PACIFIC GAS AND ELECTRIC COMPANY
San Bruno Gas Transmission Line Incident
Data Response

PG&E Data Request No.:	NTSB_055-003		
PG&E File Name:	San Bruno GT Line Incident_DR_NTSB_055-003		
Request Date:	March 16, 2011	Requesting Party:	NTSB
Date Sent:	March 31, 2011	Requestor:	Operations (Chhatre/ Gunther)

QUESTION 3

PG&E's basis for excluding manufacturing and fabrication threats for Line 132 including the reasoning for considering them as stable threats. Please provide the methodology for assessing PG&E's risk management plans including their metrics.

ANSWER 3

Many segments on line 132 are considered to have a potential manufacturing threat or construction threat. Most of these are designated as a manufacturing or construction threat due to the segments' age and susceptibility to ground movement; some are due to potential seam threats such as low frequency electric resistance welded ("ERW") pipe.

Pursuant to 49 C.F.R., section 192.917(e)(3), a segment identified as having a potential manufacturing threat or fabrication defect may be considered stable if the operating pressure on the covered segment has not increased over the maximum operating pressure experienced during the five years preceding identification of the high consequence area ("HCA"). Once that stability value is established, a potential manufacturing threat or construction defect may become unstable if the operating pressure increases above the maximum operating pressure experienced during the preceding five years, the MAOP increases or the stresses leading to cyclic fatigue increase. If any of these three events occur, the covered segment must be prioritized as a high risk segment for the baseline assessment or a subsequent reassessment.

Although some segments on Line 132 were identified as potential manufacturing or construction threats, these segments were considered stable. Pursuant to the Company's Integrity Management Program procedures, none of the triggers occurred to suggest that the segment be considered a high risk segment for the baseline assessment or a subsequent reassessment.

Pursuant to 49 C.F.R., section 192.917(e)(4), any covered pipeline segment with low frequency electric resistance welded pipe or other pipe that satisfies the conditions specified in ASME/ANSI B31.8S, Appendices A.4.3 and A.4.4, and any covered or noncovered segment in the pipeline system with such pipe that has experienced seam

failure, or operating pressure on the covered segment has increased over the maximum operating pressure experienced during the preceding 5 years, that segment will be considered an unstable threat and must be prioritized as a high risk segment for the baseline assessment or a subsequent reassessment.

Although some segments on Line 132 were identified as falling under section 192.917 (e) (4), pursuant to the Company's Integrity Management Program procedures, these segments were considered stable and none of the triggers occurred to suggest that the segment be considered a high risk segment for the baseline assessment or a subsequent reassessment.

Absent the following criteria, a segment would not be considered a potential manufacturing threat or fabrication/construction threat:

- Segments identified under section 192.917 (e) (3) and (e) (4);
- Segments identified as having a joint efficiency (JE) of less than 1;
- Segments containing low frequency electric resistance welded pipe or flash welded pipe;
- Segments that satisfy the conditions specified in ASME B31.8S, Appendices A.4.3 and A.4.4.

As set forth above, the identification of a manufacturing or construction threat is only the beginning of the analysis. If a potential threat on a segment is determined to be stable (i.e., none of the triggers under section 192.917 (e) (3) and (e) (4) or other conditions specified above have been triggered), the segment is not prioritized as a high risk segment for baseline assessment or subsequent reassessment.

Risk and threat assessment plans are reviewed and updated with the latest available information pertaining to the various threats the pipeline is likely to be subjected to. Overall program metrics include those required to be reported to the federal Office of Pipeline Safety (OPS) as well as those required by ASME B31.8S.