

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(DATA REQUEST ORA-06)**

Date Requested: April 27, 2016

Date Responded: May 12, 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:

For this set of questions, please reference San Diego Gas and Electric Company's (SDG&E) Amendment to Application, Volume 1, (Amendment to Application) pages 39-40, and specifically, the passage that provides as follows: Further, the Ruling (at 16-17) directs Applicants to provide: Ten-Year forecasted (maximum daily and annual average daily volumes in the area to be served by proposed Line 3602, including information on the quality of gas and broken down by customer type (e.g., core, non-core commercial and industrial, and noncore electric generation) The Proposed Project will operate as part of the Applicants' integrated gas transmission system. SDG&E does not forecast throughput for individual pipelines on its system.

- a. Does SDG&E assert that it is unable to forecast throughput for Line 3602?
- b. Does SDG&E assert that it is unable to provide ten-year forecasted (maximum daily and annual average daily volumes in the area to be served by proposed Line 3602, including information on the quantity of gas and broken down by customer type (e.g., core, non-core commercial and industrial, and noncore electric generation)?
- c. If the answer to question 1b is anything other than an unqualified yes, please explain why SDG&E has not provided forecast throughput for Line 3602?
- d. Has SDG&E ever forecasted for another natural gas pipeline in its service area the throughput for an existing transmission natural gas pipeline? Please explain.

RESPONSE 1:

- a. Yes, SDG&E and SoCalGas are unable to forecast throughput for any individual pipeline on its gas transmission system.
- b. No. The area to be served by the Proposed Project is the SDG&E service territory. Long term daily demand forecasts for SDG&E under the Commission's mandated design standards, broken out by customer class, have been developed and were provided in the table on page 40 of the Amended Application, and annual average demand forecasts by customer class are available in the California Gas Report.
- c. N/A

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- d. As discussed on a call between Shirley Amrany (SDG&E/SoCalGas) and Oge Enyinwa (ORA) on 5/9/16, SDG&E and SoCalGas should interpret this question as asking whether SDG&E has ever forecasted throughput for any other line other than Line 1600 in SDG&E's service territory. As stated in response 1(a) above, SDG&E and SoCalGas do not forecast throughput for any pipeline on its gas transmission system.

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QUESTION 2:

For this next set of questions, please refer to Amendment to Application, p. 41, and specifically, the passage that provides as follows:

The Ruling (at 16) also requires the Applicants to provide the “ten-year historic monthly volumes through Line 1600” and the “ten-year historic daily and annual maximum volumes through Line 1600.” SDG&E does not measure throughput by individual pipeline on its system.

- a. Does SDG&E assert that it is unable to measure throughput by individual pipeline on its system?
- b. Does SDG&E assert it is unable to measure throughput on Line 1600?
- c. Does SDG&E maintain that it is unable to provide the “ten-year historic monthly volumes through Line 1600”?
- d. Does SDG&E maintain that it is unable to provide the “ten-year historic daily and annual maximum volumes through Line 1600”?
- e. If the answers to questions a, b, c, and d are anything other than an unqualified yes, please explain why SDG&E has not provided the information required by the Ruling, as discussed in the introductory passage of this question.

RESPONSE 2:

- a. This statement is correct for the majority of pipelines on the SDG&E system.
- b. No.
- c. Yes.
- d. Yes.
- e. While it is accurate that SDG&E does not measure throughput by individual pipeline for the majority of pipelines on its system, as of May 2011, it does have metered deliveries into Line 1600 at the custody transfer point with SoCalGas (Rainbow Meter Station). And in fact, that was the data that was provided in Appendix E of the Amended Application.

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This data represents only volumes delivered into Line 1600 at the Rainbow Meter Station. Line 1600 has two other unmetered interconnects with rest of the SDG&E system south of the Rainbow Meter Station which impact its transported volumes.

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**Date Requested: April 27, 2016
Date Responded: May 12, 2016**

QUESTION 3:

Provide the records for any repairs associated with leaks on Line 1600 as required under 49 Code of Federal Regulations § 192.709(a) – Transmission lines: Record Keeping. If any such records are missing or otherwise unavailable, please say so and identify how many such records are missing.

RESPONSE 3:

SDG&E and SoCalGas object to this request on the grounds that it is vague, overbroad, unduly burdensome and appears to seek information that is neither admissible in evidence nor likely to lead to the discovery of admissible evidence. Subject to and without waiving these objections, SDG&E and SoCalGas respond as follows: Records for Transmission Lines are kept in accordance to 49 Code of Federal Regulations § 192.709(a).

