

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(DATA REQUEST ORA-38)**

**Date Requested: September 2, 2016
Date Responded: September 23, 2016**

PRELIMINARY STATEMENT

1. These responses and objections are made without prejudice to, and are not a waiver of, SDG&E and SoCalGas' right to rely on other facts or documents in these proceedings.
2. By making the accompanying responses and objections to these requests for data, SDG&E and SoCalGas does not waive, and hereby expressly reserves, its right to assert any and all objections as to the admissibility of such responses into evidence in this action, or in any other proceedings, on any and all grounds including, but not limited to, competency, relevancy, materiality, and privilege. Further, SDG&E and SoCalGas makes the responses and objections herein without in any way implying that it considers the requests, and responses to the requests, to be relevant or material to the subject matter of this action.
3. SDG&E and SoCalGas will produce responses only to the extent that such response is based upon personal knowledge or documents in the possession, custody, or control of SDG&E and SoCalGas. SDG&E and SoCalGas possession, custody, or control does not include any constructive possession that may be conferred by SDG&E or SoCalGas' right or power to compel the production of documents or information from third parties or to request their production from other divisions of the Commission.
4. A response stating an objection shall not be deemed or construed that there are, in fact, responsive information or documents which may be applicable to the data request, or that SDG&E and SoCalGas acquiesces in the characterization of the premise, conduct or activities contained in the data request, or definitions and/or instructions applicable to the data request.
5. SDG&E and SoCalGas objects to the production of documents or information protected by the attorney-client communication privilege or the attorney work product doctrine.
6. SDG&E and SoCalGas expressly reserve the right to supplement, clarify, revise, or correct any or all of the responses and objections herein, and to assert additional objections or privileges, in one or more subsequent supplemental response(s).
7. SDG&E and SoCalGas will make available for inspection at their offices any responsive documents. Alternatively, SDG&E and SoCalGas will produce copies of the documents. SDG&E and SoCalGas will Bates-number such documents only if SDG&E and SoCalGas deem it necessary to ensure proper identification of the source of such documents.
8. Publicly available information and documents including, but not limited to, newspaper clippings, court papers, and materials available on the Internet, will not be produced.

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9. SDG&E and SoCalGas object to any assertion that the data requests are continuing in nature and will respond only upon the information and documents available after a reasonably diligent search on the date of its responses. However, SDG&E and SoCalGas will supplement its answers to include information acquired after serving its responses to the Data Requests if it obtains information upon the basis of which it learns that its response was incorrect or incomplete when made.
10. In accordance with the CPUC's Discovery: Custom And Practice Guidelines, SDG&E and SoCalGas will endeavor to respond to ORA's data requests by the identified response date or within 10 business days. If it cannot do so, it will so inform ORA.
11. SDG&E and SoCalGas object to any ORA contact of SDG&E and SoCalGas officers or employees, who are represented by counsel. ORA may seek to contact such persons only through counsel.
12. SDG&E and SoCalGas objects to ORA's instruction to send copies of responses to entities other than ORA.

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QUESTION 1:

- a. Have there been any events on Line 1600 in which the pressure on the line exceeded 640 psig, from when the Maximum Allowable Operating Pressure was lowered to 640 psig in 2011, and prior to the further lowering to 512 psig on July 9, 2016?
- b. If so, please describe each such recorded occurrence including the date, psig, duration of the psig exceeding 640 psig, and mitigation efforts SoCalGas/SDG&E took after the exceedance, if any.
- c. Prior to the Maximum Allowable Operating Pressure being lowered to 640 psig in 2011, were there any recorded events on Line 1600 in which the actual pressure on the line exceeded the pressure of 800 psig?
- d. If so, please describe each recorded occurrence including the date, psig, duration of the psig exceeding 800 psig, and mitigation efforts SoCalGas/SDG&E took after the exceedance, if any.

RESPONSE 1:

- a. Yes.
- b. On August 15th, 2012, during a maintenance operation at Rainbow Meter Station a short over pressure event occurred. At approximately 8:09am a pressure alarm was received that the pressure had reached 684 psig. The hour to hour data shows the pressure by 9:00am was back down to 622 psig. The mitigation activities included verification of station drawings and refresher training for employees involved.

