

**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)

**DIRECT TESTIMONY OF
JOHN GAWRONSKI
ON BEHALF OF
THE CITY AND COUNTY OF SAN FRANCISCO
INVESTIGATION 11-11-009
CALIFORNIA PUBLIC UTILITIES COMMISSION
June 25, 2012**

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1 Q.1 Please state your name and business address.

2 A.1 My name is John Gawronski. I am a consultant affiliated with the Hudson River Energy
3 Group. My business address is 2079 County Route 47, Salem NY 12865.

4 Q.2 Please summarize your education and experience.

5 A.2 I have over 40 years of natural gas pipeline industry expertise in the areas of transmission
6 and distribution pipeline integrity management, pipeline codes and standards, as well as
7 monitoring and regulatory compliance reviews. I hold a BS in Mechanical Engineering
8 and MME in Engineering Management from City College of NY. For the period 1977 –
9 2003 I was Chief of Investigations for the Gas Division, Chief of Safety and Reliability
10 for the Office of Energy & Water, and later Gas & Water for the New York Public
11 Service Commission, supervising a staff of up to 30 employees including senior
12 supervisory responsibility for staff investigations of significant incidents and accidents,
13 and other unusual events, and serving as a senior technical advisor to the Commission
14 primarily on gas matters. I have reviewed the engineering, asset planning and operations
15 of all major New York combination companies and gas utilities. I have evaluated cast
16 iron and steel pipe replacement programs of utility operators and have participated in
17 Transmission Integrity Management Plan reviews and inspections with the USDOT of
18 transmission pipeline operators.

19
20 My resume is included as Exhibit 1.

21 Q.3 On whose behalf are you testifying in this proceeding?

22 A.3 I am testifying on behalf of the City and County of San Francisco (~~CCSF~~ or ~~San~~
23 ~~Franciscoll~~).

24 Q.4 What is the purpose of your testimony?

25 A.4 The purpose of this testimony is to provide additional insight into an operator's
26 obligation to validate the maximum allowable operating pressure (~~MAOP~~) upon the
27

1 change in population density in proximity to a transmission line, and to support findings
2 made in the Consumer Protection and Safety Division's (CPSD) Investigative Report
3 on PG&E's failure to properly classify pipelines and operate those pipelines prudently in
4 light of changes in population density in the areas surrounding those pipelines.

5 Q.5 What materials did you review in preparing this testimony?

6 A.5 I reviewed the National Transportation Safety Board Report (NTSB) Accident Report
7 dated August 30, 2011, the Independent Review Panel report dated June 24, 2011, the
8 CPSD Incident Investigation Report into the San Bruno rupture dated January 12, 2012,
9 the CPSD reports issued in CPSD's investigation into PG&E's record keeping practices
10 dated March 12, 2012, CPSD's Investigative Report in Investigation 11-11-009, PG&E's
11 response to data requests from various parties and other materials made available to the
12 public.

13 Q.6 Did the CPSD report make specific findings regarding PG&E's failure to verify the
14 MAOP for its pipelines?

15 A.6 Yes. The CPSD report found that PG&E admittedly failed to identify 898 pipeline
16 segments with class location changes on its transmission system.¹ The report also found
17 that PG&E's failure to identify locations with increased population density has resulted
18 in noncompliance with PG&E's own internal rules, a violation of 49 CFR §192.13(c),²
19 and that failure to identify changes in class locations resulted in PG&E failing to
20 conduct a class location study for 224 segments in violation of 49 CFR § 192.609.³ The
21 CPSD report also found that each failure of identification and failure to begin a class
22 study also resulted in a failure to confirm or revise the appropriate Maximum Allowable
23 Operating Pressure (MAOP) in violation of 49 CFR § 192.611.⁴ Most troubling, the
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25 ¹ CPSD Investigative Report Into the Operations and Practices of Pacific Gas & Electric
26 Company's Natural Gas Transmission Pipeline System in Locations with High Population
27 Density, at p. 1.

28 ² *Id.*

³ *Id.*

⁴ *Id.*

1 CPSD report found that some of these violations resulted in the operation of pipeline
2 segments above the federally established MAOP under 49 CFR §192.619—a particularly
3 serious violation due to the dangers of pipeline rupture to those living and working in the
4 immediate vicinity of the pipeline segment.⁵

5 Q.7 How long have some of these admitted failures persisted?

6 Q.7 In its January 17, 2012 regulatory filing, PG&E provided additional details regarding the
7 results of its class location review and stated that—many of these errors occurred many
8 years ago.⁶ This indicates that these violations have persisted for many years.