The readily available records indicate one repair associated with a leak on Line 1600 (but not on the 16" portion of the pipeline) since 2009. Please see the attached record.



ORA 06 Q3.pdf

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QUESTION 4:

Provide the records for any repairs associated with leaks on Line 3010 as required under 49 Code of Federal Regulations § 192.709(a) – Transmission lines: Record Keeping. If any such records are missing or otherwise unavailable, please say so and identify how many such records are missing.

RESPONSE 4:

SDG&E and SoCalGas object to this request on the grounds that it is vague, overbroad, unduly burdensome and appears to seek information that is neither admissible in evidence nor likely to lead to the discovery of admissible evidence. Subject to and without waiving these objections, SDG&E and SoCalGas respond as follows: Records for Transmission Lines are kept in accordance with 49 Code of Federal Regulations § 192.709(a).

The readily available records indicate one repair associated with a leak on Line 3010 (but not located on the 30" portion of the pipeline) since 2009. Please see PCMR attached.



ORA 06 Q4.pdf

**SAN DIEGO GAS & ELECTRIC COMPANY
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**Date Requested: April 27, 2016
Date Responded: May 12, 2016
Amended Response Submitted: March 30, 2017**

The response to Question 5 has been amended, changes are noted in **red, bold and underline**.

QUESTION 5:

Regarding large volume customers served by Line 1600, as defined under 49 Code of Federal Regulations § 192.3 – Definitions, provide a table that shows the number of customers and volume (in MMCFd) of gas **currently** supplied to: factories, power plants, institutional users of gas, and other by L1600, and identify **projected** customers and volume if L1600 is derated to below 20% Specified Minimum Yield Strength.

RESPONSE 5:

Please note that some of the information provided in the table below (e.g., customer daily volume) contains **confidential customer information and is provided pursuant to G.O. 66-C and Cal. Pub. Util. Code § 583**.

Large Volume Customers Supplied Directly From Line 1600	
Customer Count	Range of Daily Volume (Min to Max in MMcfd)
<u>3</u>	█ to █

Currently there are **three** large volume customers supplied directly by Line 1600. Since 2012, gas volumes supplied to these customers has varied on a daily basis from █ to a maximum of █ million cubic feet (MMcf).

The number of gas customers and the volumes consumed by those customers are driven by a multitude of factors external to SDG&E and SoCalGas. For this reason, SDG&E and SoCalGas are unable to project the number of customers or the volumes they may consume in the future should Line 1600 be derated to below 20% Specified Minimum Yield Strength (SMYS).

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QUESTION 6:

Does SCG/SDG&E solely use 20% or greater Specified Minimum Yield Strength to define transmission versus distribution pipe? If the answer is anything other than an unqualified yes, please explain.

RESPONSE 6:

No. In accordance with 49 CFR 192, SDG&E and SoCalGas define a transmission line as a pipeline segment that meets one of the following criteria:

1. Produces a hoop stress equivalent to 20% of SMYS or more based on the established maximum allowable operating pressure (MAOP).
2. Regardless of the operating stress level, transports gas within a storage field for the purpose of well injection or withdrawal, and is not a gathering line. Injection piping ends and withdrawal piping begins at the respective block valves nearest the wellhead used to control or isolate flow to and from the individual well.
3. Transports gas to a large volume customer that is not downstream of a distribution center. A distribution center is the point at which gas supply and gas delivery are demarcated by a block valve(s).

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QUESTION 7:

Please provide all references to SCG/SDG&E's adopted PSEP Plan where 1949 construction and fabrication issues are identified. If Line 1600's fabrication and construction techniques, including but not limited to welding, are in any way associated with pre-1946 techniques please say so, and explain or provide reference to SoCalGas/SDG&E testimony.

RESPONSE 7:

SDG&E and SoCalGas object to this request for "all references" in a publically available filing on the grounds that it is unreasonably burdensome and seeks information equally available to ORA. Without waiving these objections, and subject thereto, SDG&E and SoCalGas respond as follows:

SDG&E and SoCalGas's adopted PSEP Plan and supporting testimony are available at <http://www.sdge.com/regulatory-filing/469/gas-pipeline-safety-order-instituting-rulemaking-2011>.

