



**Brian K. Cherry**  
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February 2, 2011

Paul Clanon, Executive Director  
California Public Utilities Commission  
505 Van Ness Avenue  
San Francisco, CA 94102-3298

Re: CPUC February 2, 2011 Directive Regarding Pressure Reduction

Dear Mr. Clanon:

By letter dated February 2, 2011, you directed PG&E to reduce the operating pressure 20 percent below the Maximum Allowable Operating Pressure (“MAOP”) on certain of its gas transmission pipelines. This letter sets forth how PG&E is responding to your directive and provides some additional information on pressure experienced on other PG&E pipelines.

### **Response to the CPUC’s February 2, 2011 Directive**

Federal law requires that pipeline operators establish an MAOP for all pipeline segments. The MAOP includes a wide margin of safety. On transmission pipelines it is set at a fraction—for example, 50 percent or less for a Class 3 location—of the pipe’s calculated strength (specifically, the Specified Minimum Yield Strength (“SMYS”), or the minimum pressure at which the pipe is expected to begin deforming).

PG&E regulates pressure on its pipeline system through a series of pressure regulator stations and over-pressure protection devices. These systems operate to keep pressure within specified limits. They are inspected and maintained regularly. Despite these dual systems, there are times when the pressure on a pipeline may operate outside of the specified limits. This can occur due to a variety of reasons including equipment failure, liquid contamination, or human error.

Attachment A identifies the transmission pipelines for which PG&E has initiated the process for reducing pressure. Under normal weather conditions, we do not anticipate any customer impacts from these pressure reductions. For lines 148 and 1816-01, some customers may be impacted under cold weather scenarios. We will advise the CPUC if we are forecasting those weather conditions. PG&E will prioritize the lines on Attachment A for further assessment to determine if hydrostatic pressure testing or in-line inspection is necessary. And, consistent with your directive, PG&E will take action to reduce pressure on any additional segments of transmission lines located in High Consequence Areas (HCA) that have experienced pressure greater than 110 percent of MAOP.

### **Additional Information on Planned Pressure Increases**

The CPUC previously asked for information with respect to instances where PG&E undertook planned pressure increases on its transmission lines. Attachment B lists the events we have identified. We continue to research our records for planned events for certain years (2005-2007) where we suffered a hard-drive failure and will provide additional information if we identify other instances where this practice occurred.

Attachment B lists the dates, line numbers and the highest pressure readings experienced on each transmission line where PG&E undertook planned pressure increases. In several instances, PG&E exceeded MAOP by a few pounds, but never by more than 10 percent of MAOP. Each of the HCA segments that experienced a pressure in excess of the MAOP is being reviewed and will be prioritized for reassessment as part of our integrity management program, if applicable, including possible hydrostatic pressure testing or in-line inspection. We will take similar action on any other HCA transmission line segments where pressure exceeded MAOP.

Pipeline operating pressure in the course of normal operations will vary depending on such factors as weather conditions, customer demands, and operating and maintenance considerations. In addition, it is important to note that the operating pressure on a pipeline varies depending on location. The pressure readings shown on Attachment B represent the highest pressure readings on the lines. As gas leaves a regulator station and travels downstream, the pressure on the line decreases due to friction and the distribution of gas to customers. Thus, the pressure readings on Attachment B were not experienced on the entire line.

### **Additional Information on Distribution Line Pressure Events**

We are also including as Attachment C to this letter information on instances from January 2006-September 2010 where the pressure on distribution lines exceeded the amounts permitted under federal code (*See* 49CFR 192.201). Similar to our gas transmission pipelines, there are substantial safety factors already built into the pressure limitations established for our distribution pipelines. All of our distribution lines operate at only a fraction of their established design capability, resulting in a high margin of safety. For example, steel distribution lines operate at less than 20 percent SMYS. In every case, PG&E took corrective action (e.g., replacing equipment, performing leak surveys, inspecting meters).

### **Additional Actions**

Following the San Bruno accident, PG&E reduced the pressure on its three gas transmission lines running up the Peninsula by 20 percent. We also began a comprehensive review of our integrity management practices and procedures, and brought in outside experts to assist us in this effort. In December, PG&E reduced pressure by 20 percent on other transmission pipelines in our system that were installed prior to 1962<sup>1</sup> in HCAs and contain 30-inch pipeline segments that had not been pressure tested in the field. As we move forward, we will continue to review our practices and take steps to ensure the integrity and safety of our gas system.

