

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's  
Natural Gas Transmission Pipeline System in  
Locations with Higher Population Density.

I.11-11-009  
(Filed November 10, 2011)

**OPENING BRIEF  
OF THE CONSUMER PROTECTION AND SAFETY DIVISION**

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November 20, 2012

35518720

SB\_GT&S\_0549710

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The Consumer Protection and Safety Division ("CPSD") of the California Public Utilities Commission ("CPUC" or "Commission") submits this Opening Brief in Order Instituting Investigation ("OII") concerning the practices of Pacific Gas and Electric Company's ("PG&E's") natural gas transmission pipeline system in locations with higher population density. This Opening Brief is filed and served pursuant to Rule 13.11 of the Commission's Rules of Practice and Procedure, the Assigned Commissioner's Scoping Memo and Ruling of April 26, 2012, and the agreement of the parties at the evidentiary hearings of August 27, 2012, providing that Opening Briefs would be filed by the parties on September 14, 2012.

**I. INTRODUCTION**

This OII was issued by the Commission to determine whether "PG&E violated any provisions of the California Public Utilities Code, Commission rules, general orders, or decisions, federal regulations, or other applicable rules or requirements pertaining to the operation of its natural gas transmission pipeline system in or near locations of higher population density" and to determine whether "PG&E's natural gas transmission pipeline system was safely operated in areas of greater population density or other areas identified as High Consequence Areas ("HCAs") pursuant to 49 Code of Federal Regulations ("C.F.R."), §§ 192.5 et seq." (Nov. 10, 2011 OII, at p. 1.)

The OII also examined "whether PG&E properly and safely reviewed, on a regular basis, its natural gas transmission pipelines to identify areas of increased population density so as to modify its maximum allowable operating pressures (taking pressure gradient into account)

commensurate with the actual class location, to replace pipeline segments with stronger pipe commensurate with the actual class location, to review and study changes in population density affecting pipeline design, construction, and testing procedures, and to review the physical condition of pipeline segments including the operation and maintenance history of pipeline segments.” (*Ibid.*)

## **II. FACTUAL BACKGROUND OF THE OII**

Except for CPSD’s allegation that PG&E violated 49 C.F.R. § 192.107 in assuming specified minimum yield strength (“SMYS”) values in excess of 24,000 psig, the facts in this case are not in dispute. The issue of the assumed SMYS values in excess of 24,000 psig is considered in this proceeding and in I.12-01-007, the San Bruno OII. (See the August 27, 2012 Evidentiary Hearings in this proceeding, Reporter’s Transcript (“RT”) at pp. 35-46.)

### **A. Undisputed Facts**

In its Prepared Testimony (“PT”) submitted on July 23, 2012, PG&E stated, “[w]e do not dispute most of the facts set forth in the Consumer Protection and Safety Division’s (CPSD) May 25, 2012 Investigative Report.” (PG&E’s PT at p. 1-1.) The reason for this is because, as PG&E has noted, “[m]ost of CPSD’s numbers come from our filings with Commission and our data responses.” (*Ibid.*)

### **B. Disputed Facts**

What remains in dispute are:

- “the number of days of violations that may be associated with the admitted errors in [PG&E’s] class location designations;” (*Ibid.*)
- “the number of violations based on individual pipe segments;” (*Ibid.*)
- “the definition of pipeline segment;” (*Ibid.*)
- the fact that “construction of a single home or well defined area (WDA) could change the class location of several individual segments, making the number of pipeline segments an inappropriate measure;” (*Id.* at pp. 1-1 through 1-2)
- the consideration of a “bigger picture” regarding PG&E’s overall “class location process... patrol[ing], and continuing surveillance procedures... which [PG&E] failed to keep... class location designations current.” (*Id.* at p. 1-2.) And
- the use of assumed SMYS values in excess of 24,000 psig. (*Id.* at p. 1-3.)

**1. The number of *days of violations* associated with PG&E’s admitted errors in class location designations.**

The federal regulations alleged by CPSD to have been violated concern safety regulations affecting each segment of an operator’s natural gas transmission pipeline. For example, CPSD asserts violations of 49 C.F.R § 192.13(c) for PG&E’s failure to comply with its own safety rules, procedures, and regulations.