There are numerous references to pre-1946 construction/fabrication threats in SDG&E's and SoCalGas' Pipeline Safety Enhancement Plan (PSEP) related to girth weld defects, wrinkle bends, and acetylene girth welds. Discussion of these construction/fabrication threats can be found in SoCalGas and SDG&E PSEP Amended Testimony in A.11-11-002 Section IV pages 42-44, 51, 60-61 and in rebuttal testimony Chapter V.

The focus of the Proposed Project is the legacy manufacturing issues related to the electric flash welded long seam of Line 1600.

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QUESTION 8:

Did SoCalGas/SDG&E follow the American Standards Association Code for Pressure Piping, (ASA 1942 B31.1) 1942 (or subsequent edition) when it installed Line 1600 in 1949? Please explain. If SoCalGas/SDG&E followed ASA 1942 B31.1 (or subsequent edition) when it installed Line 1600 in 1949:

- a. Is there a section of that code that required the materials used in Line 1600 have been mill tested? Please explain.
- b. Is there a section of that code that required Line 1600 to have been pressure tested prior to beginning of operation? Please explain.
- c. How would SCG/SDG&E have determined the Maximum Allowable Operating Pressure of Line 1600 when it was installed? Please explain.
- d. Please provide the applicable Section of ASA 192 B31.1 from 1942 that SoCalGas/SDG&E used in order to determine Maximum Allowable Operating pressure on Line 1600 prior to placing the line in service.

RESPONSE 8:

SDG&E and SoCalGas do not have records from 1949 that provide sufficient detail to determine whether or not the specific requirements contained within ASA 1942 B31.1 (or subsequent edition) were followed as part of the design and construction of Line 1600.

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QUESTION 9:

SoCalGas/SDG&E's Application and testimony in various places states that SoCalGas/SDG&E does not have record of the pressure test of Line 1600₂, or that Line 1600 has not been pressure tested in accordance with modern day practices and recently adopted regulations. Please confirm that SoCalGas/SDG&E does not have records of pressure testing Line 1600, rather than definitely knows the line has not been pressure tested.

RESPONSE 9:

Line 1600 was installed in 1949, twelve years before the Commission first adopted pressure testing regulations. As such, Line 1600 was not required to be pressure tested prior to being placed in service, and the absence of records of pressure testing support a determination that the pipeline was not pressure tested prior to being placed in service.

Pressure tests for newly constructed segments (for example, cylindrical replacements) have been conducted in accordance with applicable code requirements on Line 1600.

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QUESTION 10:

Confirm that the proposed Line 3602 would be pressure tested to two and a half times (2.5) the Maximum Allowable Operating Pressure.

RESPONSE 10:

As stated on page 11 of the Prepared Direct Testimony of Deanna Haines, where possible, the new pipeline will be tested to 90% of its Yield Pressure (YP) including at least a 5% pressure spike. This will result in a test that is more than 2.5x MAOP, which exceeds the testing requirement for all locations.

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QUESTION 11:

For the proposed Line 3602, provide the specific items (i.e. wall thickness) needed to complete the design pressure equation under 49 Code of Federal Regulations § 192.105.

RESPONSE 11:

The proposed Line 3602:

S = 65,000 psi
T = 0.625 inches
D = 36 inches
F = 0.5
E = 1.00
T = 1.00

The approximately 1 mile of existing 36-in diameter pipeline in the City of Poway (pre-lay segment):

S = 60,000 psi
T = 0.500 inches
D = 36 inches
F = 0.5
E = 1.00
T = 1.00

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**Date Requested: April 27, 2016
Date Responded: May 12, 2016
Amended Response Submitted: April 27, 2017
Second Amended Response Submitted: May 22, 2017**

This second corrected and amended response replaces the response to ORA DR-06, Question 12 submitted on May 12, 2016 and the amended response submitted on April 27, 2017 in its entirety.

QUESTION 12:

For Line 1600, provide records for the specific items (i.e. wall thickness) needed to complete the design pressure equation under 49 Code of Federal Regulations § 192.105.

RESPONSE 12:

This response contains confidential information (shaded in gray); additionally, the attachment submitted along with this response contains confidential information provided pursuant to California Public Utilities Code § 583, General Order 66-C and D.16-08-024. Accordingly, a confidentiality declaration is included with the attachment.

As ORA was informed in Applicants' November 30, 2016 response to ORA DR 51, Question 3, the Line 1600 segment for Engineering Station 17-131 was replaced as of October 26, 2016. The Second Corrected and Updated Attachment to this response reflects such replacement.

