

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(DATA REQUEST ORA-78)**

Date Requested: March 17, 2017

Date Responded: April 12, 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.

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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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Subject: Additional information regarding the proposed project and the alternatives

QUESTION 1:

Please fill out the unfilled portion of the attached spread sheet named “DR-78 Additional Information.” ORA filled in the information that is available to ORA thus far. Please overwrite any information that is incorrect and state the reason any information ORA provided is incorrect. Please complete all cells or provide detailed description why you cannot fill the cell and please provide all assumptions made in order to provide the answers.

Description of current/new alternatives

- Rows 4 through 23** represents the alternatives presented in the CEA without any changes.
- Row 14** For this option, please assume contracts to deliver 400 mmcf/d to Otay Mesa Receipt Point.
- Row 24** is a new alternative, assumes (Hypothetically) L3602 and Line 3010 are in operation with Moreno compressor station offline, so the gas is free flowing (free flowing supplies); Line 1600 de-rated.
- Row 25** is same alternative as that identified on Row 23, but asks for the information associated with Line 3010 only.
- Row 26** is not an alternative, but is asking to fill out the information for L3010 at its current operating pressure (Assume only L3010 and Line 1600 with MAOP of 512 psig in service, no Otay Mesa deliveries).

Description of columns

- Column A:** The serial number of alternatives. (This is for reference only and no input is needed.)
- Column B:** The index of alternatives as provided in the CEA (No input needed.)
- Column C:** The alternative projects names (No input needed.)

Input is needed to the following columns for the associated proposed project and alternative projects

- Column D:** The total length of the line from the beginning of the line to the end of the line. (in Miles)

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Column E: The new construction length of the line that needs to be constructed if the alternative is selected. The values in this column cannot exceed the value in column "D" (in Miles)

Column F: The capacity for the individual pipeline at the MAOP of that pipeline (in mmcf/d)

Column G: The expected operating pressure associated with the alternative (in psig). If necessary to provide a range, please do so, and identify the most likely operating pressure within the range.

Column H: The Maximum Allowable Operating Pressure MAOP associated with the alternative (in psig).

Column I: The Minimum time required to provide gas to the nearest three distribution centers to the gas station or receipt point during Line 3010 outage. The time required means the reasonable time that SDG&E/SoCalGas operations team can manage to switch to another source of gas in the case of Line 3010 unplanned outage (hrs.)

Column J: The Minimum time required to provide gas to the nearest three distribution centers to the gas station or receipt point during Moreno Station outage. The time required means the reasonable time that SDG&E/SoCalGas operations team can manage to switch to another source of gas in the case of Moreno Station unplanned outage (hrs.)

Column K: The capacity that can be provided within short term (6 hrs.) during Line 3010 unplanned outage (mmcf/d)

Column L: The capacity that can be provided within short term (6 hrs.) during Moreno Station unplanned outage (mmcf/d)

Column M: The total number of transmission pipelines capable of providing gas from receipt points/metering stations (E.g. Rainbow Metering Station, Otay Mesa, Other) to SDG&E territory if the alternative is selected (Lines).

Column N: The total number of physical sources capable of providing gas to San Diego if the alternative was selected. The values in this column cannot exceed the value in column "M". The sources of gas are counted based on the location of the start of the pipeline not the origin of the gas. Assuming Pipeline capacity is available to deliver gas to and receive gas from Each Source (Specifically, 1) Through Ehrenburg to Moreno or to Otay Mesa; 2) Through North Needles to Moreno; 3) Tanker to ECA to GR LNG Spur to TGN to Otay Mesa; 4) Regasification of storage at ECA to GR LNG Spur to TGN to Otay Mesa).

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Column O: Please answer: If the alternative includes a constructed line that has been pigged, please indicate yes. If the alternative includes a constructed line that has not been pigged or is not peggable, please indicate no. If the alternative includes a mix of constructed segments, some of which have been pigged, and others that have either not been pigged or are not piggable, please indicate in a separate document which segments have been pigged. For alternatives that have not been built: 1) If the whole line will be piggable, please answer “yes”; 2) If the whole line will not be piggable, please answer “no”; 3) If only certain segments of the line will be piggable, please indicate those in a separate document.

Column P: If the alternative includes a line that has been pressure tested, please indicate yes. If the alternative includes a line that has not been pressure tested, please indicate no. If the alternative includes a mix of segments where some have been pressure tested and others have not, please indicate in a separate document which segments have been pressure tested. For alternatives that have not been built: 1) If the whole line will tested, please answer “yes”; 2) If none of the line will be tested, please answer “no”; 3) If only certain segments of the line will be tested, please indicate those in a separate document.

Column Q: The number of structures in potential impact radius at maximum allowable operating pressure (Structures).

Column R: Please answer: Is the line known to have seam flaws due specifically to manufacturing of the pipe? (Yes/No)

Column S: Please answer: Is the line known to have seam flaws that occurred after manufacturing? For the alternatives that have not been constructed yet enter “N/A”. For the alternatives that have portions already constructed, answer the question for each of those portions. (Yes/No)

Column T: Please answer: Does the Alternative Include Operational Characteristics and Features of a New Pipeline? List pipeline features identified below.

1. More flow
2. More Capacity
3. Better reliability

Please include how Applicants define more flow, more capacity and better reliability separately.

Column U: Please answer: Does the Alternative Include Operational Characteristics and Features of a New Pipeline? List pipeline features identified below.