**a) Violations of Subpart L—Operations**

This subpart prescribes minimum requirements for the operation of pipeline facilities. (49 C.F.R. § 192.601.) The subparts’ general provisions provide that “No person may operate a segment of pipeline unless it is operated in accordance with this subpart.” (49 C.F.R. § 192.603(a).) Failure to comply with subpart L on each and every segment of pipeline is a violation.

**i. Violations of 49 C.F.R § 192.13(c)  
(Compliance with operator’s own rules)**

That regulation prohibits a person from operating “a segment of pipeline” that is not in compliance with subsection (a), subsection (b) and requires that the operator “maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part [Part 192].” [Emphasis added.] CPSD asserts that § 192.13(c) requires compliance on a per segment basis.

**ii. Violations of 49 C.F.R §§ 192.603 and 192.605 (Recordkeeping under Subparts L and M)**

49 C.F.R. § 192.603 provides that “No person may operate a segment of pipeline unless it is operated in accordance with this subpart [emphasis added].” 49 C.F.R. § 192.605 provides that “each operator shall keep records necessary to administer the procedures under § 192.605.” 49 C.F.R. § 192.605(8) provides that the operator must “periodically review the work done by operator personnel to determine the effectiveness and adequacy of the procedures used in normal operation and maintenance and modify[] the procedure when deficiencies are found.” CPSD asserts that the failure to maintain necessary records for any segment is a violation of 49 C.F.R. § 192.605.

**iii. Violations of 49 C.F.R. § 192.609 (Class location study)**

49 C.F.R. § 192.603 provides that:

Whenever an increase in population density indicates a change in class location for a segment of an existing steel pipeline operating at hoop stress that is more than 40 percent of SMYS, or indicates that the hoop stress corresponding to the established maximum allowable operating pressure for a segment of existing pipeline is not commensurate with the present class location, the operator shall immediately make a study ...[emphasis added].

A failure to make a class location study whenever population density indicates a change in class for any segment constitutes a violation of this regulation.

**iv. Violations of 49 C.F.R. § 192.611 (Confirmation or revision of MAOP for changes in class location)**

49 C.F.R. § 192.611 provides in pertinent part:

If the hoop stress corresponding to the established maximum allowable operating pressure of a segment of pipeline is not commensurate with the present class location, and the segment is in satisfactory physical condition, the maximum allowable operating pressure of that segment of pipeline must be confirmed or revised...[emphasis added].

Any segment that operates at a maximum allowable operating pressure (MAOP) that is not commensurate with its class location is in violation of this regulation.

**v. Violations of 49 C.F.R. § 192.613 (Continuing surveillance)**

49 C.F.R. § 192.613 provides that “each operator shall have a procedure for continuing surveillance of its facilities to determine and take appropriate action concerning changes in class location” (49 C.F.R. § 192.613(a)) and “[i]f a segment of pipeline is determined to be in unsatisfactory condition but no immediate hazard exists, the operator shall initiate a program to recondition or phase out the segment involved, or, if the segment cannot be reconditioned or phased out, reduce the maximum allowable operating pressure in accordance with § 192.619 (a) and (b) [emphasis added].” (49 C.F.R. § 192.613(b).) Consequently, an operator whose continuing surveillance procedure fails to identify the unsatisfactory condition of a single

segment when an adequate surveillance procedure would have discovered the condition, the operator is in violation of this regulation. Furthermore, CPSD’s Investigation revealed that PG&E did not have a formal Continuing Surveillance procedure.<sup>1</sup>

vi. **Violations of 49 C.F.R. §§ 192.619 and 192.620 (Operating a pipeline segment above MAOP)**

49 C.F.R. § 192.619(a) provides that “no person may operate a segment of steel or plastic pipeline at a pressure that exceeds a maximum allowable operating pressure” determined through the alternative design pressure based on class location under § 192.620. PG&E operated 898 segments above MAOP based on these segments class location. (See PG&E’s Second Update (April 2, 2012) at p. 5.)

b) **Violations of Subpart M—Maintenance**

Subpart M “prescribes minimum requirements for maintenance of pipeline facilities.” (49 C.F.R. § 192.701.) “No person may operate a segment of pipeline, unless it is maintained in accordance with this subpart [emphasis added].” (49 C.F.R. § 192.703(a).)