PG&E has launched a series of initiatives to improve the safety and operations of our natural gas system and the safety of the communities we serve. The process of improving our gas operations will take time to complete, and we are approaching it with a sense of urgency.

Please contact us should have any questions.

Sincerely,



Brian Cherry  
Vice President, Regulatory Relations

cc: Michael R. Peevey, President  
Mike Florio, Commissioner  
Catherine Sandoval, Commissioner  
Timothy A. Simon, Commissioner  
Julie Fitch, Energy Division  
Richard Clark, Consumer Protection Safety Division  
Julie Halligan, Consumer Protection Safety Division  
Frank Lindh, General Counsel  
Harvey Y. Morris, Legal Division  
Patrick S. Berdge, Legal Division  
Joe Como, Division of Ratepayer Advocates

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<sup>1</sup> In 1961, the Commission adopted General Order 112, which required pressure testing for new pipelines.

**Attachment A**  
**Lines on Which the CPUC Has Directed PG&E to Reduce Pressure**

Date	Line	Location	MAOP (psig)	Max P reached <sup>1</sup> (psig)
22-Jun-10	DFM 0805-01*	Area 3, San Jose Division, Milpitas	200	300
13-Nov-09				222
15-Dec-08				275
22-Jun-10	DFM 0807-01*	Area 3, San Jose Division, Milpitas	200	300
13-Nov-09				222
15-Dec-08				275
12-Jun-09	DFM 1816-01	Area 3, Central Coast Division, Watsonville	303	338
15-Dec-08	L148	Area 5, Stockton Division, Modesto	408	650

\*Pipelines with multiple pressure increase events.

<sup>1</sup> Based on instantaneous pressure reading from Citect SCADA database where available, hourly pressure average data in SCADA Gas Historian, where available or field pressure test gauge.

Paul Clanon  
February 2, 2011

**Attachment B**  
**Planned Pressure Exercises**

Date	Line	MAOP (psig)	Max P reached <sup>1</sup> (psig)
20-Jul-10	L50A	250	252.0
12-Apr-10	L109*	150	147.2
08-Jan-10	L118A	400	402.4
13-Aug-09	L142S*	600	523.8
19-Jun-09	L107	477	470.7
19-Jun-09	L114	497	499.0
08-Jan-09	L108	412	409.0
09-Dec-08	L132*	400	400.7
14-Nov-08	L109	375	375.1
12-Nov-08	DFM 0805-01	200	197.4
30-Oct-08	L138	650	651.2
23-May-08	DFM 1607-01	188	175.2
19-Oct-04	L142S*	600	554.1
11-Dec-03	L101	396	402.2
11-Dec-03	L132*	400	402.7
29-Sep-03	L142S*	600	523.3
11-Dec-03	L109*	150	150.0

\*Pipelines with multiple pressure increase events.

<sup>1</sup>Based on hourly pressure average data in SCADA Gas Historian.

**Attachment C**  
**Distribution Line Pressure Events**

Date	Location / Line	MAOP (psig)	Max P reached <sup>1</sup> (psig)
02-Dec-08	1305-01*	150	200
10-Jun-09	1305-01*	150	187
24-Aug-09	0618-05	175	230
01-Feb-06	Redacted	60	145
06-Feb-07		50	63
09-Feb-07		50	59
16-Feb-07		50	82
29-Oct-07		10.5" wc <sup>2</sup>	16" wc <sup>2</sup>
07-Apr-08		60	240
20-Nov-08		50	58
04-Feb-09		10.5" wc <sup>2</sup>	13" wc <sup>2</sup>
17-Mar-09		30	42
23-Jul-09		60	175
25-Sep-09		60	175
10-May-10		55	71
08-Sep-10		10.5" wc <sup>2</sup>	11" wc <sup>2</sup>

\*Distribution system with multiple pressure increase events

<sup>1</sup>Based on instantaneous pressure reading from Citect SCADA database, where available, hourly pressure average data in SCADA Gas Historian, where available or field pressure test gauge

<sup>2</sup>27.7" wc = 1 psig