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)

REPLY BRIEF
OF THE CONSUMER PROTECTION AND SAFETY DIVISION

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The Consumer Protection and Safety Division ("CPSD") of the California Public Utilities Commission ("CPUC" or "Commission") submits this Reply Brief in Order Instituting Investigation ("OII") concerning the practices of the Pacific Gas and Electric Company's ("PG&E's") natural gas transmission pipeline system in locations with higher population density. This Reply 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, the Assigned Commissioners' Ruling Granting, in Part, and Denying, in Part, Motion for Extension of Time in Proceedings in Order to Facilitate Negotiations Toward a Stipulated Outcome, the agreement of the parties at the evidentiary hearings of August 27, 2012, and the extension of time to file briefs ordered October 4, 2012.

I. ISSUES RAISED IN PG&E'S OPENING BRIEF

1) CPSD's contention "[t]hese problems resulted in a complete breakdown in PG&E's compliance with class location regulations and procedures."[1]
2) PG&E's use of conservative assumed SMYS values.
3) CPSD's aggregation of violations by segment as characterized by PG&E as "layering".

II. WAS THERE A COMPLETE BREAKDOWN IN PG&E'S COMPLIANCE WITH CLASS LOCATIONS AND PROCEDURES?

PG&E takes issue with CPSD's characterization of PG&E's compliance with class location regulations at the time of the San Bruno rupture and fire as "a complete breakdown." (PG&E Opening Brief ("OB") at 2 and 5-8.) PG&E contends that it "had procedures and standards in place that should have resulted in class locations being accurately and timely identified…" PG&E claims these procedures were just "not consistently followed" and "not fully effective." (*Id*. at 1.)

CPSD disagrees with this PG&E assertion. PG&E failed to meet federal requirements for Class Location. As stated in CPSD's Report, one of the primary causes of PG&E's deficiencies in its class location process was PG&E's failure to satisfy the requirements of continuing surveillance in both practice and procedure resulting in its failure to meet the requirements of

[1] Ex. CPSD-1 at 56 (May 25, 2012 Report).

49 CFR §192.613(a). Because of this failure in continuing surveillance, PG&E's patrolling procedures did not translate into effective class location processes. PG&E did not provide contrary evidence concerning this claim which was substantiated by CPSD's compelling evidence. (Rebuttal Testimony of Ken Bruno at p. 5, ¶ 13-15, and p. 6, ¶ 16.)

PG&E continues to contend that continuing surveillance is nothing more than a subset of class location requirements much like patrolling. Continuing surveillance is much more than that. It encompasses all aspects of updating population, employment, and construction activity surrounding PG&E's transmission pipelines. CPSD's basis for this characterization of a complete breakdown includes evidence of:

- instances of missed observations and documentation of new developments (CPSD's May 25, 2012 Report at 33-35 and 39-43),
- missing patrol records (*id.* at 33-34, Table 7 and the internal PG&E P-F Letter of Dec. 3, 2001, at 35),
- missing F4127 "Reports of New Construction" (*id.* at 17, 19-20, 28, 30, 33-34, 36, and 38-41),
- nonexistent or improper documentation of corrective actions,
- failures of GSM&TS management to initiate reports of new construction following an aerial observation reporting new development (*id.* at 28, 35-37, 39, 47, and 51),
- failure of PG&E to incorporate recurring internal audit findings citing improper protocols (*id.* at 33-34, and 40),
- confusion as to the meaning of, significance of, and compliance with continuing surveillance, ambiguity between patrolling and continuing surveillance (*id.* at 32, 40, 41, 46-47, 50-52, 54, 55, and 56), and
- a badly compromised GIS system riddled with class location errors including assumed SMYS values greater than permitted by regulations (*id.* at 8, 10, the internal PG&E P-F Letter of Dec. 3, 2001, at 35, 37, 38, 47, 49, and 55).[2]

[2] CPSD's May 25, 2012 Report at 8, "The response provided an update to the initial June 30, 2010 Class Location report and identified 806 segments with class change errors in GIS and 48 segments that had been operating at hoop stresses too great for their updated actual class." See also: *id.* at 10, "These 57 MAOP violations are included in the 898 segments and are classified as errors in GIS…" and *id.* at 55.