**49 C.F.R. §§ 192.705 and 192.709 (Patrolling pipeline for class location changes)**

49 C.F.R. § 192.705(a) requires that “[e]ach operator shall have a patrol program to observe surface conditions on and adjacent to the transmission line right-of-way for indications of leaks, construction activity, and other factors affecting safety and operation.” 49 C.F.R. § 192.709(c) requires that “a record of each patrol, survey, inspection, and test required by subparts L and M of this part must be retained for at least five years or until the next patrol, survey, inspection, or test is completed, whichever is longer.” Every instance in which PG&E failed to retain patrol records of a pipeline segment for a period of at least five years or until the next patrol, survey, inspection, or test is completed if more than five years after the patrol, is a violation of this regulation.

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<sup>1</sup> CPSD Investigative Report at pp. 52-53.



**2. CPSD’s calculation of *the number of violations* based on individual pipe segments and the definition of pipeline segment**

As described above, each violation of Subparts L and M applies to each segment of PG&E’s pipeline system. When PG&E argues that the number of segments is not fixed” (PT at p. 1-1) and that “[n]either federal nor state regulations define ‘pipeline segment’” (*ibid*), it is suggesting that its segment designations are changeable.

[PG&E] use[s] the term [segment] to identify a continuous length of pipe with similar characteristics (pipe specifications, class location, etc.). During our analysis of the class location data, and our separate maximum allowable operating pressure (MAOP) validation effort, the total number of pipeline segments changed as we identified adjacent sections of pipeline with different characteristics. For example, if we determined that 500 feet of pipeline in the middle of Class 2 segment should be Class 3, that one class 2 segment would be split into three new segments: a Class 2 segment, the 500 foot Class 3 segment, and a second Class 2 segment. Because the number of segments is constantly changing, we provided both segment and mileage information in our April 2, 2012 update.

(PG&E PT at p. 1-1, fn. 2.)

CPSD does not dispute the methodology used in establishing segments in PG&E’s April 2, 2012 update. When the pipeline segment characteristics or specifications change, new segments should indeed be reconfigured but not after-the-fact in an attempt to artificially lower the number of violations. These segment characteristics and specifications used in determining CPSD violations had existed for years and, in some cases, decades. The analysis that PG&E undertook in 2011 and 2012, should have been made years earlier but PG&E must stand or fall with the segment identifications used in that 2011-2012 analysis. PG&E can claim that they were unaware of just how out-of-date its records were and that the recent class location analysis was necessary to correct the information but this serves to emphasize how poorly PG&E maintained its pipeline specification and location records.

Ms. Muse, employed by PG&E first as a Land Technician, then Gas Engineer, and finally as Senior Gas Engineer, testified in her deposition on May 13, 2011, that she prepared and presented a paper concerning PG&E’ Gas Information System (“GIS”) at San Diego, California,

in 2004. PG&E's GIS was intended to present all of PG&E's pipeline records within a geographical overlay of its system so that the exact characteristics and specifications of the pipeline could be pulled up by a computer using the GIS. PG&E has long been aware of the deficiencies in gaining access to pipeline specifications throughout its system but chose not to correct the problem until after the San Bruno accident.

In any event, the segments at issue and the numbers of segment violations calculated by CPSD are based on the segment identifications presented to it by PG&E following its Class Location analysis and described in its submissions to the Commission, particularly the April 2, 2012 update. Regardless of changing segment identifications, the segments used by CPSD were provided by PG&E. Those identifications were the best available and, in fact, the only ones available to PG&E and CPSD in April through July of 2012, and time and administrative economy and efficiency precludes further corrections or adjustments by PG&E.

