

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(DATA REQUEST ORA DR 10)
Date Requested: April 28, 2016
Date Responded: May 13, 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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Subject: Prepared Testimony of D. Bisi

QUESTION 1:

The Prepared Direct Testimony of D. Bisi at page 5 explains “several large noncore customers and single-sourced distribution systems are directly served by Line 1600.”

- a. How will these customers receive gas if Line 1600 is derated to a distribution line?

RESPONSE 1:

Customers and single-sourced distribution systems directly served by Line 1600 will continue to be served by Line 1600 if it's converted to a distribution line, or will be moved to a higher pressure pipeline if that is feasible.

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QUESTION 2:

The Prepared Direct Testimony of D. Bisi at page 5 states that “many customers would be directly impacted by the prolonged outage on Line 1600 that would be required by pressure testing, if supplies at Otay Mesa are unavailable...”

- a. If pressure testing started at the north end of Line 1600 and ended in the south, would that minimize disruptions to customers?
- b. If pressure testing was of Line 1600 was done at a given time of the year, would that minimize disruptions to customers? What time of year would that be?

RESPONSE 2:

- a. No.
- b. Please refer to SDG&E’s and SoCalGas’ response to ORA Data Request 8, Question 11(f) in this proceeding.

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QUESTION 3:

How would loss of compression at Moreno Compression Station (i.e. “free flowing” supplies) impact gas deliveries into the Los Angeles Basin?

RESPONSE 3:

Moreno Compressor Station does not serve the Los Angeles Basin.

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QUESTION 4:

Why would “delivered pressures from SoCalGas to Moreno Compressor Station drop below that required for the compressors to operate”, as described on page 8 of the Prepared Direct Testimony of D. Bisi?

RESPONSE 4:

Several factors can cause low delivery pressure to the Moreno Compressor Station, including but not limited to: low southern system receipts, high southern system demand, high Los Angeles basin demand, Blythe Compressor Station outages, and southern system pipeline outages.

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QUESTION 5:

Provide the advice letters associated with the June 30, 2015 and July 1, 2015 emergency localized gas curtailments in the LA Basin.

RESPONSE 5:

The advice letters are attached. Advice Letter (AL) 4827-G is associated with the emergency localized curtailment on June 30, 2015 and AL 4831-G is associated with the emergency localized curtailment on July 1, 2015.



ORA 10 Q5 -
AL4827.pdf



ORA 10 Q5 -
AL4831.pdf

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QUESTION 6:

Regarding the Line 4000 “compliance-required maintenance” as described on page 9 of the Prepared Direct Testimony of D. Bisi:

- a. What was the compliance-required maintenance?
- b. Why was SoCalGas/SDG&E conducting this maintenance during the summer months?
- c. As a percentage, how much of the gas into the LA Basin would Line 4000 normally provide?
- d. As a percentage, how much of the gas was Line 4000 normally providing at the time of the maintenance?

RESPONSE 6:

- a. Hydrotesting and replacement of pipe segments due to class location changes.
- b. Class location change maintenance must be completed in a given timeframe.
- c. SDG&E and SoCalGas object to this question on the grounds that the term “normal” is vague and ambiguous and subject to speculation in interpretation. Conditions on the SoCalGas and SDG&E gas transmission system are dynamic, and “normal” conditions are difficult to define. Subject to and without waiving this objection, SDG&E and SoCalGas respond as follows: Line 4000 has capacity to provide at least 25% of the LA Basin pipeline supply.
- d. Please refer to Response to Question 6(c) of this data request.

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QUESTION 7:

What five winters in the last three decades had the highest amount of natural gas consumption for electric generators?

RESPONSE 7:

SDG&E and SoCalGas object to this question as the investigation required is overly burdensome, overly broad and unnecessarily time-consuming, and not reasonably calculated to lead to the discovery of relevant evidence. Subject to and without waiving this objection, SDG&E and SoCalGas respond as follows: Three decades of operational data for the electric generation customer class are not readily available. The five winter seasons in the last decade (2005-2015) that had the highest level of natural gas consumption for electric generation customers were 2005, 2008, 2012, 2013, and 2010.

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QUESTION 8:

How many MW of solar plants are installed in the San Diego area? How many MW do they provide in the winter months?

RESPONSE 8:

In the San Diego area, there are 46.8 MW of solar plants currently installed. They have the same MW in the winter and summer. However, they produce less energy in the winter.

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QUESTION 9:

Please describe the system conditions that would lead to the entire connected load of San Diego being used simultaneously.

