

**DRA DATA REQUEST
DRA-SCG-DR-148
SOCALGAS 2012 GRC – A.10-12-006
SOCALGAS RESPONSE**

**DATE RECEIVED: NOVEMBER 10, 2011
DATE RESPONDED: NOVEMBER 28, 2011**

Exhibit Reference: SCG-205

Subject: Gas Engineering O&M

Please provide the following:

1. Referring to page RKS-18 and RKS-19, please provide the total number of HCA and non-HCA miles SoCalGas assessed each year from 2004 to 2009.

SoCalGas Response 01:

	2003	2004	2005	2006	2007	2008	2009	Total
Baseline-HCA	35	109	117	325	281	106	74	1,047
Baseline-NON HCA	65	72	168	324	102	8	27	766
Re-Assessment-HCA					6		23	29
Re-Assessment-NON HCA					3		93	96
Total	100	181	285	649	392	114	217	1,938

(miles)

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2. Referring to page RKS-34, Table RKS-5, please provide the 2011 recorded expenses for (1) number of Risers Inspected, (2) number of Trenton Coating Applied, and (3) # of Risers Replacement Orders.

SoCalGas Response 02:

- (1) 2011 recorded expenses are not available at this time.
- (2) There have been 27,752 AL risers inspected and coated with the Trenton coating for this DIMP program through 11/1/2011.
- (3) There have been 6,157 riser replacement orders issued for this DIMP program through 11/1/2011.

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3. Referring to pages RKS-28 to RKS-35, please provide the following information:
- a. A copy of SoCalGas' Anodeless Riser Inspection Program as identified in the engineering report.
 - b. Is the Anodeless Riser Inspection Program a part of the Distribution inspection and mitigation work activity? If not, please explain.
 - c. Identify the inspection criteria in the Anodeless Riser Inspection Program used to determine if the 650 AL risers in the pilot program "passed" or "failed."
 - d. Please identify the reasons the 650 AL risers "failed", the manufacturer, make, locations within the service territory, and year of install. Also, provide a citation to the engineering study where these failures are discussed.
 - e. Please provide a citation to the "comprehensive engineering analysis report" identified on page RKS-29, where SoCalGas identified the risks associated with AL risers that are new, different, or an increase from the 2004-2009 levels, and that were and are currently addressed by Distribution and that now necessitate an accelerated mitigation/replacement approach by Engineering for DIMP.
 - f. Please identify the criteria of the 650 AL risers SoCalGas used to extrapolate the accelerated replacement of 300,000 AL risers.
 - g. On page RKS-29, SoCalGas states, "...In response to DRA-SCG-040-DAO, SoCalGas provided, in response to question 3(a), a copy of its comprehensive engineering analysis report explaining in great detail the issues that are driving this DIMP request." Question 3(a) referred to SoCalGas statement, "Based on a preliminary analysis, SoCalGas estimates that approximately 15% of the risers will ultimately qualify for replacement...." Please explain how the "preliminary" analysis is a "comprehensive" analysis.
 - h. Has SoCalGas performed any other analysis with regard to the failure rate of AL risers, in addition to the report provided to DRA in response to DRA-SCG-040-DAO, question 3(a)? If so, please provide such analysis or analyses.

SoCalGas Response 03:

- a. Attached is the copy Gas Standard 184.0121, Anodeless Riser Inspection Program. This document was also presented in response to SCG-DRA-040, Question 3e, and in Attachment B of Mr. Stanford's Rebuttal testimony:



1840121.pdf

- b. Yes, this procedure is currently used by the field operations organizations during routine anodeless riser inspection activities.

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SoCalGas Response to Question 3 (continued)