**3. The fact that “*construction of a single home or well defined area (WDA) could change the class location of several individual segments, makes the number of pipeline segments an inappropriate measure*”.**

The meaning of this allegation by PG&E (PT at pp. 1-1 to 1-2) is unclear to CPSD. Why a portion of a transmission pipeline identified by PG&E as an individual segment should not be counted for purposes of violations is not explained by PG&E. While a segment may have to be reconfigured because of an increase in class location, the original segment identification remains for purposes of determining whether it was operated in violation of state and federal safety regulations.

**4. Considering the “*bigger picture*” regarding PG&E problems in patrolling and continuing surveillance instead of focusing on individual pipeline segments as violations.**

PG&E admits that 120.6 miles of its transmission pipeline system were not patrolled and an additional 51.5 miles which were allegedly patrolled but for which PG&E has no records. (CPSD Investigative Report (“Rep.”) at p. 54, footnote 92.) PG&E argues that its failures in patrolling its pipeline and in providing its system with adequate continuing surveillance is a bigger picture than the number of violations of these requirements for each segment not patrolled

or lacking adequate continuing surveillance to determine a change in class location. CPSD does not argue that these are not big or severe deficiencies. However, in calculating penalties, the regulations covering these deficiencies under *Subpart L—Operations* and *Subpart M—Maintenance* require a segment-by-segment review. Each segment that failed to:

- comply with PG&E’s own safety rules and procedures;
- have adequate records;
- have a class study when increased population density that might result in a class change;
- have confirmation or revision of MAOP when a class location change required it;
- have been provided adequate continuing surveillance to discover a potential class change;
- have been operated above the MAOP for its actual class location; and
- have patrol records for a period of at least five years of more,

was in violation of the relevant federal and/or state regulation(s). The issues characterized by PG&E as the “bigger picture” are issues that must be corrected for purposes of public safety. Safety corrections are essential but penalties serve a different purpose, i.e., to deter the utility from ever committing the admitted violations again. The penalties, therefore, must be considered for each admitted violation on a segment-by-segment basis.

### **C. Issues Beyond the Scope of This Proceeding**

In June of 2012, PG&E brought to the attention of CPSD encroachment issues by private landowners on PG&E’s transmission pipeline rights-of-way. PG&E has begun a pilot study to determine the number and location of these problems. These encroachment issues were raised recently and are specifically outside the scope of this Class Location proceeding.

### **III. PUBLIC ENDANGERMENT ESTABLISHING THESE CLASS LOCATION VIOLATIONS AS SUBSTANTIAL**

The assigned Administrative Law Judge (ALJ) admonished CPSD, at the August 27, 2012 Prehearing Conference in this proceeding, to fully support its claims that the

alleged violations are substantial.<sup>2</sup> The safety risks to the public from the following violations are noted.

First, CPSD notes that the purpose of the U.S.D.O.T.'s pipeline safety code is "to provide adequate protection against risks to life and property posed by pipeline transportation and pipeline facilities." (49 U.S.C. § 60102.) These federal safety standards are minimum standards. (*Ibid.*) The risks to life and property are evident from the San Bruno explosion and fire from the rupture of PG&E's transmission pipeline 132 on September 9, 2010. Eight residents lost their lives and 38 homes were destroyed and others damaged.

When [the pipeline] blew up Thursday evening at Earl Avenue and Glenview Drive, it left a 30-foot-wide crater. A large section of the pipe was hurled from the ground, "indicating great magnitude," said Christopher Hart, the vice chairman of the National Transportation Safety Board...It took crews at least a half hour to shut down the gas flow to the broken line. The blaze wasn't fully contained until midday Friday...Geological reports registered a shaker of 1.1 magnitude at the time of the explosion, which officials believe was from the pipeline detonating.<sup>3</sup>

**A. Risks Inherent in Failing to Comply with Federal Safety Regulations**

Some courts have held that "[w]here explosive compounds are in play, the measure of care arises with the degree of hazard involved."<sup>4</sup> Further, some courts state that "[t]he power of uncontrolled gas and electricity to destroy and disfigure is so great, that upon their purveyors the law imposes the 'highest standard of care practicable...'"<sup>5</sup> "A gas company is also either expressly or impliedly held to a duty to make reasonable inspection to discover the condition of its main. The failure to do so will cause the gas company to be negligent in not discovering and repairing the break."<sup>6</sup> "The reason evidence of customary practice is admissible is to help the

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<sup>2</sup> RT Aug. 27, 2012, at p. 40.

