest possible dates for providing the bill credits in the Advice Letter required by Ordering Paragraph 5.
- c. PG&E shall submit a report to the Commission 45 days after the \$400 million bill credit has been distributed describing its calculation of the bill credit on a customer class basis, the number of customers it was distributed to on a customer class basis, and the total amount of bill credits distributed.
- d. If the total amount of bill credits distributed is more or less than \$400 million PG&E shall, at the same time as it submits its report, submit a Tier 2 advice letter proposing a method of truing up the \$400 million using existing balancing accounts.

5. Pacific Gas and Electric Company shall submit a Tier 2 Advice Letter to implement the bill credit mechanism adopted in Ordering Paragraph 4, including proposed customer bill language, within 45 days of the effective date of this decision. This Advice Letter shall also provide a mechanism to inform master meter customers at mobile home parks and other residential complexes of their obligation to pass the bill credit on to their submetered customers in the manner required by Public Utilities Code Section 739.5(b).

6. Within 60 days of today's decision, PG&E shall submit a Tier 3 Advice Letter establishing the Shareholder-Funded Gas Transmission Safety Account and its two sub-accounts, consistent with the requirements detailed in Section 6.1

above, with service on all parties to these proceedings, all parties to A.13-12-012, and any other persons as directed by Energy Division. In addition to complying with all of the requirements of Section 6.1, the Advice Letter shall specify any additional accounting measures that will be necessary to carry out the intent of that section.

7. In A.13-12-012, the Commission will determine which expenses and capital expenditures authorized in that proceeding are for “safety-related” gas transmission projects or programs (as that term is defined in Section 6.1 above) that should be funded via the Shareholder-Funded Gas Transmission Safety Account, subject to the expense and capital expenditure requirements contained in Section 6.1 above.

8. If the amounts of safety-related gas transmission projects or programs identified in A.13-12-012 do not exceed \$850 million, additional capital expenditures and expenses will be identified in a subsequent GT&S proceeding to bring the total expenditures from the Shareholder-Funded Gas Transmission Safety Account to \$850 million.

9. If the GT&S proceeding designates for funding via the Shareholder-Funded Account projects or programs whose total costs are projected to equal or exceed \$850 million, but thereafter PG&E determines that the total of its actual costs for these projects and programs will not exhaust the \$850 million, PG&E shall file an information-only filing, informing the Commission of that conclusion and showing the applicable amounts actually spent (or expected to be spent), and serve it on all parties to these proceedings, all parties to A.13-12-012, and any other persons as directed by Energy Division.

10. After the end of each calendar year, and no later than May 1 of the following year, PG&E shall submit a detailed accounting to the Commission of all entries to the Shareholder-Funded Gas Transmission Safety Account, as an

information-only filing, pursuant to Section 6 of General Order 96-B. This information-only filing shall also be served on all parties to these proceedings, all parties to A.13-12-012, and any other persons as directed by the Commission's Energy Division, and shall contain the details specified in Section 6.1 above.

11. PG&E shall reimburse the Commission for the cost of an independent auditor, to be selected by Commission Staff, to conduct audits of the Shareholder-Funded Gas Transmission Safety Account. This reimbursement shall be funded by shareholders, not ratepayers.

12. The independent auditor referred to in the preceding Ordering Paragraph shall review each of PG&E's detailed annual accountings and prepare a report. Each auditor's report shall be served on all parties who PG&E served with its annual accounting.

13. When both sub-accounts in the Shareholder-Funded Gas Transmission Safety Account have been fully utilized (i.e. PG&E's spending obligations have been exhausted), PG&E shall submit a final accounting to the Commission, as an information-only filing, to be served on all parties to these proceedings, all parties to A.13-12-012, and any other persons as directed by the Commission's Energy Division. This final accounting shall be filed within 180 days of the date when the Shareholder-Funded Account was exhausted. This final accounting may be combined with PG&E's annual information-only filing if this timing requirement can be met.

14. The independent auditor shall prepare an audit of PG&E's final accounting and serve its final audit report on all parties PG&E served with its final accounting. Thereafter, PG&E shall file an advice letter to close out the Shareholder-Funded Account, with service on all parties served with its final accounting.

15. Pacific Gas and Electric Company shall implement the remedies adopted in Appendix E of this decision.

16. 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.