The May 22, 2017 Corrected and Updated Confidential Attachment to Applicants' Response to ORA DR 6, Question 12 1600 Pipe Segment Data attached to this response also reflects corrections of inaccurate information provided in the original May 12, 2016 Attachment. The original data was taken from a database that had not been fully updated to reflect information learned from research of historical records and to reflect recent construction activity. The corrected information was previously provided to ORA in: (1) Applicants' August 12, 2016 response to ORA DR 25, Question 1; (2) Applicants' August 4, 2016 email to ORA (Ogeonye Enyinwa, Nathaniel Skinner, Mina Botros, Pearlie Sabino, and Darryl Gruen) attaching an amendment to a document previously provided in response to ORA DR 19, specifically a copy of Applicants' August 2, 2016 amended response to SED DR 3, Q2 and Attachment thereto; and (3) Applicants' July 15, 2016 response to ORA DR 19 (which provided a copy of Applicants' original response to SED DR 3, Q2 and Attachment thereto). Corrections are noted in red in the attachment.

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Amended Response Submitted: April 27, 2017
Second Amended Response Submitted: May 22, 2017**

In preparing Applicants' April 27, 2017 Corrected and Updated Confidential Attachment to Applicants' Response to ORA DR 6, Question 12 1600 Pipe Segment Data, Applicants confused the Cumulative (CUM) Stationing used in the response to ORA-DR06, Q12 for the Engineering (ENG) Stationing used in the response to ORA-DR25, Q1 and Q2. This resulted in an error with respect to the wall thickness for CUM Station [REDACTED] to [REDACTED] (ENG Station [REDACTED] to [REDACTED]), which should be [REDACTED] inches rather than [REDACTED] inches, and an error for CUM Station [REDACTED] to [REDACTED] (ENG Station [REDACTED] to [REDACTED]), which should be [REDACTED] inches rather than [REDACTED] inches. A further explanation of CUM and ENG Stationing is provided in Applicants' response to ORA DR-84, Q1. Those errors are corrected in the May 22, 2017 Corrected and Updated Confidential Attachment to Applicants' Response to ORA DR 6, Question 12 1600 Pipe Segment Data attached to this response.

The May 22, 2017 Corrected and Updated Confidential Attachment to Applicants' Response to ORA DR 6, Question 12 1600 Pipe Segment Data attached to this response provides the records required to complete the design pressure equation.

All Line 1600 pipe segments are designed in accordance with the PHMSA 192.105 Design Formula:

$$P = (2St/D) \times F \times E \times T$$

F = [REDACTED], Factor for Class 3 location

E = [REDACTED], Longitudinal Joint Factor

T = [REDACTED], Temperature factor for 250 degrees Fahrenheit or less

All Line 1600 pipe segments are less than 20% SMYS at [REDACTED] psig
 $\% \text{ SMYS} = (PD/2t)/\text{Yield Strength} \times (100)$

P = [REDACTED] psig pipeline pressure

D = [REDACTED] inches

t = wall thickness, inches

Specified Minimum Yield Strength, psi

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QUESTION 13:

Which subsection of 49 CFR § 192.619 applies to determine Maximum Allowable Operating Pressure of Line 1600?

RESPONSE 13:

49 CFR § 192.619(c).

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**Date Requested: April 27, 2016
Date Responded: May 12, 2016
Amended Response Submitted: May 23, 2017**

The response to Question 14 has been amended, the change is noted in **red, bold, and underline**.

QUESTION 14:

Provide the specific values needed to determine the Maximum Allowable Operating Pressure of Line 1600 if it is derated to a distribution line, including reference to the applicable code sections of 49 Code of Federal Regulations § 192. ORA understands that if Line 1600 were to be derated, the new Maximum Allowable Operating Pressure would be established under 49 Code of Federal Regulations § 192.619, 620, or 621.

RESPONSE 14:

Please refer to Response 12 to this data request, which provides the specific values needed to determine the MAOP for Line 1600 if it is derated to a distribution line at 320 psig.

Per 49 CFR § 192.3 Definitions:

Distribution Line – a pipeline other than a gathering or transmission line.

If Line 1600 were to be derated, the new MAOP would be established under 49 CFR §§ 192.619 and 192.62¹.

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QUESTION 15:

Provide the baseline assessment for Line 1600, as required under 49 Code of Federal Regulations 192, Subpart O.