<sup>3</sup> "It looks like a war zone," SFGate, <http://www.sfgate.com/default/article/It-looks-like-a-war-zone-3174941.php#page-1> (Sept. 11, 2010).

<sup>4</sup> *Hemrock v. Peoples Natural Gas Co.* (1966) 423 Pa. 259, 223 A.2d 687, 692.

<sup>5</sup> *Ibid.*

<sup>6</sup> *Stanton v. Nat'l Fuel Gas Co.* (1987), 1 Pa. D. & C.4th 223, 238.

jury decide whether the defendant violated the duty of care it owed the plaintiff. It is, of course, true that evidence of customary practice is not conclusive; whether the defendant exercised due care must be decided on the basis of all the evidence. In a particular case, it may be that customary practice does not represent due care. [Citing *Hemrock v. Peoples Natural Gas Co., supra.*]<sup>7</sup>

**B. Risks Inherent in Failing to Maintain Records**  
[49 C.F.R. §§ 192.603, 192.605, 192.709(c)]

PG&E’s failure to maintain transmission pipeline records resulted in its failure to update increased population density for a large number of pipeline segments. PG&E admits that 898 transmission pipeline segments—140.4 miles—were erroneously classified in its GIS and operated above MAOP in violation of federal safety standards because of the errors in recordkeeping. The lack of sufficient electronic data due to PG&E’s failed GIS system, and the lack of properly maintained hardcopy records at PG&E’s local district offices, made compliance with record retention policies impossible. PG&E’s failure placed the public at risk of a potential rupture, explosion, and fire.

**C. Risks Inherent in Failing to Make a Class Location Study**  
[49 C.F.R. § 192.609]

When the class location of a transmission pipeline segment changes, the operator must make a study to determine whether the MAOP is properly determined. Courts have held that “[t]he responsibility of a gas company is to see to it that the highly inflammable commodity it is selling is contained within a casing, formidable enough to withstand the pressure or violence to which it could foreseeably be subjected.”<sup>8</sup> PG&E failed to perform the requisite study for 224 segments operating at a hoop stress of 40% or more. PG&E’s failure placed the public at risk of a potential rupture, explosion, and fire.

**D. Risks Inherent in Failing to Confirm or Revise MAOP**  
[49 C.F.R. § 192.611]

Due to the failure to conduct the required studies as discussed above, PG&E also failed

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<sup>7</sup> *Kubit v. Russ* (1981) 287 Pa. Super. 28, 36.

<sup>8</sup> *Hemrock, supra*, 423 Pa. at p. 264.

to perform the requisite confirmation or revision of MAOP for each of the 224 segments operating at a hoop stress of 40% or greater. PG&E's failure to ensure that its MAOP was commensurate with its pipeline segment specifications placed the public at risk of a potential rupture, explosion, and fire.

**E. Risks Inherent in Failing to Perform Continuing Surveillance**  
[49 C.F.R. § 192.613]

Continuing surveillance is necessary to prevent against building on pipeline rights-of-ways, provide adequate patrolling, ensure against dig-ins, and provide for regular leak surveys. Proper continuing surveillance protects against all these threats and inadequate continuing surveillance may lead to the possibilities of explosions.<sup>2</sup>

**F. Risks Inherent in Failing to Maintain MAOP at A Level Commensurate with the Pipeline Segment's Specifications**  
[49 C.F.R. § 192.619]

CPSD has determined that 63 segments, representing 9 miles of transmission pipeline, had MAOPs that exceeded the hoop stress limits set forth in 49 CFR § 192.619. PG&E's failure to ensure that pipeline segments have MAOPs commensurate with their specifications placed the public at risk of a potential rupture, explosion, and fire.