17. The Compliance Filing ordered in Ordering Paragraph 15 shall also include a timeframe for completion of each of the remedies adopted in Appendix E of this decision.

18. Within 60 days of the effective date of this decision, CPSD shall present a proposal to the Commissioners for the MAOP Validation and Project Mariner audits, and the timing for such audits to occur.

19. Within 60 days of the effective date of this decision, CPSD shall present a proposal to the Commissioners to perform 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.

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

21. Pages 1421-1429 of the Joint Transcript shall be unsealed, but the Confidential Exhibits discussed in that portion of the transcript shall remain under seal.

This order is effective today.

Dated _____, at San Francisco, California.

APPENDIX A

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(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 No.	Violation (abbreviated description; see applicable conclusion of law for full statement of violation)	Date (one-time violations)	Date Range		Offenses (Pub. Util Code § 2108)		
				(Continuing Violations)				
				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	19,611
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	19,611
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

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	-	-	12/17/04-9/9/10	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 CFR 199.225(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 Offenses		27,036	32,219	59,255

(End of Appendix B)

APPENDIX C

Table of Violations for I.11-02-016 (Recordkeeping OII)

Appendix C
Table of Violations for I.11-02-016 (Recordkeeping OII)

	Violation (abbreviated description; see applicable conclusion of law for full statement of violation)	Duration	Pre-1/01/1994 Days in Violation	Post-1/01/1994 Days in Violation	Total Days in Violation
1	No records for salvaged pipe installed into Segment 180 - Violation of Public Utilities Code Section 451 (Felts Violation 1)	1956- September 9, 2010	13,698	6,095	19,793
2	Failure to create/retain construction records for 1956 project GM 136471 - Violation of Public Utilities Code Section 451 (Felts Violation 2)	1956- September 9, 2010	13,698	6,095	19,793
3	Failure to create/retain post- installation pressure test records for Segment 180 - Violation of Public Utilities Code Section 451 and ASME B.31.8 Section 841 (Felts Violation 3)	1956- September 9, 2010	13,698	6,095	19,793
4	Increase MAOP of Line 132 without conducting hydrostatic test - Violation of Public Utilities Code Section 451 (Felts Violation 4)	December 10, 2003 - September 9, 2010		2,465	2,465
5	Failure to Follow Procedures to Create Clearance Record - Violation of Public Utilities Code Section 451 (Felts Violation 5)	August 27, 2010- September 9, 2010		13	13
6	Out of date drawings and computer diagrams of Milpitas Terminal- Violation of Public Utilities Code Section 451 (Felts Violation 7)	December 2, 2009 - July 2011		590	590
7	Failure to have accurate SCADA diagrams- Violation of Public Utilities Code Section 451 (Felts Violations 7 and 9)	December 2, 2009 - October 27, 2010		329	329
8	No Back-up Software at the Milpitas Terminal - Violation of Public Utilities Code Section 451 (Felts Violations 8)	September 9, 2010		1	1

Appendix C
Table of Violations for I.11-02-016 (Recordkeeping OII)

9	Operated Line 132 in excess of 390 MAOP - Violation of Public Utilities Code Section 451 (Felts Violation 11)	December 11, 2003- September 9, 2010		2,464	2,464
10	Operated Line 132 in excess of 390 MAOP - Violation of Public Utilities Code Section 451 (Felts Violation 11)	December 9, 2008- September 9, 2010		639	639
11	Operated Line 132 in excess of 390 MAOP - Violation of Public Utilities Code Section 451 (Felts Violation 11)	September 9, 2010		1	1
12	PG&E's Contradictory Data Responses Regarding Recorded Brentwood Camera 6 Video - Violation of Commission Rules of Practice and Procedure Rule 1.1 (Felts Violation 13)	October 10, 2011 - March 9, 2012		151	151
13	PG&E's Data Response 30, Q 8.d Did Not Identify All of the People in Milpitas Handling the Pressure Problem on September 9, 2010- Violation of Commission Rules of Practice and Procedure Rule 1.1 (Felts Violation 14)	December 17, 2011- January 15, 2012		29	29
14	PG&E's Data Response 30, Q 2 Did Not Identify All of the People in Milpitas Handling the Pressure Problem on September 9, 2010- Violation of Commission Rules of Practice and Procedure Rule 1.1 (Felts Violation 14)	December 17, 2011 - January 15, 2012		29	29
15	PG&E's recordkeeping practices for Job Files adversely impacts ability to operate transmission pipeline system safely - Violation of Public Utilities Code Section 451. (Felts Violation 16)	1987 - December 12, 2012	2,376	6,928	9,304

