

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

PG&E Data Request No.:	CPUC_164-Q02		
PG&E File Name:	SanBrunoGT-LineRuptureInvestigation_DR_CPUC_164-Q02		
Request Date:	August 26, 2011	Requester DR No.:	
Date Sent:	September 2, 2011	Requesting Party:	CPUC (CPSD)
		Requester:	

**QUESTION 2**

Provide a detailed description, including methods and procedures used, on how the system-wide verification of PG&E Transmission pipeline class locations was conducted by Willbros Engineers, (U.S.), LLC.

**ANSWER 2**

Attached to this response is the step-by-step process describing the methods and procedures Willbros used to conduct the system-wide verification of PG&E's class location designations (*SanBrunoGT-LineRuptureInvestigation\_DR\_CPUC\_164-Q02Atch01*). Below is an overview of what is described in much greater detail in the attached document.

*Set Up & Class Determination*

As an initial step, PG&E provided Willbros' engineers source Geographic Information System (GIS) data regarding the Company's entire transmission pipeline system. As PG&E has previously noted, the GIS database is not PG&E's system of record for all pipeline attributes, but for a system-wide effort PG&E elected to use GIS as the starting point for the sake of efficiency. Willbros utilized three primary fields from this source data (fields with information about the number of buildings, units or dwellings and well defined outside areas per 49 CFR Part 192.5) to attribute parcel datasets and then ran PG&E's class calculator and reviewed the results.

Next, Willbros engineers worked with GIS analysts to conduct class analysis for each of the 40 counties within PG&E's service territory. Once Willbros determined a class location area, it updated its database. Once completed, Willbros engineers reviewed the class location area for structures and identified sites to determine whether the class location designation should be modified.

PG&E instructed Willbros to be conservative in performing its analysis to ensure no class locations were classified lower than they should be. Once completed, Willbros performed a quality control check on each of these class location designations.

*Mapping & Delivery*

Next, Willbros designed two overlapping mapping templates, reflecting PG&E's gas transmission system, buffer zones, parcel data and class location designations. These maps went through two stages of quality control checks. Once Willbros engineers approved these maps, a report was run describing the proposed class location change indicated on the map. In addition, GIS analysts provided GIS data in tabular format for the affected pipe segments on the map. Willbros' engineers reviewed this additional data, adding explanatory text as needed.

Willbros placed all maps and corresponding reports into binders and prepared a GIS extract of data for each county. After final quality control checks and spreadsheet updates, Willbros delivered the binders to the appropriate PG&E engineer for review and approval.

As described in the June 30 Report, PG&E is continuing to aggressively review its records for segments so that they are operating in the correct class level and to validate Willbros' initial analysis. The process of PG&E engineers reviewing Willbros' preliminary verification, sending the Willbros maps back for additional review, modification and finalization is ongoing. The attached procedure provides that after the maps and reports are finalized, Willbros will create a summary report for each county as well as an overall PG&E system report and make a final delivery, but this has not yet happened.