SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY

PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)

(A.15-09-013)

(DATA REQUEST ORA-92)

Date Requested: June 22, 2017
Date Responded: July 7, 2017
Date Amended: July 12, 2017
Second Amended Response Submitted: August 2, 2017

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.

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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In the opening testimony of Sera, at page 16, footnote 25 is the following statement:

Per 49 CFR Part 192.113, electric flash welded long seams are assigned a longitudinal joint factor of 1.0. To account for the long seam hook cracking that has been observed in the EFW seams on Line 1600, and consistent with a conservative approach to risk evaluations based on feedback from pipeline assessment data, a longitudinal joint factor of 0.8 was used in lieu of 1.0 as a conservative approach to reflect the condition of these pipe segments in the risk scoring.

Attached is the spreadsheet ORA DR 25 Q1_Attachment_Corrected and Updated_Confidential data response from April 27, 2017, which ORA understands to be the most recent version of the ORA DR 25 Q1 attachment provided to ORA as of June 22, 2017. If there is a more current version, please provide that in this response and indicate which data has been updated, why it was updated, and provide all supporting documentation for that change.

QUESTION 1:

For each segment of Line 1600 in the attached spreadsheet:

a. Fill out column W “Joint Efficiency Factor (Risk)”, with the joint efficiency factor used by SoCalGas/SDG&E to conduct risk scoring of that segment (as identified in the opening testimony of Sera, quoted above) at the time the Application was filed.

b. Fill out column X “Joint Efficiency Factor (Risk)”, with the joint efficiency factor used by SoCalGas/SDG&E to conduct risk scoring of that segment (as identified in the opening testimony of Sera, quoted above) as of May 31, 2017. If a more current date can be used, please provide that. If data as of May 31, 2017 is not available, please provide the most current data and indicate the date of that data.

c. SoCalGas/SDG&E may provide another column if necessary if any other Joint Efficiency Factors are used for a given segment as of May 31, 2017. If SoCalGas/SDG&E do so, provide a narrative description of why that joint efficiency factor is used.

d. For column AA, please update the Change Year value to reflect the Month, Day, and Year of the class location change.

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The response to Question 1 has been amended, the changes are noted in **red, bold and underline.** Deletions are in **bold and strikethrough.**

RESPONSE 1:

The preamble to Question 1 refers to the spreadsheet ORA DR 25 Q1_Attachment_Corrected and Updated_Confidential data response from April 27, 2017, and states: "If there is a more current version, please provide that in this response and indicate which data has been updated, why it was updated, and provide all supporting documentation for that change." SDG&E and SoCalGas (Applicants) object that this "question" is vague and ambiguous. If ORA is asking whether there is a more current version of that spreadsheet, which was prepared only to respond to data requests, the answer is no. If ORA is asking whether there have been any changes in the Applicants' High Pressure Database that would impact the calculation that each segment of Line 1600 would be below 20% of its SMYS at a MAOP of 320 psig, the answer is no. There are recent repairs/replacements on Line 1600 for which records have been and are being added to the High Pressure Database. In all cases, new pipe is below 20% of its SMYS at an MAOP of 320 psig. Gathering the requested information for each such change would be time-consuming and is unduly burdensome given that it does not appear relevant to any issue within the scope of this proceeding. To the extent that ORA is seeking such information, Applicants object on those grounds.

Applicants object to Question 1(a) – (d) to the extent that it calls upon Applicants to utilize a longitudinal joint factor contrary to that specified in 49 CFR § 192.113 and thus contrary to the required calculation to determine design pressure for steel pipe in accordance with 49 CFR § 192.105. ORA's request that Applicants do so seeks information not relevant to the scope of this proceeding, is unduly burdensome, and runs the risk that it would be improperly perceived to be in compliance with federal safety regulations. Applicants further object that Question 1's use of the term "risk scoring" is vague and ambiguous. Subject to and without waiving their objections, Applicants respond as follows:

a. ORA DR-25, Q1 requested an "updated version of the table provided in response to SED DR-3, Q2 and Q3, that includes the following columns appended to the end." The referenced table was provided in response to SED DR-3, Q2, which asked for "A segment by segment engineering analysis for the entire Line 1600 with any unknown pipeline characteristics identified and any assumed values detailed." The "spreadsheet ORA DR 25 Q1_Attachment_Corrected and Updated Confidential data response from April 27, 2017" provides correct engineering values for the calculation required in 49 CFR § 192.105. 49 CFR § 192.113 prescribes use of a 1.0 longitudinal joint factor for electric

flash-welded (EFW) and electric resistance welded (ERW). The 1.0 longitudinal joint factor is set forth in Column V of the referenced spreadsheet. The use of a 0.8 longitudinal joint factor to determine design pressure for Line 1600 segments under 49 CFR § 192.105 would be incorrect.

SDGE-2 Prepared Direct Testimony of Travis Sera in no way suggested that the use of a 0.8 longitudinal joint factor would be appropriate for such use. The footnote quoted by ORA was solely appended to the following statement in SDGE-2 Prepared Direct Testimony of Travis Sera at 16: "To reflect the increased risk exposure, the Utilities adjusted the long seam factor that contributes to the risk ranking of Line 1600 shown in Table 3 to account for potential undetected seam anomalies and known hook cracking." Table 3 in SDGE-2 reflected Applicants' risk ranking of "SoCalGas/SDG&E transmission pipelines that contain flash welded seams" solely for purposes of comparing risk among pipeline with electric flash welded longitudinal seams. There have been no changes to the Applicants' risk ranking as reflected in Table 3.