Appendix C
Table of Violations for I.11-02-016 (Recordkeeping OII)

16	PG&E failed to retain pressure test records for all segments of its gas transmission pipeline system - Violation of Public Utilities Code Section 451, ASME B.31.8, GO 112 through 112-B and PG&E's internal records retention policies (Felts Violation 18)	1956 - December 20, 2012	13,698	6,928	20,626
17	Weld Inspection Records Missing or Incomplete - Violation of Public Utilities Code Section 451, 49 CFR 192.241 and 192.243, ASME B.31.8, General Orders 112, 112-A, 112-B, section 107. (Felts Violation 19)	1955- December 20, 2012	14,064	6,928	20,992
18	Operating Pressure Records Missing, Incomplete or Inaccessible - Violation of Public Utilities Code Section 451 (Felts Violation 20)	1955- December 17, 2004	14,064	4,003	18,067
19	Inaccurate and incomplete data in leak reports; missing leak records - Violation of Public Utilities Code Section 451 (Felts Violations 21 and 22)	1955 - December 20, 2012	14,064	6,928	20,992
20	Failure to retain records of reconditioned and reused pipe in transmission pipeline system - Violation of Public Utilities Code Section 451 (Felts Violation 23)	1940 - December 20, 2012	19,542	6,928	26,470
21	Failure to ensure the accuracy of data in GIS and to adopt conservative assumed values for missing data in GIS - Violation of Public Utilities Code Section 451 (Felts Violation 24)	1995 - December 20, 2012		6,382	6,382
22	PG&E unable to assess the integrity of its pipeline system and effectively manage risk - Violation of Public Utilities Code Section 451 (Felts Violation 25)	December 17, 2004 - December 20, 2012		2,925	2,925

Appendix C
Table of Violations for I.11-02-016 (Recordkeeping OII)

23	Failure to retain metallurgist report concerning a 1963 fire and explosion on Line 109 - Violation of Public Utilities Code Section 451 (Felts Violation 27)	1963 - December 20, 2012	11,142	6,928	18,070
24	Inability to operate and maintain PG&E's gas transmission pipeline system in a safe manner due to poor records management activities - Violation of Public Utilities Code Section 451, GO 112 through 112-B, Section 107, ASME B.31.8. (Duller/North Violation A.1)	1955 - December 20, 2012	14,064	6,928	20,992
25	Failure to retain records of Leak Survey Maps - Violation of ASME B.31.8 Section 851.5. (Duller/North Violation B.1)	April 16 2010-December 20, 2012		979	979
26	Failure to retain records of Line Patrol Reports - Violation of ASME B.31.8 Section 85L5. (Duller/North Violation B.2)	September 1, 1964 - December 20, 2012	10,714	6,928	17,642
27	Failure to retain records of Line Inspection Reports - Violation of ASME B.31.8 Section 851.5. (Duller/North Violation B.3)	December 17, 1991-December 20, 2012	746	6,928	7,674
28	Failure to retain pressure test records - Violation of ASME B.31.8 Section 851.417. (Duller/North Violation B.4)	September 1, 1964 - December 20, 2012	10,714	6,928	17,642
29	Failure to retain records of transmission line inspections - Violation of ASME B.31.8 Section 851.5. (Duller/North Violation B.5)	September 1, 1964- December 20, 2012	10,714	6,928	17,642
30	Failure to comply with internal records retention policies - Violation of 49 CFR 192.13(c). (Duller/North Violation B.6)	1955- December 20, 2012	14,064	6,928	20,992
31	Failure to identify and include in all pipe segments with unusual longitude seams and joints for replacement- Violation of Public Utilities Code Section 451. (Duller/North Violation C.1)	June 1988-December 20, 2012	2,026	6,928	8,954

Appendix C
Table of Violations for I.11-02-016 (Recordkeeping OII)

32	Failure to properly identify and replacing those pipelines that were prone to damage during severe earthquake- Violation of Public Utilities Code Section 451. (Duller/North Violation C.2)	June 1992- December 20,2012	565	6,928	7,493
33	Failure to maintain comprehensive database for all gas leaks in transmission pipeline system - Violation of Public Utilities Code Section 451. (Duller/North Violation C.3)	1957 - December 20, 2012	13,333	6,928	20,261
	Total Days in Violation		206,984	143,205	350,189