On March 4, 2013, during a source testing for AQMD a short over pressure event occurred. At approximately 10:19am a pressure alarm was received that the pressure had reached 645 psig, Gas Control detected the over pressure and immediately communicated to station personnel. The hour to hour data shows the pressure by 11:00am was back down to 615 psig. The mitigation activities included the re-scheduling of the AQMD testing and decreasing the pressure to allow for an appropriate margin during the testing.

- c. SDG&E and SoCalGas (Applicants) object to this request as being unreasonable and overly burdensome. The subject pipeline has been in service since 1949 and the availability of what are/were mainly paper based distant historical operating records is limited. However, in an effort to be responsive, and subject to and without waiving their

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objection, Applicants respond as follows: Based on readily available records from 2008 there have been no pressure excursions above 800 psig.

d. N/A

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QUESTION 2:

With hook-like cracking, could an event in which actual pressure on a natural gas pipeline exceeded maximum allowable operating pressure on that line cause an existing hook-like crack to grow? Please explain the response.

RESPONSE 2:

Applicants understand this question to be addressing Line 1600, which is stated to be the subject of this Data Request. Yes, pressure-affected anomalies like long seam manufacturing flaws can experience growth as a result of exposure to pressures above MAOP. Since Line 1600 has experienced a pressure reduction from 800psig to 640psig, the resultant safety margin diminishes exposure to such flaw growth (recognizing the limitations of existing assessment data as discussed on page 19 of Sera's testimony). The benefit of pressure reduction would extend to include pressure exceedances provided they are not significant - see Sera's testimony at sections C & D, page 15 – 26 for a complete discussion.

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QUESTION 3:

On row 42 (covering beginning station 45,057 to ending station 60,561), of SoCalGas/SDG&E's response to ORA DR-25 Q1, please describe the results of the class location study when the class location changed in 2009? When was the class location study completed?

RESPONSE 3:

The segment described on row 42 operates below 40% of SMYS and does not require a class location study prescribed by 49 CFR § 192.609. Subsequently, there was no class location study performed for the change in class (from 1 to 2) that occurred in 2009. Per the Applicants' response to ORA DR 25, Question 18, the entire pipeline operates at a stress level that is commensurate for class 1, 2 and 3. Thus, a change in class location from class 1 to 2, would not require additional measures to remain commensurate.

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QUESTION 4:

Please provide reference to any PHMSA interpretations or regulations governing pipelines that experience two level changes in class location (e.g. Class 1 to Class 3).

RESPONSE 4:

Neither the Code of Federal Regulations nor the interpretations within § 192.611 specifically address a two level change; rather, they provide parameters for stress levels and class location. Please refer to 49 CFR §192.611.

§192.611 Change in class location: Confirmation or revision of maximum allowable operating pressure.

(a) If the hoop stress corresponding to the established maximum allowable operating pressure of a segment of pipeline is not commensurate with the present class location, and the segment is in satisfactory physical condition, the maximum allowable operating pressure of that segment of pipeline must be confirmed or revised according to one of the following requirements:

(1) If the segment involved has been previously tested in place for a period of not less than 8 hours:

(i) The maximum allowable operating pressure is 0.8 times the test pressure in Class 2 locations, 0.667 times the test pressure in Class 3 locations, or 0.555 times the test pressure in Class 4 locations. The corresponding hoop stress may not exceed 72 percent of the SMYS of the pipe in Class 2 locations, 60 percent of SMYS in Class 3 locations, or 50 percent of SMYS in Class 4 locations.

(ii) The alternative maximum allowable operating pressure is 0.8 times the test pressure in Class 2 locations and 0.667 times the test pressure in Class 3 locations. For pipelines operating at alternative maximum allowable pressure per §192.620, the corresponding hoop stress may not exceed 80 percent of the SMYS of the pipe in Class 2 locations and 67 percent of SMYS in Class 3 locations.

(2) The maximum allowable operating pressure of the segment involved must be reduced so that the corresponding hoop stress is not more than that allowed by this part for new segments of pipelines in the existing class location.

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(3) The segment involved must be tested in accordance with the applicable requirements of subpart J of this part, and its maximum allowable operating pressure must then be established according to the following criteria:

(i) The maximum allowable operating pressure after the requalification test is 0.8 times the test pressure for Class 2 locations, 0.667 times the test pressure for Class 3 locations, and 0.555 times the test pressure for Class 4 locations.

(ii) The corresponding hoop stress may not exceed 72 percent of the SMYS of the pipe in Class 2 locations, 60 percent of SMYS in Class 3 locations, or 50 percent of SMYS in Class 4 locations.

