

**PACIFIC GAS AND ELECTRIC COMPANY
San Bruno GT Line Rupture Investigation
Data Response**

PG&E Data Request No.:	CPUC_184-03Supp01		
PG&E File Name:	SanBrunoGT-LineRuptureInvestigation_DR_CPUC_184-Q03Supp01		
Request Date:	September 14, 2011	Requester DR No.:	
Date Sent:	February 2, 2012	Requesting Party:	CPUC (CPSD)
		Requester:	██████████

Please note the attachments to this response contain sensitive personal information pertaining to PG&E employees, such as employee names and Lan IDs. For this reason, and only for this reason, PG&E is providing this response pursuant to Public Utilities Code section 583. The dissemination of employee information contained in the attachments to this response raise privacy concerns. Therefore, PG&E believes that such information should remain confidential and not be subject to public disclosure.

Question 3

What studies, if any, were conducted under 49 CFR 192.609 to compare the design, construction, and testing procedures used in the original construction of segments of PG&E's pipeline with the new class designations (e.g., caused by increased population density or the establishment of an HCA) identified in the June 30, 2011 CPUC Class Location Study?

-Please include the operating and maintenance history of these segments, the maximum actual operating pressure and the corresponding hoop stress, taking pressure gradient into account, for the pipeline segments, and the actual area affected by the population density increase including physical barriers or other factors which may limit further expansion of the more densely populated area, considered in class studies conducted by PG&E prior to September 9, 2010, on those class locations identified as changed in the June 30, 2011 CPUC Class Location Study.

-Please provide copies of all class location studies conducted prior to September 9, 2010, on those changed class locations (172.1 miles of transmission pipeline segments) identified in the June 30, 2011 CPUC Class Location Study.

ANSWER 3 (PROVIDED TO CPSD ON OCTOBER 7, 2011)

On June 30, 2011, PG&E submitted a report on the Company's on-going system-wide class location verification effort to the CPUC. PG&E provided data from a report by Willbros Engineers (U.S.), LLC ("Willbros") in which Willbros identified that 172.1 miles

of pipeline had changed up in class location. As a result of PG&E's continued work to review and verify class location designations across its gas transmission system, and its attendant quality control and quality assurance efforts, as of September 12, 2011, the number of miles with a possible change up in class location has decreased to 169.6. In addition, Willbros and PG&E are analyzing the cause of the class changes, and which ones are due to an increase in population density.

PG&E is undertaking an extensive effort to confirm and revise, as necessary, the MAOP on each of the segments identified by Willbros that potentially changed up in class location designation. As part of this process, PG&E's pipeline engineers have been reviewing and considering design, construction, and testing information when available. PG&E has prioritized the segments and has focused first on the ones that possibly were operating at a pressure above their class designation as shown by the preliminary Willbros review. Depending upon the particular characteristics of each affected pipeline segment, the Company may replace the pipeline or reduce the operating pressure as appropriate. PG&E's pipeline engineers will complete studies pursuant to 49 CFR 192.609 on pipeline segments that have gone up in class as soon as possible once pressure issues have been resolved.

In addition, PG&E is in the process of reviewing its records in order to identify class location studies that were performed for these pipeline segments prior to September 9, 2010. PG&E will update the Commission when it has retrieved relevant information.

ANSWER 3 (SUPPLEMENTAL RESPONSE- PROVIDED TO CPSD ON FEBRUARY 2, 2012)

As described in PG&E's Response to I.11-11-009 (Response) PG&E determined that 293 of the 1,376 segments that are currently in a higher class location than reflected in GIS had an MAOP greater than 40% SMYS.¹ Where PG&E had not identified a change in class location that occurred prior to the June 30, 2011, Class Location Study Report, it did not perform a class location study under Section 609 at the time of the class location change. Since filing its Response PG&E has updated its analysis and determined that there were actually 282 segments requiring a Section 609 study.

Section 609 studies for these 282 segments are attached to this response, and are listed in the table below.² Each study consists of two documents taken together, a

¹ Although the language of 49 CFR 192.609 is disjunctive, since a hoop stress of 40% of SMYS is allowed in class locations, by definition a segment must be operating at a hoop stress greater than 40% of SMYS to be potentially not commensurate with the allowable hoop stress for its class location.