(End of Appendix C)

APPENDIX D

Table of Violations for I.11-11-009 (Class Location O I I)

Appendix D
Table of Violations for I.11-11-009 (Class Location OII)

Violation (abbreviated description; see applicable conclusion of law for full statement of violation)	Number of Segments (Violations)	Pre-1/01/1994 Days in Violation	Post-1/01/1994 Days in Violation*	Total Days in Violation
49 CFR § 192.107 (b) (Assumed SMYS Values)	133	451,890	766,482	1,218,372
P.U. Code § 451 (Assumed SMYS Values Resulting in Excessive MAOPs)	133	451,890	766,482	1,218,372
49 CFR § 192.13(c) (Not Following Procedures)	843	2,107,255	4,162,027	6,269,282
49 CFR § 192.609 (Required Study)	224	542,030	1,095,373	1,637,403
49 CFR § 192.611 (MAOP Confirmation/Revision)	224	542,030	1,095,373	1,637,403
49 CFR § 192.613 (Continuing Surveillance)	677	1,723,956	3,346,447	5,070,403
49 CFR § 192.619 (Non-Commensurate)	63	154,734	338,828	493,562
P.U. Code § 451 (Non-Commensurate)	63	154,734	338,828	493,562
TOTAL	2,360	6,128,519	11,909,840	18,038,359

*End Date January 17, 2012

(END OF APPENDIX D)

APPENDIX E

ADOPTED REMEDIES

Adopted Remedies Proposed by CPSD in All Three Oils

1. PG&E shareholders shall 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 shall 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 oversight and to assure the opportunity for legacy piping characterization through sampling is not lost in the rush to execute the program.

2. PG&E shareholders shall pay to reimburse CPUC/CPSD for the cost of conducting all three of the present investigations.

Adopted Remedies Proposed by CPSD in I.12-01-007 (San Bruno Oil)

1. PG&E's pipeline construction standards shall meet or exceed all legal requirements and industry standards for identifying and correcting pipe deficiencies and strength testing.

2. PG&E shall revise its integrity management procedures 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.

3. PG&E shall 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. PG&E shall revise its Integrity Management training to ensure that missing data is represented by conservative assumptions, and that those assumptions are supportable, per the requirements of ASME B31.8S. As required by Ordering Paragraph 1 of D.11-06-017, PG&E shall 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.

5. PG&E shall revise its integrity management procedures and related training, to ensure robust data verification processes are enacted and implemented.

6. PG&E shall 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.

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

8. PG&E shall 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 shall 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. Each assessment shall be documented and retained for the life of the facility.

9. PG&E shall revise its threat identification and assessment procedures and training to ensure that HCA pipeline segments are prioritized for a suitable assessment method (e.g., hydro-testing), per the requirements of 49 CFR Part 192.917(e)(3)-(4).

10. PG&E shall 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).

11. PG&E shall 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.

12. PG&E shall 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.

13. PG&E shall 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.

14. PG&E shall review and implement its Inspection, Testing, and Maintenance procedure applicable to stations to ensure that integrity of electrical equipment, wiring and documentation and identification of electrical components does not deteriorate to unsafe conditions.

15. PG&E shall 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.

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

17. PG&E shall revise its control systems, including SCADA, to ensure that all relevant information, including redundant pressure sensors, is considered.

18. PG&E shall 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.

19. PG&E shall program its PLCs to recognize that negative pressure values are erroneous and require intervention to prevent valves from fully opening.

20. PG&E shall replace the three pressure controllers which malfunctioned on September 9, 2010 unless PG&E demonstrates to CPSD’s satisfaction that the controllers have been removed from the system.

21. PG&E shall 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 shall create a procedure covering the commission of electrical equipment from one Uninterruptable Power Supply to another. Each project Clearance shall include possible scenarios and contingency plans to mitigate any abnormal operating conditions that may arise.

22. PG&E shall 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 shall not commence until such time as the operator and technician have reviewed the work clearance and have confirmed that both 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.

23. PG&E shall provide training to Gas Service Representatives (GSRs) 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. The training provided GSRs should enable them to recognize the differences between fires of low-pressure natural gas, high-pressure natural gas, gasoline fuel, or jet fuel.