9 Q.8 What must an operator do if there are population density changes in the area surrounding
10 its pipelines?

11 A.8 Pursuant to 49 CFR § 192.613, an operator is required to perform—continuing
12 surveillance of its facilities to determine and take appropriate action concerning changes
13 in class location, failures, leakage, history, corrosion, substantial changes in cathodic
14 protection requirements, and other unusual operating and maintenance conditions.⁷ This
15 requirement applies to all transmission lines, not just those in high consequence areas.
16 Section 49 CFR § 192.609 also sets forth specific requirements regarding monitoring
17 changes in class location. Whenever there is a change in class location, the operator must
18 confirm or revise the MAOP.⁸ Based on the CPSD report, PG&E has not performed the
19 necessary continuing surveillance to ensure that its pipelines are operating at levels
20 commensurate with their class location.

21 Q.9 Have these requirements existed since the time the federal standards were enacted?

22 A.9 Yes. As originally enacted, the code of federal regulations included a section 192.607.
23 That section required operators to complete a study to determine the then-present class
24 location and ensure that the MAOP was commensurate with the class locations, as

25 ⁵ *Id.*

26 ⁶ PG&E's January 17, 2012 Response to Order Instituting Investigation 11-11-009, at p. 2.

27 ⁷ 49 C.F.R. § 192.613(a).

27 ⁸ 49 CFR § 192.611.

1 required by section 192.611. Operators were required to complete this initial
2 determination for all transmission pipelines operating over 40 percent SMYS by January
3 1, 1973. If there were changes in class location after April 15, 1973, those changes
4 would be governed by sections 192.609 and 192.611.⁹ The Department of Transportation
5 intended that section 192.609 and 192.611 together would be—sufficient to require that
6 operators have up-to-date class location determinations for high-stress pipelines, and
7 maintain the MAOPs for those lines commensurate with their class locations.||¹⁰

8 Q.10 Do these requirements apply to pipelines that are operated pursuant to 49 CFR
9 192.619(c)?

10 A.10 Yes. When setting a safe operating pressure for its pipelines, an operator must consider
11 all relevant factors including changes to the population density surrounding or near the
12 pipeline. Although the grandfathering provision, 49 CFR § 192.619(c), allows for
13 pipelines to be operated at historic high pressures experienced between 1965 and 1970,
14 that section explicitly states that—an operator must still comply with § 192.611.||¹¹

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16 This requirement was confirmed in a study performed by the Hartford Steam Boiler
17 Inspection and Insurance Company on behalf of the Gas Research Institute. The study
18 states that—The ‘grandfather clause’ essentially said not withstanding all other
19 requirements for establishing MAOP for new pipeline that: ‘...an operator may operate a
20 segment of pipeline found to be in satisfactory condition, considering its operating and
21 maintenance history, at the highest actual operating pressure to which the segment was
22 subjected during the 5 years preceding July 1, 1970...’, subject to the requirements of
23 change in class location.||¹²

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25 ⁹ 35 Federal Register 13249.

26 ¹⁰ 61 Federal Register 28780.

27 ¹¹ 49 C.F.R. § 192.619(c).

28 ¹² (Exhibit 2) Evaluation of Pipeline Design Factors, Michalopoulos and Babka, Hartford Steam
Boiler Inspection and Insurance Company, prepared for Gas Research Institute, (February 2000),
at p. 21.

1 Q.11 How many miles of PG&E's transmission pipelines did PG&E operate pursuant to
2 192.619(c)?

3 A.11 PG&E has stated that of the 1,805 miles of pipelines in Class 3 and 4 locations and Class
4 1 and 2 high consequence areas, 455 miles of transmission pipelines operate pursuant to
5 the grandfather clause.¹³ PG&E operates approximately 3,000 more miles of
6 transmission pipelines in non-high consequence areas. It is not clear how many of these
7 pipelines were operated pursuant to the grandfather clause. If PG&E failed to identify
8 changes in class locations, and failed to perform the class location study for
9 grandfathered segments, PG&E may have been operating those transmission lines above
10 the permitted MAOP.

11 Q.13 Does that conclude your testimony?

12 A.13 Yes, it does.

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¹³ PG&E March 15, 2011 Report on Records and Maximum Allowable Operating Pressure
Validation, p. 13 (filed in R.11-02-019).