- c. Section 4 of Gas Standard 184.0121 details the inspection criteria used to determine the fitness for service of AL risers during MSA inspections. These criteria were used to determine if the 650 AL risers in the pilot program “passed” or “failed.”
- d. This information was provided in response to Data Request SCG-DRA-040, Question 3(a), as an attachment (*AL Pilot Survey with conf.pdf*) showing the inspection results of the pilot program. Please refer to the DR for this information.
- e. The citation in response to this question is Figure 3 of the DIMP-Driven Anodeless Riser Inspection Project Report which demonstrates the increasing nature of the AL Riser system threat along with the projected increasing trend. AL risers are a known safety threat to SoCalGas’ distribution system. SoCalGas has been addressing this threat as part of routine operations for a number of years. In accordance with the new DIMP regulations, SoCalGas has evaluated its system threats and determined that the current, routine, efforts for addressing this threat should be accelerated due to the historical trending of leak repairs to AL risers, the projected future increase in AL riser leak repairs, and the safety threat presented by such leaks in near proximity to homes and buildings. SoCalGas’ position is that it is most prudent to address and mitigate current, known threats to its system and continue to be aware of and address any new threats that are identified. Again, the DIMP regulations do not simply state that an operator is to only look for and address new threats.
- f. The pilot survey data summary provides the information used to determine that 300,000 anodeless risers will require replacement. The final three pages of the “*AL Pilot Survey with conf.pdf*” file summarize the inspections/failures by three geographic-based regions: Coastal, Inland, and Desert. Failure rates for each region were calculated and applied to the ratios of installed AL risers in each region. This resulted in a total weighted average failure rate of approximately 19%. As mentioned in the AL Riser Report, this rate was reduced to a more conservative rate of 15% and applied to the total number of AL risers installed, providing the number of 300,000 AL risers requiring replacement.

Further, since the inception of the DIMP-Driven AL Riser inspection program in June 2010, there have been approximately 32,000 DIMP AL riser inspections, resulting in roughly 6,200 replacement orders generated. This equates to a replacement rate of over 19%, which further supports to data analysis and conclusions of the pilot survey and DIMP-AL riser report.

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SoCalGas Response to Question 3 (continued)

From the second and third paragraphs on page 5 of the DIMP-Driven Anodeless Riser Inspection Report, the following is stated:

Approximately 650 anodeless risers were inspected and their conditions were documented. An inspection criteria described in the company's Anodeless Riser Inspection Program was used to determine if the riser "passed" or "failed". An average failure rate was calculated for each of the 3 geographic regions. This failure rate was then statistically applied across the company's service territory, comprising of 44 operating Districts based on the population density of anodeless risers for each geographic area. Based on this analysis, the failure rate was calculated to be 19%. Since this pilot research survey covered a relatively small sampling of the company's total anodeless risers, a conservative failure rate of 15% can be applied. The total number of anodeless risers installed since the 1970s is in excess of 2,040,000. A failure rate of 15% would result in the replacement of over 300,000 anodeless risers.

- g. The label of "preliminary" on this report should have been removed; the report as delivered represents the final content.

As discussed in the report the data shows that AL riser leak repairs are trending up; the pilot program showed that the risers were failing at an elevated rate. This data proved to be more than adequate for SoCalGas to develop an accelerated DIMP program to mitigate the threat in a more focused and effective manner than before. As shown in the initial DIMP inspection, repair, and replacement order data, SoCalGas is indeed locating and mitigating this threat at a higher rate than with the routine activities.

- h. No other analysis has been performed.

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4. Referring to Figure RKS-2 on page RKS-31, please provide the number of annual AL Riser Code 1 leak repairs and the number of system total Code 1 leak repairs for 2005-2009.

SoCalGas Response 04:

Repaired Year	AL Riser Code 1 Leaks	System Total Code 1 Leaks
2005	1,657	10,744
2006	1,925	10,547
2007	1,852	9,608
2008	1,965	8,268
2009	1,767	7,167

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5. Please provide the number of annual AL Riser leaks detected for 2005-2009, categorized by Code.

SoCalGas Response 05:

Detect Year	Code 1 Leaks	Code 2 Leaks	Code 3 Leaks	Total
2005	1,657	146	19	1,822
2006	1,928	122	15	2,065
2007	1,852	95	6	1,953
2008	1,965	75	10	2,050
2009	1,764	93	8	1,865

Note: The table in response to Question 4 shows the number of Code 1 leaks repaired, while the table in response to Question 5 shows the number of Code 1 leaks detected. The slight discrepancy in these two depictions is attributable to the timing difference between when a code 1 leak is detected and when it is repaired.

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6. Referring to the statement on page RKS-31, “Because AL riser leak repairs represent 30% of all system leaks and nearly 25% of all hazardous system leak repairs, it was identified as a key system threat...” please identify the time period in which the 30% and the 25% leaks were determined.

SoCalGas Response 06:

This response refers to the data presented in Figure 1 and Figure 2 of the DIMP-Driven Anodeless Riser Inspection Report. The values of 30% and 25% are in reference to the 2009 data for “percent of” (bottom item in each figure’s legend) in these Figures.