ORA has requested that Applicants provide further information regarding Applicants' High Pressure Pipeline Database (HPPD) and the determination of the correct longitudinal joint factor for Line 1600. Applicants again note that Applicants possess paper and other records relating to Line 1600 in addition to documents that have been reviewed and incorporated into the HPPD. The HPPD is a tool used to store information and documents for pipeline integrity purposes, and is updated over time. Until information is verified to be accurate and reliable, conservative values are used in the HPPD to provide a margin of safety. As a result, the timing of updates to the HPPD does not pose a safety issue.

ORA asked if Line 1600's Longitudinal Joint Factor (LJF) information has been contained within the HPPD. No, Joint Factor is not a numeric value in the database, it is a calculated value produced when the data is exported to a report template. In the HPPD, there is a long seam attribute field in which the seam type is identified.

ORA asked (on 7/10/17) if the LJF information is not contained in the HPPD, then explain where the LJF values for the segments come from. The HPPD is designed to accept entry of an alphanumeric value into the longitudinal long seam field in the HPPD. When the HPPD is exported to the report template that contains the MAOP calculator, the joint factor is calculated by a script which translates the alphanumeric longitudinal long seam attribute field into an assigned value of 0.6, 0.8 or 1.0. If the alphanumeric value in the long seam field reflects that the seam type is unknown, the script will assign a conservative default value based on consideration of several factors that may include

diameter, year of installation, wall thickness, SMYS, and MAOP. In the case of Line 1600, if the seam type is listed as "unknown" for a segment the resultant default value would be either 0.8 or 1.0. The use of the default value is intentionally conservative to provide a margin of safety unless/until a reliable and accurate record can substantiate an update to the HPPD.

In responding to SED DR-3, Q2, Applicants exported Line 1600 attributes to the pre-established report template, which then assigned an LJF and calculated MAOPs under Section 192.619(a). The resulting table was provided to SED on June 13, 2016. On July 29, 2016, ORA asked Applicants to amend this table and add longitudinal joint factor as well as additional detail about class information as part of ORA DR 25 Q1.

The SED table was amended, but during the process of validating the data it was noted that in some instances the MAOP calculator was utilizing overly conservative joint factors that did not reflect available records containing reliable data that should be applied in place of assigned conservative values. As a result, updates to the HPPD were made to include these additional records. Simultaneously, it was discovered that there were database limitations affecting the result. Specifically, there were instances where purchase records documented the pipe had a joint factor of 1.0, but the long seam type was not indicated (either ERW or ~~**seamless**~~ **Double Submerged Arc Weld**). The lack of specificity prevented the assignment of a long seam value in the HPPD because the long seam domain was limited to only accept specific entries resulting in a null HPPD entry for the long seam attribute. The null entry then prompted the MAOP calculator to utilize a conservative default value of 0.8.

As a result, Applicants used the HPPD data (the longitudinal long seam attribute) and its subsequent research to manually add the longitudinal joint factor to the table produced for ORA and SED, and provided an amended response to SED DR-3, Q2 on August 2, 2016 (and to ORA on August 4, 2016).

Work occurred in the latter half of 2016 to address the script issues on the pre-established report template and address the HPPD domain limitation. On January 10, 2017 the HPPD changed. The option to put a known "JF=1" and "JF=.8" was added as a domain value in the longitudinal long seam attribute, and the script was reprogrammed to recognize this entry and assign the numerical value 1.0 or 0.8 in the MAOP calculator. This allowed future reports to properly assign the numeric joint factor value on the MAOP reports. Updates to Line 1600 longitudinal seam attributes were submitted via a series of Form 2112s for the pipe segments that previously could not be entered. The first Form 2112 was submitted on March 8, 2017. All submitted Form 2112s were added to the

HPPD on March 22, 2017. These updates culminated in every segment of Line 1600 containing a known entry in the HPPD for wall thickness, diameter, SMYS, and long seam.

Applicants note that the Proposed Project only includes de-rating Line 1600 from Rainbow Metering Station to Kearny Villa Pressure Limiting Station, and that all Engineering Stations higher than 235,213 reflect Line 1600 pipe segments that are not within the Proposed Project.

b. There are no changes to the risk scoring in Table 3 in SDGE-2 Prepared Direct Testimony of Travis Sera. Adjustments to the joint factor are not appropriate as explained in the response to Question 1(a) above. To generate the risk score for Line 1600 in Table 3, a longitudinal joint factor of 0.8 (as opposed to a longitudinal factor of 1.0 for electric flash welded seams) was converted into a PIR multiplication factor to account for the long seam hook cracking that has been observed in the EFW seams on Line 1600, and consistent with a conservative approach to risk evaluations based on feedback from pipeline assessment data.

c. There have been no changes to the joint factors presented.

d. Please see the response to ORA DR-52. The date format change for the class location change date listed in ORA DR-25 was previously requested and provided in the attachment for the response to ORA DR-52, Q2 (“Confidential_ORA_DR_52_Q2_C”).

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QUESTION 2:

In response to ORA DR-20, Q10, SoCalGas/SDG&E indicated they confirmed hook-like cracking on July 23, 2013. SoCalGas/SDG&E stated "the CPUC was first informed of the presence of manufacturing flaws in a safety related condition status update on December 29, 2014."

a. When did SoCalGas/SDG&E begin using a 0.8 joint efficiency factor for Line 1600?

b. Please provide the documentation that supports the date provided in response to question 2a.

c. Please provide the safety related condition status update provided to the CPUC on December 29, 2014 and any subsequent updates.

RESPONSE 2:

a. Applicants do not use a 0.8 longitudinal joint factor for Line 1600.

b. Please see the response Question 2(a) above.

c. Please see the attachment, which is an original copy of the safety related condition (SRC) status update that was provided to the CPUC on December 29, 2014. Please note that the attachment contains a confidential header because at the time of its submission to the CPUC, it was confidential. However, the information contained therein is no longer confidential.