² Some of the attached studies show additional segments that are operating under 40% SMYS because PG&E conservatively included them for a Section 609 study while it simultaneously validated their MAOPs. The studies initiated for these segments

“609 study” and a corresponding PSVF form, which includes information gathered and analyzed during the Section 609 study.

Attachment	Description
SanBrunoGT-LineRuptureInvestigation_DR_CPUC_184-Q03Atch01	Summary table of 282 segments
SanBrunoGT-LineRuptureInvestigation_DR_CPUC_184-Q03Atch02-CONF	131_Antioch_Livermore_11022011
SanBrunoGT-LineRuptureInvestigation_DR_CPUC_184-Q03Atch03-CONF	21F_Adobe_SanRafael_10262011
SanBrunoGT-LineRuptureInvestigation_DR_CPUC_184-Q03Atch04-CONF	300A_Hinkley_PLS3_11162011
SanBrunoGT-LineRuptureInvestigation_DR_CPUC_184-Q03Atch05-CONF	300A_PLS4_PLS5_11162011
SanBrunoGT-LineRuptureInvestigation_DR_CPUC_184-Q03Atch06-CONF	300A_PLS6_PLS7_11152011
SanBrunoGT-LineRuptureInvestigation_DR_CPUC_184-Q03aAtch07-CONF	300B_Hinkley_PLS3
SanBrunoGT-LineRuptureInvestigation_DR_CPUC_184-Q03_Atch08-CONF	300B_Kettleman_PLS6_11162011
SanBrunoGT-LineRuptureInvestigation_DR_CPUC_184-Q03Atch09-CONF	300B_PLS4_Kettleman_11072011
SanBrunoGT-LineRuptureInvestigation_DR_CPUC_184-Q03Atch10-CONF	300B_PLS6_Milpitas_10252011
SanBrunoGT-LineRuptureInvestigation_DR_CPUC_184-Q03Atch11-CONF	303_ [REDACTED] _11152011
SanBrunoGT-LineRuptureInvestigation_DR_CPUC_184-Q03Atch12-CONF	303_ [REDACTED] _11302011
SanBrunoGT-LineRuptureInvestigation_DR_CPUC_184-Q03Atch13-CONF	400_ [REDACTED] _Antioch_11072011
SanBrunoGT-LineRuptureInvestigation_DR_CPUC_184-Q03Atch14-CONF	401_Bethany_Panoche_11072011
SanBrunoGT-LineRuptureInvestigation_DR_CPUC_184-Q03Atch15-CONF	609 Review Remaining Segments_B1CW-1_Signed
SanBrunoGT-LineRuptureInvestigation_DR_CPUC_184-Q03Atch16-CONF	609 Review Remaining Segments_BAM7-2_Signed
SanBrunoGT-LineRuptureInvestigation_DR_CPUC_184-Q03Atch17-CONF	609 Review Remaining Segments_BAM7-3_Signed
SanBrunoGT-LineRuptureInvestigation_DR_CPUC_184-Q03Atch18-CONF	609 Review Remaining Segments_D5SC-1_Signed
SanBrunoGT-LineRuptureInvestigation_DR_CPUC_184-Q03Atch19-CONF	609 Review Remaining Segments_IAP4-1_Signed
SanBrunoGT-LineRuptureInvestigation_DR_CPUC_184-Q03Atch20-CONF	609 Review Remaining Segments_IAP4-2_Signed
SanBrunoGT-LineRuptureInvestigation_DR_CPUC_184-Q03Atch21-CONF	609 Review Remaining Segments_MGT-1 and MGT-2_Signed

were not completed once they were determined to be under 40% SMYS. These segments are not included in the final count of 282 segments with a complete Section 609 study.