M1: Thicker Pipe Wall

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M2: Modern Fracture Resistance

M3: Modern Pipe Quality

M4: Modern Construction Quality

Please include how Applicants define thicker pipe wall, modern fracture resistance, modern pipe quality and modern construction quality.

Column V: Please answer: Does the Alternative Include Pipeline Features of a New Pipeline? List pipeline features identified below.

P1: Post-construction Pressure Test

P2: Warning Mesh

P3: Real-time Leak Detection

P4: Real-time Intrusion Monitoring

P5: Modern Coating and CP

Please include how Applicants define post-construction pressure test, warning mesh, real-time leak detection, real-time intrusion monitoring and modern coating and CP separately.

Column W: The annual post construction Green House Gases (GHG) emissions due to Operation of each line. (CO2 Tons/Year)

Column X: The Green House Gases (GHG) emissions during construction of each line. (CO2 Tons)

Column Y: please provide the estimated "Construction Cost Estimates" associated with each alternative. Construction costs estimates for each alternative should be defined to only include a total of: 1) The costs of Engineering, Procurement and Construction; 2) Environmental and Regulatory costs; 3) Public/External Affairs costs; 4) Other Project Costs; 5) Allowance for Funds Used During Construction (AFUDC); and 6) Contingency. For contingency, please assume a 20 percent contingency. If there are any questions about the definitions of these terms, please use the same definitions used to determine the cost estimate provided in SDG&E's Application A.14-04-011, the Sycamore to Penasquitos 230 kV Transmission Line Project. The cost estimate and breakdown is available on page 3-5 of Section 3.0 of the Proponent's Environmental Assessment in A.14-04-011. Provide the basis for the estimated costs in response to this DR (not in the spreadsheet itself).

Column Z: Total Cost of All Factors Required by California Public Utilities Code Section 1003(d) (Exclude costs that are redundant to those provided in columns AA, AB, AC and AD)

Note for Columns AA, AB, AC, and AD. Columns AA, AB, AC, and AD, ask for estimated costs of capacity, gas, or transportation of gas. Please confirm that there are no construction costs associated with the estimates asked about in columns AA, AB, AC, and AD. If there are

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construction costs associated with these columns, please identify them and explain the basis for them. To provide cost estimates requested under

Columns AA, AB, AC, and AD, please assume delivery of gas to the closest available receipt point or station to the source of gas. For example, in the case of Alternative A, "Proposed Project (Line 3602)", please assume delivery of gas to Rainbow compressor station. As another example, in the case of Alternative B, "Hydro test Alternative (Line 1600)", please assume delivery of gas to Rainbow compressor station. As another example, in the case of Alternative E, "Otay Mesa Alternative (Contractual-nonphysical)", please assume delivery of gas to the Otay Mesa receipt point. The only exception to the exercise should be for option F, "Otay Mesa Alternative". In this case, you may assume delivery of gas first to Ehrenberg, and then to Otay Mesa receipt point.

Column AA: Cost Estimate of Natural Gas, please provide the estimated costs associated with the cost (in \$ / MMbtu) of natural gas from the source to the receipt point Otay Mesa on the SoCalGas/SDG&E system. For example, tankers at the Energia Costa Azul Liquefied Natural Gas Terminal or gas received at Ehrenberg. In order to calculate costs for purposes of this exercise, please calculate the average cost of MMCFD at each city gate to Sempra's system. Provide the basis for the estimated costs in response to this DR (not in the spreadsheet itself).

Column AB: Cost of Capacity on spot market basis (\$/mmcf) , please provide the estimated costs that would associated with the purchase of 400 mmcf of capacity along the paths identified in ORA DR-74 Question 2. Provide the basis for the estimated costs in response to this DR (not in the spreadsheet itself).

Column AC: Cost of Capacity on long term contracting (10 years) basis (\$/mmcf), please provide the estimated costs that would associated with the purchase of 400 mmcf of capacity along the paths identified in ORA DR-74 Question 2. Provide the basis for the estimated costs in response to this DR (not in the spreadsheet itself).

Column AD: Cost of Transportation of Gas Spot Market (\$/mmcf), please provide the estimated costs that would be associated with the transportation of 400 mmcf of capacity along the path identified in ORA DR-74 Question 2 for a spot market purchase. Provide the basis for the estimated costs in response to this DR (not in the spreadsheet itself).

Column AE: Cost of Transportation of Gas Assuming contracting long term 10 years, please provide the estimated costs that would be associated with the transportation of 400 mmcf of capacity along the path identified in ORA DR-74 Question 2 for a long term purchase. Provide the basis for the estimated costs in response to this DR (not in the spreadsheet itself).

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RESPONSE 1:

Applicants object to this Question as vague and ambiguous, calling in part for information not in Applicants' possession, custody or control, calling in part for speculation, and unduly burdensome. Without waiving and subject to their objections, Applicants respond as follows:

Please refer to the attached spreadsheet which 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 this submission.**

Applicants have attempted to interpret ORA's spreadsheet and instructions in a way that makes sense given how Applicants' gas system functions. With respect to Columns D and O, Applicants respond regarding the pipeline that is the focus of the alternative, rather than all pipelines in the SDG&E gas system. With respect to Columns T, U and V, please see Applicants' Cost-Effectiveness Analysis (CEA) for how Applicants define the relevant characteristics. With respect to Column Y, Applicants provide the fixed cost estimate from the CEA for each alternative.