

**PACIFIC GAS AND ELECTRIC COMPANY  
Gas Transmission System Class Location OII  
Data Response**

PG&E Data Request No.:	CPSD_002-01		
PG&E File Name:	GTSCClassLocationOII_DR_CPSD_002-001		
Request Date:	December 16, 2011	Requester DR No.:	PG&E 12-16-11-06
Date Sent:	January 23, 2012	Requesting Party:	CPUC (CPSD)
		Requester:	[REDACTED]

**QUESTION 1**

1. In response to Data Request CPUC\_164-Q06, PG&E provided several pipeline segments with assumed SMYS values greater than 24,000 p.s.i. For each segment provided in PG&E's response CPUC\_164-Q06Supp01Atrch11-CONF (and summarized in Attachment A of this Data Request) provide the following:
  - a. Evidence of an assumed SMYS value based on the tensile test requirements established in Title 49 CFR § 192.107. (Please provide evidence of the tensile tests for each segment if applicable).
  - b. For any assumed SMYS values that were not established by the tensile test requirement methods of Title 49 CFR § 192.107, explain why an assumed value greater than 24,000 p.s.i. was used?

**ANSWER 1**

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

As requested by Data Request CPUC\_164-Q06, PG&E provided the Commission with annual archived versions of GIS. As PG&E has previously explained, GIS provides a quick reference to system information, but is not PG&E's system of record for pipeline data. PG&E's system of record, and what is used by PG&E to calculate the SMYS value of its pipelines, is the "job files" for each pipeline segment, which prior to September 9, 2010, may have been stored in local offices, the Walnut Creek Records Center, and other facilities. These records have the most complete and accurate information on each pipeline segment.

PG&E uses GIS as a tool for, among other things, risk management analysis to focus and prioritize integrity management activities. The assumed values for SMYS greater than 24,000 psi that appear in GIS have been modified to perform risk management calculations.

The use of assumed values for Integrity Management purposes is consistent with ASME B31.8S. (See, e.g., Appendix A1.2.) For the versions of GIS provided in response to Data Request CPUC\_164-Q06, PG&E used primarily two documents to populate the unknown pipe properties in GIS. The first document was prepared in 2000 and covers the unknown pipe properties for transmission pipelines installed between 1920 and 1972.(GTSCClassLocationOII\_DR\_CPSD\_002-Q01-Atch01-CONF). The second document was based on later research and prepared in 2005. It covers unknown pipe properties for transmission pipelines installed between 1942 and 1995 (GTSCClassLocationOII\_DR\_CPSD\_002-Q01-Atch02-CONF). These documents use conservative values that may elevate the calculated risk used for prioritization of integrity management assessments and may prompt further mitigation actions.

PG&E has not performed tensile tests on any of the segments where the assumed SMYS value in GIS is greater than 24,000 psig. Title 49 CFR § 192.107 provides that for pipe whose specification or tensile properties are unknown, the yield strength used in the design formula of Section 192.105 is to be, among other things, 24,000 p.s.i. The job files, and not GIS, are what PG&E pipeline engineers use when they need to calculate design pressure or %SMYS. PG&E engineers also use conservative engineering based assumptions, based, for example, on PG&E's prior purchasing history, where PG&E's records are not conclusive but the pipe's properties are not completely unknown. See also D.11-06-017, Ordering Paragraph 1 directing PG&E to use engineering-based assumptions for pipeline components where complete records are not available.

As the Commission knows, pursuant to Resolution L-410 and D.11-06-017, PG&E has initiated a comprehensive records search and review for the original source documents to validate the MAOP and create pipeline features lists (PFL) <sup>1</sup> of its transmission pipelines. Where pipe specification data is not available or cannot be conclusively verified, conservative assumptions are used, and when appropriate, field excavations conducted. The product of this comprehensive effort, e.g., validated information and records confirming pipeline specifications, has been and continues to be provided to key groups within PG&E, such as integrity management and the team leading PG&E's Pipeline Safety Enhancement Plan. PG&E is also developing an enhanced GIS platform into which this verified and confirmed pipeline information will be integrated.

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<sup>1</sup> A catalog of all pipeline components and associated specifications for a specified pipeline segment(s).