**G. Risks Inherent in Failing to Patrol Pipelines**  
[49 C.F.R. § 192.705]

On May 7, 2012, PG&E pipelines that were not patrolled and an additional 51.5 miles which were patrolled but for which PG&E has no records. As with failures in providing continuing surveillance of its pipelines, PG&E's failure to patrol placed the public in those areas at risk of a potential rupture, explosion, and fire.

**H. Risks Inherent in Failing to Maintain Patrol Records for at Least Five Years**  
[49 C.F.R. § 192.611]

Failure to "maintain patrol records for at least five years or until the next patrol...whichever is longer" placed the public at risk of a potential rupture, explosion, and fire because it made locating changes in class locations difficult at best.

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<sup>2</sup> See: *Texas Eastern Transmission, LP v. Perano*, (E.D.Pa. Feb. 4, 2005) 2005 U.S. Dist. LEXIS 1683 at p. \*23.

**I. Risks Inherent in Failing to Comply with PG&E’s Own Safety Procedures and Rules**  
[49 C.F.R. § 192.13(c)]

49 CFR § 192.13(c) requires PG&E “to maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish” under federal safety regulations. PG&E admits that 898 pipeline segments were not accurately classified in violation of federal regulations and, therefore, its own rules for updating and ensuring appropriate class location changes. (See PG&E’s Second Update (April 2, 2012) at p. 5.) Failure to comply with these safety regulations— many mandated by federal safety regulations— placed the public at risk of a potential rupture, explosion, and fire.

**IV. PG&E’S USE OF ASSUMED “SMYS” VALUES IN EXCESS OF 24,000 psig**

CPSD’s contention with respect to the alleged violation of 49 C.F.R. § 192.107 concerns the legal validity of using assumed SMYS values above 24,000 psig when the pipe segment specifications are not accessible with traceable, verifiable, and complete specification records or a tensile test record. This proceeding does not address the use of substitute records for specification records such as procurement records for the pipe segment as alleged in Mr. Zurcher’s testimony (PG&E’s PT, Chap. 2, Ex. PG&E-1). That issue regarding assumed SMYS values using substitute records is reserved for briefing in the San Bruno OII, I.12-01-007.

**A. *In re Adoption of New Safety & Safety Reliability Regulations by PG&E, D.11-06-017***

PG&E alleges that the Commission has approved the use of “engineering-based assumptions for pipeline components where complete records are not available...” (PG&E’s PT at p. 1-3, citing D.11-06-017 (June 9, 2011), Ordering Paragraph 1, and pp. 13, 18 at n.22.)<sup>10</sup> CPSD does not agree that D.11-06-017, providing for “engineering-based assumptions for

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<sup>10</sup> D.11-06-017, OP #1 states: “Pacific Gas and Electric Company must complete its Maximum Allowable Operating Pressure determination based on pipeline features and may use engineering-based assumptions for pipeline components where complete records are not available. Such assumptions must be clearly identified, based on sound engineering principles, and, where ambiguities arise, the assumption allowing the greatest safety margin must be adopted. The calculated values must be used for interim pressure reductions and to prioritize segments for subsequent pressure testing.” (2011 Cal. PUC LEXIS 324 at p. \*45.)

pipeline components” lacking complete records, permits PG&E to use assumed SMYS values above 24,000 psig. The Commission had previously ordered PG&E to reduce pressure by 20% on 30-inch DSAW transmission pipe lacking hydro testing records. (Executive Director’s Letter of December 16, 2010 to PG&E.) In the Executive Director’s letter of January 3, 2011, to PG&E, the utility was directed to:

“Aggressively and diligently search for all as-built drawings, alignment sheets, and specifications, and all design, construction, inspection, testing, maintenance, and other related records...for Pacific Gas and Electric Company natural gas transmission lines in class 3 and class 4 locations and class 1 and class 2 high consequence areas that have not had a maximum allowable operating pressure established through prior hydrostatic testing. These records should be traceable, verifiable, and complete.”