Consequently,

> Because of these deficiencies in PG&E's compliance with 49 CFR 192.613 (a) as well as the previously mentioned failures to comply with class location changes, CPSD contends that PG&E failed to satisfy the requirements of Continuing Surveillance in both practice and procedure. CPSD contends that effective capture of class location change begins with effective patrolling and documenting observations of new development. Field crews should be trained to be on the lookout for class location changes and obvious misclassifications. Only with all field employees working in consultation with mapping and engineering employees can Continuing Surveillance be effective in documenting class location changes.
>
> CPSD views each and every class location misclassification as a breakdown in PG&E's continuing surveillance practices. CPSD finds that PG&E's procedures and training were ineffective at illustrating the importance of continuing surveillance especially as it relates to class location changes. As such, staff finds that the lack of focus and training on continuing surveillance was a contributing factor to PG&E's failure to make the required class location changes to its gas transmission pipeline system.

(CPSD's May 25, 2012 Report at 53.)

III. DID PG&E'S PROCEDURE FOR ESTABLISHING CONSERVATIVE ASSUMED SMYS VALUES IN EXCESS OF 24,000 PSIG VIOLATE 49 U.S.C. § 192.107(b)?

PG&E contends that because CPSD has not presented any evidence that the 133 pipe segments were not manufactured in accordance with the required specifications for their installation location, CPSD did not provide sufficient evidence of a violation. (PG&E OB at 3.) Therefore, PG&E claims the common industry practice to "infer" a conservative SMYS value based on procurement records may be employed. (*Id.* at 3-4.) PG&E defends the use of procurement records by asserting that CPSD agrees that "assigning an assumed SMYS value using the fully-researched and most conservative material procurement specification during the time in question would be appropriate." (PG&E OB at 4.) CPSD made no such statement. CPSD stated,

> …[T]he evidence demonstrates that PG&E did not fully research all of its 11 records of procurement specifications; thus there cannot be any certainty about what was the lowest quality/strength pipe it bought at any given time. PG&E is, therefore, required to

> default to the Part 192.107(b) value of 24,000 psi for the yield strength for unknown pipe…

(Ex. CPSD-4 at 2 (Supplemental Assumed SMYS Testimony).)

The risk of having potentially noncommensurate pipe in the system—by assuming the specifications of pipe segments procured at or about the time other pipe was actually placed in the ground—is too great. Nevertheless, PG&E asserts that "CPSD has not met its burden of establishing any violation of § 192.107(b)(2)." (PG&E OB at 5.)

Additionally, PG&E attacks the 133 instances alleged by CPSD for PG&E's failure to use conservative assumed SMYS values not to exceed 24,000 psig on the grounds that "CPSD offers no individualized evidence as to these … segments." (PG&E OB at 2.) It was PG&E who admitted these instances in its Class Location Study and responses to CPSD's data requests. Further, it was PG&E that contended that these instances appeared in its GIS (Geographic Information System) and were modified "to perform risk management calculations."[3] As noted in CPSD's OB, the 133 instances are violations of the literal terms of the federal safety regulation which provides that where the pipe specifications and tensile strength tests are not known, the maximum assumed SMYS value shall be "24,000 p.s.i." (49 C.F.R. § 192.107(b)(2).) PG&E contends that the pipe specifications could be determined by procurement records of pipe purchased at about the time that the pipe segments were installed. The actual pipe specifications and/or tensile test results were not available to PG&E. Consequently, CPSD cannot approve of assumed SMYS values above the maximum under 49 C.F.R. § 192.107(b)(2), i.e., 24,000 p.s.i.