SanBrunoGT-LineRuptureInvestigation _DR_CPUC_184-Q03_Atch22-CONF	609 Review Remaining Segments_NPJ3-1_Signed
SanBrunoGT-LineRuptureInvestigation _DR_CPUC_184-Q03Atch23-CONF	609 Review Remaining Segments_RJWS-1_Signed
SanBrunoGT-LineRuptureInvestigation _DR_CPUC_184-Q03Atch24-CONF	609 Review Remaining Segments_RJWS-2_Signed
SanBrunoGT-LineRuptureInvestigation _DR_CPUC_184-Q03Atch25-CONF	609 Review Remaining Segments_SEBQ-1_Signed
SanBrunoGT-LineRuptureInvestigation _DR_CPUC_184-Q03Atch26-CONF	609 Review Remaining Segments_SEBQ-2_Signed
SanBrunoGT-LineRuptureInvestigation _DR_CPUC_184-Q03Atch27-CONF	609 Review Remaining Segments_SRFA-1_Signed
SanBrunoGT-LineRuptureInvestigation _DR_CPUC_184-Q03Atch28-CONF	609 Review Remaining Segments_TWS4-1_Signed
SanBrunoGT-LineRuptureInvestigation _DR_CPUC_184-Q03Atch29-CONF	609 Review Remaining Segments_TWS4-2_Signed
SanBrunoGT-LineRuptureInvestigation _DR_CPUC_184-Q03Atch30-CONF	609 Review Remaining Segments_TWS4-3_Signed
SanBrunoGT-LineRuptureInvestigation _DR_CPUC_184-Q03Atch31-CONF	609 Review Remaining Segments_TWS4-4_Signed
SanBrunoGT-LineRuptureInvestigation _DR_CPUC_184-Q03Atch32-CONF	609 Review Remaining Segments_TWS4-5_Signed
SanBrunoGT-LineRuptureInvestigation _DR_CPUC_184-Q03Atch33-CONF	609 Review Remaining Segments_TWS4-6_Signed
SanBrunoGT-LineRuptureInvestigation _DR_CPUC_184-Q03Atch34-CONF	609 Review Remaining Segments_TWS4-7_Signed
SanBrunoGT-LineRuptureInvestigation _DR_CPUC_184-Q03Atch35-CONF	609 Review Remaining Segments_TWS4-8_Signed
SanBrunoGT-LineRuptureInvestigation _DR_CPUC_184-Q03Atch36-CONF	609 Review Remaining Segments_WGC7-1_Signed
SanBrunoGT-LineRuptureInvestigation _DR_CPUC_184-Q03Atch37-CONF	609 Review Remaining Segments_WGC7-2_Signed
SanBrunoGT-LineRuptureInvestigation _DR_CPUC_184-Q03Atch38-CONF	609 Review Remaining Segments_WGC7-3_Signed
SanBrunoGT-LineRuptureInvestigation _DR_CPUC_184-Q03Atch39-CONF	609 Review Remaining Segments_WGC7-4_Signed
SanBrunoGT-LineRuptureInvestigation _DR_CPUC_184-Q03Atch40-CONF	609 Review Remaining Segments_WGC7-5_Signed
SanBrunoGT-LineRuptureInvestigation _DR_CPUC_184-Q03Atch41-CONF	609 Review Remaining Segments_WGC7-6_Signed
SanBrunoGT-LineRuptureInvestigation _DR_CPUC_184-Q03Atch42-CONF	609 Review Remaining Segments_WGC7-7_Signed
SanBrunoGT-LineRuptureInvestigation _DR_CPUC_184-Q03Atch43-CONF	PSVF_Sections 131A L to 401B P
SanBrunoGT-LineRuptureInvestigation _DR_CPUC_184-Q03Atch44-CONF	PSVF_Sections [REDACTED]
SanBrunoGT-LineRuptureInvestigation _DR_CPUC_184-Q03Atch45-CONF	PSVF_Sections [REDACTED]
SanBrunoGT-LineRuptureInvestigation _DR_CPUC_184-Q03Atch46-CONF	PSVF_Sections [REDACTED]
SanBrunoGT-LineRuptureInvestigation _DR_CPUC_184-Q03Atch47-CONF	SAC_220 [REDACTED]_10262011