24. Internal coordination – PG&E shall 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 shall include assigning specific geographical monitoring responsibilities for Control Room employees.

25. External coordination – Until PHMSA issues 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, PG&E shall revise its own procedures to allow for the immediate and direct notification of 911 emergency call centers when a possible pipeline rupture is indicated.

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

27. RCV/ASV – PG&E shall 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.

28. Response time – PG&E shall 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.

29. Emergency Plan Revision – Currently a maintenance supervisor annually reviews SCADA alarm responses and makes revisions as necessary. This process shall 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.

30. Public Awareness – Until PHMSA issues 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, PG&E shall undertake a review of its gas transmission public awareness and outreach programs to ensure that system-specific information is appropriately disseminated.

31. PG&E's business strategies and associated programs shall expressly ensure that safety is a higher priority than shareholder returns and be designed to implement that priority.

32. Deleted.

33. PG&E's gas employee incentive plan shall include safety. PG&E shall revise its STIP program to make safety performance 40% of the score used to determine the total award. PG&E shall require all gas leaders including officers to participate in annual training activities that enhance and expand their knowledge of safety, including exercises in which gas leaders including officers will have an opportunity to enhance their knowledge of incident command and will participate in an annual safety leadership workshop.

34. Deleted.

35. PG&E shall focus on enhancing public safety and operational excellence as a core mission, and shall examine whether the time and money it spends on public relations and political campaigns distracts it from this core mission.

36. Deleted.

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.

38. PG&E shall follow and implement the following NTSB recommendations:

38.a Revise work clearance procedures to include requirements for identifying the likelihood and consequence of failure

associated with the planned work and for developing contingency plans. (P-11-24)

- 38.b.1 Establish a comprehensive emergency response procedure for responding to large- scale emergencies on transmission lines; the procedure shall (1) identify a single person to assume command and designate specific duties for supervisory NTSB Pipeline Accident Report 131 control and data acquisition staff and all other potentially involved company employees.
- 38.b.2 Establish a comprehensive emergency response procedure for responding to large- scale emergencies on transmission lines; the procedure shall include the development and use of trouble-shooting protocols and checklists.
- 38.b.3 Establish a comprehensive emergency response procedure for responding to large- scale emergencies on transmission lines; the procedure shall include a requirement for periodic tests and/or drills to demonstrate the procedure can be effectively implemented. (P-11-25).
- 38.c Equip supervisory control and data acquisition system with tools to assist in recognizing and pinpointing the location of leaks, including line breaks; such tools could include a real-time leak detection system and appropriately spaced flow and pressure transmitters along covered transmission lines. (P-11-26).
- 38.d Expedite the installation of automatic shutoff valves and remote control valves on transmission lines in high consequence areas and in class 3 and 4 locations, and space them at intervals that consider the factors listed in Title 49 Code of Federal Regulations Part 192.935(c). (P-11-27).
- 38.e Revise post-accident toxicological testing program to ensure that testing is timely and complete. (P-11-28).
- 38.f Assess every aspect of the integrity management program, paying particular attention to the areas identified in this investigation, and implement a revised program that includes, at a minimum, (1) a revised risk model to reflect PG&E Company's actual recent experience data on leaks, failures, and incidents; (2) consideration of all defect and leak data for

the life of each pipeline, including its construction, in risk analysis for similar or related segments to ensure that all applicable threats are adequately addressed; (3) a revised risk analysis methodology to ensure that assessment methods are selected for each pipeline segment that address all applicable integrity threats, with particular emphasis on design/material and construction threats; and (4) an improved self-assessment that adequately measures whether the program is effectively assessing and evaluating the integrity of each covered pipeline segment. (P-11-29).

- 38.g Conduct threat assessments using the revised risk analysis methodology incorporated in your integrity management program, as recommended in Safety Recommendation P-11-29, and report the results of those assessments to the Commission and the Pipeline and Hazardous Materials Safety Administration. (P-11-30).
- 38.h Develop, and incorporate into PG&E's public awareness program, written performance measurements and guidelines for evaluating the plan and for continuous program improvement. (P-11-31).