Where PG&E did not have “traceable, verifiable, and complete” hydrotest records for these pipeline segments, the utility was ordered to determine the maximum allowable operating pressure with a spike test followed by a hydrostatic pressure test (as recommended by the NTSB in its January 3, 2011 Safety Recommendation to the Commission, P-10-1 (Urgent), see recommendation P-10-4).

Under these circumstances, the second sentence in OP #1 in D.11-06-017 is critical. “Such assumptions must be clearly identified, based on sound engineering principles, and, where ambiguities arise, the assumption allowing the greatest safety margin must be adopted.” The “greatest safety margin” does not permit the use of assumed SMYS values in excess of 24,000 psig without “traceable, verifiable, and complete” hydrotest records for pipeline segments “in class 3 and class 4 locations and class I and class 2 high consequence areas.” (See paragraph #1 in the Executive Director’s January 3, 2011 letter to PG&E.)

The OP #1 in D.11-06-017 cannot reasonably be characterized as a grant of authority by the Commission to use assumed SMYS values in excess of 24,000 psig since the use of conservative engineering assumptions for SMYS was permitted only for interim pressure reductions and the prioritization of segments for subsequent pressure testing as noted in the last sentence of the OP.



**B. Industry Practice of Using *Inferred* SMYS Values Above 24,000 psig**

PG&E also asserts that it is common operator practice to use other records as a basis for engineering assumptions that would permit the use of assumed SMYS values above 24,000 psig. (See Zurcher’s Testimony in Chapter 2 of PG&E PT.) Unfortunately, Mr. Zurcher does not explain or know which pipeline segments had assumed SMYS values in excess of the 24,000 psig. CPSD’s Report alleges that because PG&E’s GIS was lacking traceable records and could be used only for integrity management activities. (Rep. at p. 51; see PG&E’s response to GTSCClassLocationOII\_DR\_CPSD\_007\_Q01.) Further, the official records for pipe specifications could only be found in job files which PG&E has been unable to locate in many instances. At the same time, PG&E has admitted that its GIS is the official record system for class location determinations. (*Id.* at p. 51.)

Consequently, using inferred SMYS values<sup>11</sup> in excess of 24,000 psig without knowing the class location of pipeline segments cannot be considered a reasonable approach, as suggested by Mr. Zurcher, unless the operator has sufficient knowledge and records for class location determinations to permit the operator to use other “traceable, verifiable, and complete” records such as related pipe purchase records for assumed SMYS values above 24,000. (PG&E’s PT, Ch. 2, Zurcher testimony at pp. 2-5 through 2-6.) Nowhere in his testimony does Mr. Zurcher suggest that using these higher SMYS values is approved when those values are applied to segments with unknown class location designations.

In conclusion, whether or not the use of assumed SMYS values above 24,000 psig is generally employed by operators when they have not retained the specification records of the pipe segment and have not tensile tested the segment, it is a violation of the wording of 49 C.F.R. § 102.107 which literally requires the use of assumed SMYS values no greater than 24,000 psig under those circumstances. Operators who violate this regulation do so at their own risk. Furthermore, alleging that it is common industry practice to use values above the maximum does not relieve PG&E of its burden of establishing what records were used and on which pipe segments. The use of 24,000 psig ensures safe pipeline operations. Using assumed values above

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<sup>11</sup> See PG&E’s PT, Ch. 2, Zurcher testimony at p. 2-5, “it is a common industry practice to *infer* a conservative SMYS for the segment in question [emphasis added].”

the maximum limit requires engineering analysis through careful records authentication to ensure comparable safety. PG&E has not demonstrated that the quality of its recordkeeping would permit it to safely use any assumed values above the regulation's maximum.

**V. PG&E'S SEPTEMBER 27, 2012 REPORT ADMITTING A NEED TO REDUCE PRESSURE (MAOP) ON LINE 111A**

In Francis Yee's (PG&E's Acting Director, Regulatory Compliance and Support) September 27, 2012 letter to General Jack Hagan, Director CPSD, PG&E advised that it was reducing MAOP on Line 111A under 49 C.F.R. § 192.113 which requires a long seam factor of 0.8 for A.O. Smith steel pipe. Using this factor, the MAOP for Line 111A must be reduced from 650 psig to 534 psig. This reduction was not considered in CPSD's May 25, 2012 Investigative Report in this proceeding and was not reported prior to PG&E's letter which is attached to this Opening Brief.