RESPONSE 15:

Please note that some of the information provided in the attachment contains confidential information provided pursuant to G.O. 66-C and Cal. Pub. Util. Code § 583.

Please see the attached document:



L1600 Post
Assessment Report Cc

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QUESTION 16:

Confirm that Attachment 1 (SoCalGas/SDG&E Decision Tree) to D.14-07-006, note 5 states:⁴ L#1600 - 54 miles of existing L#1600 to be TFI'd (Amended Workpapers, WP-IX-1- 43). After 54 new miles installed in Phase 1B (Amended Workpapers, WP-IX-1-34), then 45 miles of existing L#1600 will be pressure tested in Phase 1B (Amended Workpapers, WP-IX-1-17)

- a. Does the above quoted statement mean that SoCalGas/SDG&E still intends to pressure test 45 miles of existing L#1600 as part of Phase 1B of its Pipeline Safety Enhancement Program? Please explain.
- b. If the answer to question A is yes, would SoCalGas/SDG&E pressure test the 45 miles of existing Line Number 1600 before or after it would derate that Line, as it proposes to do in this proceeding?
- c. Please provide the referenced amended workpapers from A.11-11-002.

RESPONSE 16:

- a. No. As explained in the Prepared Direct Testimony of Doug Schneider, the Proposed Project consists of derating the MAOP of the existing Line 1600 rather than conduct a pressure test. Construction of the proposed new transmission line (Line 3602) would enable SDG&E and SoCalGas to reduce the operating pressure of Line 1600 to a distribution level of service while continuing to serve customers directly fed off Line 1600, avoid potential customer impacts associated with pressure testing the portion of Line 1600, and enhance the safety and integrity of the system.
- b. N/A
- c. Please refer to the following website for workpapers in A.11-11-002:
<http://www.sdge.com/regulatory-filing/469/gas-pipeline-safety-order-instituting-rulemaking-2011>

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QUESTION 17:

In response to SED Data Request Question 14, SoCalGas/SDG&E has stated, "We have no plans to perform additional pressure test (on Line 1600). "Our plan is to de-rate Line 1600 to a service level of 320 psig. This will allow for the existing operating pressure to act as a satisfactory pressure test for the newly de-rated pipeline because the existing service level of 640 psig which is 1.5x over our intended new operating level. Implementing this approach will allow a cost avoidance, as further pressure testing would not be required."

Please explain how SoCalGas/SDG&E's stated plan to not pressure test Line 1600 is consistent with the language in the attachment of SoCalGas/SDG&E's Decision Tree to D.14-06-007, as quoted in question 19 above.

RESPONSE 17:

As explained in the Prepared Direct Testimony of Doug Schneider, derating the Line would reduce the operating pressure of Line 1600 to a distribution level of service, and therefore not be applicable to the adopted PSEP Decision Tree methodology, which is only applied to transmission lines.

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(DATA REQUEST ORA-06)**

**Date Requested: April 27, 2016
Date Responded: May 12, 2016**

QUESTION 18:

Has Line 1600 undergone any class location changes after installation? If so, please provide at the segment level, the date of class location change, the old class location, the new class location, and the percentage of Specified Minimum Yield Strength of the pipe before and after the class location change.

RESPONSE 18:

Yes, the pipeline has undergone class location changes since installation.

The entire pipeline operates at a stress level that is less than 50% of SMYS and would be commensurate for class 1, 2 and 3 areas. As such, there would be no need for a change in the percentage of SMYS from a change in class location between class 1, 2 and 3 for Line1600.

Please note that some of the information provided contains **confidential information provided pursuant to G.O. 66-C and Cal. Pub. Util. Code §583**. The attached document identifies the segments that increased in class location since 2008 with the associated percentage of SMYS.



PSRP_ORA6_Question
18.pdf

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(DATA REQUEST ORA-06)**

Date Requested: April 27, 2016

Date Responded: May 12, 2016

QUESTION 19:

What was the average volume of gas transported through Line 1600 in 2013, 2014, and 2015?

RESPONSE 19:

The average volume of gas supply delivered into Line 1600 at Rainbow Meter Station in 2013, 2014, and 2015 was 42, 62, and 83 MMcfd, respectively.

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(DATA REQUEST ORA-06)**

Date Requested: April 27, 2016

Date Responded: May 12, 2016

QUESTION 20:

What was the average volume of gas transported through Line 3010 in 2013, 2014, and 2015?