(iii) For pipeline operating at an alternative maximum allowable operating pressure per §192.620, the alternative maximum allowable operating pressure after the requalification test is 0.8 times the test pressure for Class 2 locations and 0.667 times the test pressure for Class 3 locations. The corresponding hoop stress may not exceed 80 percent of the SMYS of the pipe in Class 2 locations and 67 percent of SMYS in Class 3 locations.

(b) The maximum allowable operating pressure confirmed or revised in accordance with this section, may not exceed the maximum allowable operating pressure established before the confirmation or revision.

(c) Confirmation or revision of the maximum allowable operating pressure of a segment of pipeline in accordance with this section does not preclude the application of §§192.553 and 192.555.

(d) Confirmation or revision of the maximum allowable operating pressure that is required as a result of a study under §192.609 must be completed within 24 months of the change in class location. Pressure reduction under paragraph (a) (1) or (2) of this section within the 24-month period does not preclude establishing a maximum allowable operating pressure under paragraph (a)(3) of this section at a later date.

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QUESTION 5:

Please provide any internal guidance, policies, standards, or other internal documents relating to how SoCalGas/SDG&E verifies or revises the maximum allowable operating pressure of gas transmission pipelines that have their maximum allowable operating pressure established under 49 Code of Federal Regulations § 192.619(c).

RESPONSE 5:

Applicants do not have internal guidance, policies, standards, or other internal documents regarding verifying or revising maximum allowable operating pressure (MAOP) established under 49 Code of Federal Regulations (CFR) § 192.619(c). 49 CFR § 192.619(c) is an allowable methodology for establishing the MAOP. However, once a pipeline has been pressure tested or replaced consistent with California Public Utilities Code Section 958, the MAOP is then established, as appropriate, under other provisions of 49 CFR 192.619.

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QUESTION 6: ORA marked this question confidential as it contains confidential information (shaded in gray) previously provided in response to ORA DR 25.

In SoCalGas/SDG&E's response to ORA DR-25 Q1, row 88 of that response, covering beginning station 204,779 to ending station 204,810 of Line 1600, the identified specified minimum yield strength (SMYS) is shown as 800 psig. In fact, assuming a design pressure of [REDACTED] (under §192.619(a)(1)), an historical pressure of 812 (under §192.619(c)), and current operations of 640 psig, is it accurate that the SMYS for the Line 1600 segment identified in row 88 is 78.8% since the line has its MAOP established under 49 Code of Federal Regulations § 192.619(c) and has not been pressure tested? Please explain.

RESPONSE 6:

Applicants do not understand ORA's logic used to calculate 78.8% specified minimum yield strength (SMYS) nor did the line item referenced in the question above indicate 800 psig in any of the fields. The SMYS for the segment was provided within the "SMYS" column.

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QUESTION 7:

Please provide the records, including purchase orders, that support the design specifications of Line 1600 when it was installed in 1949.

RESPONSE 7:

Please see the confidential attachment to the response to ORA DR 39, Question 4.

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QUESTION 8:

ORA understands from the presentation on 8/23/2016 on the CEA and workpapers, that the TIMP costs for Line 3602 assume that a single ILI run would be appropriate. Is ORA's understanding accurate? If so, please provide the basis for a performing a single ILI run on an approximately 50 mile pipeline. If ORA's understanding is incorrect, please explain.

RESPONSE 8:

The assumption of a single in-line inspection (ILI) run is correct. The proposed new pipeline, Line 3602, would be constructed using modern design and construction methods, and as a result would be built to accommodate ILI tools for its entire length. Therefore, a single ILI run can be used to assess the entire pipeline.

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QUESTION 9:

Please provide a histogram of all actual curtailments (by percentage curtailed) on Line 3010 going back to 2008.

RESPONSE 9:

Applicants' response to ORA Data Request 7, Question 5 provided a table showing 12 curtailments affecting the SDG&E system since 2008. Line 3010 capacity was 100% available during the four unplanned events. Capacity of Line 3010 was less than 100% available for all 8 planned maintenance outages in sufficient quantity to require 100% curtailment of gas flow for noncore customers scheduling gas south from Rainbow. No overall Line 3010 availability during these events was determined.

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QUESTION 10:

Please provide a daily histogram of San Diego actual demand covering from 1/1/2008 to 12/31/2015.

RESPONSE 10:

Please refer to the attached file.