IV. IS CPSD'S QUANTIFICATION OF VIOLATIONS ON A SEGMENT-BY-SEGMENT BASIS ARTIFICIAL AND INAPPROPRIATE?

PG&E claims that penalties assessed on a segment-by-segment basis is an "artificial and inappropriate measure" (PG&E Opening Brief ("OB") at 6) because:

[3] See PG&E's response to Data Request GTSClassLocationOII_DR_CPSD_002-Q01.

- Segments are often only a few feet in length (*ibid.*);
- one mistake may affect multiple segments (*ibid.*);[4]
- the term "segment" itself is not defined in the federal code or in General Order 112-E (*Ibid.*);
- the number of segments is constantly in flux (*ibid.*);CPSD's approach results in double-, triple-, quadruple-, and even quintuple-counting of individual segments (*id.* at 7);[5] and since
- "[t]he deficiencies stemmed from a single core issue: PG&E's patrol, class location, and continuing surveillance processes were not well linked and were not effective in maintaining the proper class location designations for 100% of PG&E's transmission system" (*ibid.)* that failure for a single "course of action" (*id.* at 8) should not be penalized for each regulation not followed.

PG&E's own rules and procedures identify portions of its transmission pipeline system as segments. PG&E chose to function in a manner identifying particular portions of its pipelines on a segment-by-segment basis. There is, unfortunately, no other means of identifying those portions except on a segment-by-segment basis. Since PG&E adopted a procedure that applied class location designations to a group of segments in a given location for purposes of determining pipe specifications and class location, it must comply with federal safety regulations on that basis.

PG&E's "layering" argument and its claim that CPSD is "compounding" violations (PG&E OB at 7) is ignoring the significant consequences of its admitted class location misclassifications. For example, if a given segment was determined to be misclassified by the PG&E/Willbros June 30, 2012 Class Location Study, staff sought to determine how the segment became misclassified and what were the effects of the misclassified segment. In the case of

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[4] PG&E cites the "cluster rule" as an example of one mistake affecting a number of pipe segments that are included separately in one area that was incorrectly determined to be in a class lower than the area's actual class location designation. (PG&E OB at 6.) See page 23 of CPSD's May 25, 2012 Investigative Report, "Transmission line 300A, segment 390 and eight additional contiguous segments lie just south of a large subdivision in the Coyote Valley south of San Jose. For this segment, the pipeline beneath the subdivision was analyzed and the class location adjusted, however the analysis was not performed correctly and the nine segments to the south were not re-classified as required."

[5] PG&E asserts that CPSD's allocation of a separate violation on a segment-by-segment basis for each violation of a separate safety regulation for the segment in question results in a "total of 3,062 code violations by "separating" and then "filtering" 898 segments into eight different categories or "layers" of different alleged code violations." (PG&E OB at 7.)

misclassified transmission line 300B, Segment 350, staff provided evidence of a missed report of new construction (not following patrolling procedures), a failure to perform a required study, a failure to confirm or revise the MAOP for the pipeline, and a non-commensurate SMYS—these are by no means an artificial layering but rather illustrate the safety consequences of having a misclassified segment. Further the Code of Federal Regulations itself refers to "segments". (See CPSD OB at II. B. 1. (a)(i) through (a)(vi) and 49 CFR §§ 192.609, 192.611, and 192.619, which state in part:

49 CFR § 192.609	"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 to determine…[emphasis added]."
49 CFR § 192.611	(a) 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 according to one of the following requirements…[emphasis added]."
49 CFR § 192.619	(a) "No person may operate a ***segment*** of steel or plastic pipeline at a pressure that exceeds a maximum allowable operating pressure determined under paragraph (c) or (d) of this section, or the lowest of the following … [emphasis added]."