**VI. CPSD ASSERTS THAT PG&E'S OPERATION OF TRANSMISSION PIPELINE SEGMENTS ABOVE MAOP ARE PUBLIC UTILITIES CODE 451 VIOLATIONS**

Operation of transmission pipeline segments above MAOP irrefutably risks potential rupture, explosion, and fire. Because of PG&E failures in complying with federal class location procedures, PG&E placed the public at risk of a pipeline rupture, explosion, and fire by operating transmission pipeline segments at pressure levels above those permitted under federal regulations. Consequently, CPSD contends that the 63 violations of 49 C.F.R. § 192.619 with a total number of continuing daily violations of 480,918 in addition to 133 violations of 49 C.F.R. § 192.107(b) (as set forth in CPSD's Investigative Report at pages 55 and 57), should be considered section 451 violations. PG&E failed to:

furnish and maintain such adequate, efficient, just, and reasonable service, instrumentalities, equipment, and facilities, including telephone facilities, as defined in Section 54.1 of the Civil Code, as are necessary to promote the safety, health, comfort, and convenience of its patrons, employees, and the public.

(Cal. Pub. Util. Code § 451.)

**VI. CPSD'S TABLE OF DAILY VIOLATONS**

**TABLE 1<sup>12</sup>**

<b>Regulation</b>	<b>Violations</b>	<b>Pre-7/26/1993 Days in Violation</b>	<b>Post-7/26/1993 Days in Violation</b>	<b>Total Days in Violation</b>
49 CFR § 192.107 (b) / P.U. Code 451 (Assumed SMYS Values)	133	437,784	753,878	1,191,662
49 CFR §192.13 (c) (Not Following Procedures)	843	2,034,251	4,063,039	6,097,290
49 CFR §192.609 Violations (Required Study)	224	523,961	1,068,420	1,592,381
49 CFR §192.611 Violations (MAOP Confirmation / Revision)	224	523,961	1,068,420	1,592,381
49 CFR §192.613 Violations (Continuing Surveillance)	677	1,665,053	3,269,307	4,934,360
49 CFR §192.619 Violations (Non- Commensurate SMYS)	63	147,924	332,994	480,918
49 CFR §192.603, 49 CFR§192.605, 49 CFR§192.709 (c) *(Recordkeeping)	898	N/A	N/A	N/A
<b>Total</b>	<b>3,062</b>	<b>5,332,934</b>	<b>10,556,057</b>	<b>15,888,990</b>

<sup>12</sup> CPSD Investigative Report at p. 58.

**VII. SINGLE COORDINATED BRIEF REGARDING FINES AND REMEDIES IN PROCEEDINGS I.11-02-016, I.11-11-009, AND I.12-01-007**

On September 25, 2012, ALJs Amy C. Yip-Kikugawa and Mark S. Wetzell issued a Ruling Granting CPSD's Coordinated Motion for Leave to Serve Additional Prepared Testimony Regarding PG&E's Financial Resources in Proceedings I.11-02-016, I.11-11-009, and I.12-01-007, and Granting CPSD Permission to File a Single Coordinated Brief Regarding Fines and Remedies in Proceedings I.11-02-016, I.11-11-009, and I.12-01-007. The hearing on Fines and Penalties is scheduled for November 13, 2012, at 10:00 A.M. While the Ruling did not decide whether to consolidate the three proceedings, all parties were permitted to file rebuttal briefs on Fines and Penalties. Consequently, CPSD will provide its position on fines, penalties, and potential disallowances in its single coordinated brief.

**VIII. CONCLUSION**

For the reasons stated above, CPSD requests that both a significant penalty and substantial ratepayer relief from the costs of replacing pipeline segments that have no traceable, verifiable, and complete specification records and related safety improvements regarding PG&E's omissions in its class location processes, be imposed on PG&E in this proceeding.

Respectfully submitted,

/s/ PATRICK S. BERDGE

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November 20, 2012