RESPONSE 20:

The average volume of gas supply delivered into Line 3010 at Rainbow Meter Station in 2013, 2014, and 2015 was 323, 258, and 252 MMcfd, respectively.

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(DATA REQUEST ORA-06)**

Date Requested: April 27, 2016

Date Responded: May 12, 2016

Regarding the Prepared Direct Testimony of Neil Navin

QUESTION 21:

At page 3 of the Prepared Direct Testimony of Neil Navin dated March 21, 2016, Mr. Navin states: "The level of scope definition and estimating accuracy has been defined by references to AACE Recommended Practice 56R-08 Classification System. As discussed in my testimony, the Utilities were able to develop a Class 3 cost estimate for the Proposed project based on a defined route, semi-detailed design and engineering, and an environmental assessment. By contrast, the maturity level of the scope for the Alternatives, is lower, in some cases much lower, due to lack of detailed definition for key project cost drivers ... The Utilities' project team evaluated each Alternative, the scope and other considerations against the AACE Recommended Practices and assigned the appropriate estimate class."

On page 140 of SoCalGas/SDG&E's TCAP A.11-11-002 Phase 1 Opening Brief, SoCalGas and SDG&E indicate the use of AACE guidelines and state: "SoCalGas and SDG&E's estimates reflect early planning efforts for PSEP projects and the historical experience of SoCalGas, SDG&E, and System Planning Engineering and Consulting Services (SPEC Services) – the consultant hired to assist in developing estimates. Through these efforts, SoCalGas and SDG&E have developed pipeline replacement and testing cost estimates that are "between a Class 4 and a Class 5" in the guidelines developed by the Association for the Advancement of Cost Engineering (AACE).⁵²⁸ The AACE estimate class system describes, among other attributes, the characteristics, end usages, and expected accuracies of cost estimates as they range from high level to fully detailed."

- a. Please clarify whether the AACE guidelines used in SoCalGas/SDG&E's Pipeline Safety Enhancement Plan (PSEP) which is referenced in quoted statement from Sempra's Opening Brief in the TCAP is the same AACE Recommended Practice 56R-08 Classification System that is referenced on page 3 of Mr. Navin's testimony. If these are different sets of guidelines, then please explain the reason for the use of a different set of AACE guidelines in Mr. Navin's testimony against those used in the development of the Sempra PSEP.
- b. Please state whether it is SoCalGas/SDG&E or the company hired to assist in developing estimates who decide on the guidelines to use for purposes of scope definition and estimating accuracy.
- c. Please state whether SoCalGas/SDG&E used a different set of guidelines from the AACE described by Mr. Navin for purposes of developing contingency estimates, and if so, please identify and cite reference to the guidelines used for purposes of contingency estimates.

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RESPONSE 21:

- a. The AACE Recommended Practices are guidelines that are used to gauge scope and execution planning maturity with estimate accuracy and estimate class. In the original PSEP proceeding, SDG&E and SoCalGas used AACE Recommended Practice 18R-97 (engineering, procurement, and construction for the process industries). In this Application, SDG&E and SoCalGas used AACE Recommended Practice 56R-08 (building and general construction industries).

The AACE has not created a pipeline or utility specific cost estimate classification recommended practice. In the absence of pipeline or utility specific AACE International cost estimate Recommended Practice, SDG&E and SoCalGas have determined that Recommended Practice 56R-08 is more applicable to longitudinal, buried pipeline projects. The building and general construction industries Recommended Practice can be applied across a wide range of industries and on site/civil projects. Although there are applicable aspects of 18R-97 to utility projects, it is more suited for a greenfield or retrofit environment in which most of the project costs are spent on process equipment, and the remainder serves to support, connect, and power the equipment. Although neither practice is a perfect fit, the more widely applicable building and general industries AACE International Recommended Practice 56R-08 appears to be a better fit to pipeline projects.

- b. SDG&E and SoCalGas decided on which guidelines to use.
- c. SDG&E and SoCalGas did use different sets of guidelines from the AACE and PMBOK for purposes of developing contingency estimates, as stated in the Prepared Direct Testimony of Mr. Navin at page 22, footnotes 17 and 18:
- *AACE Recommended Practice, No. 34-R-05, TCM Framework: 7.3 - Cost Estimating and Budgeting, 2007, at 4.*
 - *Project Management Institute's Project Management Body of Knowledge (PMBOK) in Section 7.2.2.6 Reserve Analysis states, "contingency reserves can provide for a specific activity, for the whole project, or both."*