Adopted Remedies Proposed by CPSD in I.11-02-016 (Recordkeeping OII)

- 1. PG&E's gas transmission organization shall achieve at least a Level 3 information maturity score under the Generally Accepted Records Keeping Principles within 3 years.
- 2. Rejected
- 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 shall be incorporated into procedures specific to meet the needs of every Line of Business.
 - 3.b The Information Management and Compliance Department shall design a governance controls catalog for recordkeeping practices to assess compliance with the corporate policy and standard, consistency of behavior with 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.

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:

- 4.a All staff shall be 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.
- 4.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.
- 4.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.

5. PG&E shall develop and deploy the systems necessary to manage, maintain, access and preserve records (physical and electronic, in all formats and media types); their related data, metadata, and geographic location and geospatial content to the extent appropriate in accordance with legal and business mandated rules, utilizing technology that includes appropriate aids to help improve data and metadata quality.

6. 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. PG&E shall identify and document the employees responsible for implementing the Records and Information Management program for gas transmission.

8. PG&E shall develop consistent standard practices that include gas transmission records management linked to corporate policies on information governance.

9. PG&E shall implement mandated retention periods for all records relevant to gas transmission.

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

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

12. 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."

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

14. PG&E shall 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 shall be immediately accessible from multiple locations. The development of a complete and accurate catalog of job files that can be searched immediately shall be included within this objective.

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.

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.

17. 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, 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.

18. 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.

19. Rejected. TURN proposed remedy 1 adopted instead.

20. PG&E shall implement the recommendations included in the final Pricewaterhouse Coopers (PwC) audit report. (TURN Exhibit 16, Appendix B).

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.

Adopted Remedies Proposed by CPSD in I.11-11-009 (Class Location OII)

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

2. Procedures: PG&E shall update procedures, patrolling process instructions, and related Operator Qualification 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.

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

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

5. PG&E shall ensure that the Report of New Construction forms are completed.

6. The Aerial Patrol Program Manager's duties shall be increased to include oversight and review of the quality and accuracy of patrol reports.

7. PG&E shall create a detailed procedures manual containing the Aerial Patrol Program Manager's duties to ensure quality control of aerial patrol responsibilities.

8. Training: PG&E shall utilize varied training exams for patrolling.

9. The new training exams for patrolling shall include questions with greater detail and complexity than the current exam and shall 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 shall 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.

10. Improve Aerial Patrol Pilot training: PG&E's pilot training shall include 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 include in its training photographs, video or other aids to reflect expected views to be seen from typical patrol altitudes.

11. Audits the patrolling process shall 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.

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

13. Audits shall 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).

Adopted Remedies Proposed by City of San Bruno

1. Recommendation V.B rejected.

2. PG&E shall reimburse CPSD for the costs of contracts to retain independent experts chosen by CPSD for verification audits and inspections to ensure compliance with the *PSEP Decision* and remedies ordered in this decision. This shall include 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. 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 will fall within the scope of this remedy. The reimbursement amount is capped at \$30 million.

3. Recommendation V.D.1 rejected

4. Recommendation V.D.2.a incorporated into CPSD adopted remedy 23 for I.12-01-007.

5. 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.

6. Recommendation V.D.2.c incorporated into CPSD adopted remedy 4 for I.11-02-016.

7. Recommendation V.D.2.d incorporated into CPSD adopted remedy 4 for I.11-02-016.

8. Recommendation V.D.2.e incorporated into CPSD adopted remedy 4 for I.11-02-016.

9. Recommendation V.D.2.f incorporated into CPSD adopted remedy 10 for I.11-11-009.

10. PG&E shall enter into Mutual Assistance Agreements with the cities, counties and fire districts within its service territory by no later than December 31, 2015. The Mutual Assistance Agreements shall formalize PG&E's emergency response role and disclosure obligations. A copy of each Mutual Assistance Agreement shall be maintained in the appropriate Division Emergency Plan.

11. Recommendation V.E rejected.

12. Recommendation V.F rejected.

Adopted Remedies Proposed by TURN

1. 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 should 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 should 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.

2. Recommendation 2A incorporated into CPSD adopted remedy 4 for I.12-01-007.

3. Recommendation 2B incorporated into CSB adopted remedy 2.

4. Recommendation 3 incorporated into CSB adopted remedy 2.

Adopted Remedies Proposed by DRA

1. CPSD shall 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.

2. Recommendation I.B.7. that PG&E shall compensate TURN, CSB, CCSF and DRA for their litigation expenses in connection with these three proceedings, is rejected.

(End of Appendix E)