As noted in CPSD's May 25, 2012 Investigative Report ("Report") and its Opening Brief, under each of the nine cited federal safety regulations, a failure on any segment was to be considered a single, separate violation. (CPSD Report at 46-53; CPSD OB at 3-6.) PG&E's contention that there should not be separate violations for "a single course of action" that resulted in deficiencies is based on the Commission's decision in *Utility Consumers' Action Network ("UCAN") v. SBC Communications ("AT&T")*, D.08-08-017, 2008 Cal. PUC LEXIS

302. UCAN alleged that AT&T terminated the availability of 911 service to residences formerly having billed telephone service after an arbitrary 180-day period and, further, alleged that AT&T had not made 911 service available to new residential units. For remedies, UCAN sought imposition of a penalty of $62 million. Because the violations in *UCAN v. AT&T, supra,* did not result in the fatalities, injuries, and damages found in this proceeding, that decision is not applicable to this proceeding. In *UCAN v. AT&T, supra*, the Commission found that the violation was only "moderately serious". (*Id.* at *43.)[6]

PG&E also cites *Pacific Gas and Electric Company,* D.99-06-080, 1999 Cal. PUC LEXIS 430, in support of its "one course of action" claim. (PG&E OB at 8.) However, the penalties there were agreed to by most of the parties to the proceeding.[7] In addition to the penalties imposed by the Commission on PG&E in *Pacific Gas and Electric Company, supra,* the Decision ordered "the cost of all claims related to the storm to be borne solely by PG&E's shareholders." (*Pacific Gas and Electric Company, supra,* at *1.) Also, the facts concerning the violations were wholly different from those appearing in this proceeding.

The violations in *Pacific Gas and Electric Company, supra,* concerned "unusually harsh rainstorms causing an estimated $ 1.3 billion in damages" in December 1995. (*Pacific Gas and Electric Company, supra,* at *3.) The severity of the storm was weighed by the Commission as part of its "assessment of the reasonableness of PG&E's response." (*Id.* at *34.) Staff in that proceeding concluded that "that PG&E's transmission and distribution systems were generally adequately inspected and maintained prior to the December 1995 storm." (*Id.* at *40.) The Commission concluded that "underbuilds[8] did increase the severity of the damage caused by the

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[6] "*What is not shown in the record is any evidence of actual injury to former customers or other persons* resulting from this policy and practice [emphasis added]. UCAN has not proven, or even attempted to prove, a single incident where a residential occupant was unable to reach 911 emergency services from a unit where warm line access had been terminated or never provided. Had such incidents been proven, the seriousness of AT&T's conduct would have been significantly enhanced." (*UCAN v. AT&T, supra,* at *44-*45.)

[7] The agreement was not an All Parties Settlement Agreement because while ORA, the Commission's Utility Safety Branch, and PG&E arrived at an agreement, TURN did not agree so that the settling parties characterized the agreement as a Joint Parties Agreement. (*UCAN v. AT&T, supra*, at *27.)

[8] "'Underbuild' means wires and equipment under the main conductors on the pole." (*Id.* at *41.)

high winds in the December 1995 storm. However, [the Commission] cannot find an outright violation of the requirements of GO 95." (*Id.* at *45.)

> PG&E experienced over $ 70 million in damages to 109 wood transmission poles, 1,490 wood distribution poles, 32 transmission towers, 940 distribution transformers, 86 miles of transmission conductor, and 435 miles of primary, secondary, and service conductor. The majority of the damage was caused by falling trees and tree limbs or other objects being blown into PG&E's electrical equipment.

(*Id.* at *141-*142.)

Pacific Gas and Electric Company, supra, concerned "a record that did not permit the Commission to quantify the extent or duration of individual acts…" (*Id.* at 128.) Here, each violation concerns a discrete act on pipeline segments resulting in easy quantification. Unlike this Class Location proceeding, there was no loss of life and, aside from damage to PG&E's infrastructure, no significant injury or damage to persons, local households, or communities in *Pacific Gas and Electric Company, supra.*

VI. CONCLUSION

For the reasons stated above, in its Opening Brief, and in its Report of May 25, 2012, 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,

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