RESPONSE 9:

SDG&E and SoCalGas do not expect the entire connected load of San Diego to be used simultaneously. As stated in the Prepared Direct Testimony of David Bisi, “although connected load is not the standard that should be used to design capacity on the system... it is a useful indicator of the potential for EG demand that may quickly be dispatched and that may not otherwise be captured under long-term demand forecasting.” This potential has already been demonstrated, as the historical maximum SDG&E demand of 674 MMcfd exceeds the SDG&E system capacity of 630 MMcfd.

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QUESTION 10:

Regarding the 1,000 MMcfd of connected load described on page 11 of the Prepared Direct Testimony of D. Bisi:

- a. Does that amount of connected load include the new power plants discussed in the Prepared Direct Testimony of S. Ali Yari?
- b. Does that amount of connected load include the retiring power plants discussed in the Prepared Direct Testimony of S. Ali Yari?

RESPONSE 10:

The statement at page 11 in the Prepared Direct Testimony of David M. Bisi reads: "Currently, the "connected load" in San Diego is over 1 billion cubic feet per day (Bcfd)". This statement is accurate with the additions and retirements described in the Prepared Direct Testimony of S. Ali Yari.

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QUESTION 11:

As a percentage, how much of LA Basin connected load can be served by the existing pipelines into the LA Basin? Please explain.

RESPONSE 11:

SDG&E and SoCalGas object to this question as vague, ambiguous and subject to speculation in interpretation. Subject to and without waiving this objection, SDG&E and SoCalGas respond as follows.

SDG&E and SoCalGas interpret this question as seeking the percentage of connected load that can be supported by the LA Basin transmission system. As such, the LA Basin transmission system can support approximately 70% of the LA Basin connected load.

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QUESTION 12:

As a percentage, how much of San Diego connected load can be served by the existing pipelines into San Diego? Please explain.

RESPONSE 12:

SDG&E and SoCalGas object to this question as vague, ambiguous and subject to speculation in interpretation. Subject to and without waiving this objection, SDG&E and SoCalGas respond as follows.

SDG&E and SoCalGas interpret this question as seeking the percentage of connected load that can be supported by the existing SDG&E transmission system. As such, the existing SDG&E transmission system can support approximately 55% of the connected load in San Diego.

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QUESTION 13:

As a percentage, how much of San Diego connected load can be served by the forecast and existing pipelines into San Diego (i.e. if Line 1600 is down rated, Line 3602 is connected, and including Otay Mesa)? Please explain.

RESPONSE 13:

SDG&E and SoCalGas object to this question as vague, ambiguous and subject to speculation in interpretation. Subject to and without waiving this objection, SDG&E and SoCalGas respond as follows.

SDG&E and SoCalGas interpret this question as seeking the percentage of connected load that can be supported by the improved SDG&E transmission system. As such, the improved SDG&E transmission system can support approximately 75% of the connected load in San Diego.

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QUESTION 14:

Is it correct that Line 3010 provides approximately 500 MMCfd of capacity into San Diego, Line 1600 provides approximately 100 MMCfd, and that Otay Mesa could provide approximately 400 MMCfd into San Diego? Or in other words, the capacity of the major transmission lines into San Diego currently equals approximately 1000 MMCfd, or the current connected capacity? If not, please explain.

RESPONSE 14:

The statement is not correct. Please refer to Response 10 to this data request and note that the Prepared Direct Testimony of D. Bisi (at page 11) states that the current connected load in San Diego exceeds 1 billion cubic feet per day (Bcf). The SDG&E system could support a sendout of approximately 1 Bcf if customers deliver sufficient supply on the Southern System and at Otay Mesa, locations where customers have historically chosen not to delivery supply.

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QUESTION 15:

Page 12 of the Prepared Direct Testimony of D. Bisi states “although the number of new natural gas-fired power plants in San Diego has dramatically increased by about 86% since 2000, no additional pipelines to improve gas system capacity were installed as the electric generation capacity grew.”

- a. How many MW of new natural-gas fired power plants has been built in the time period discussed by D. Bisi?
- b. How many MW of natural-gas fired power plants have retired been built in the time period discussed by D. Bisi?
- c. What was the average heat rate of natural gas-fired power plants in San Diego in 2000?
- d. What is the average heat rate of natural gas-fired power plants in San Diego as of April 1, 2015?
- e. What will the average heat rate of the natural-gas fired power plants in San Diego be once the new (Pio Pico, Carlsbad, any other currently authorized) power plants are online and existing plants (Encina, and any other plants currently scheduled to retire) retired?
- f. Did SoCalGas/SDG&E or any other operator undertake other efforts to improve gas system capacity other than the installation of additional pipelines? Please explain.

RESPONSE 15:

- a. Please refer to SDG&E’s and SoCalGas’ response to ORA Data Request 7, Question 8 in this proceeding.
- b. Please refer to SDG&E’s and SoCalGas’ response to ORA Data Request 7, Question 8 in this proceeding.
- c. SDG&E and SoCalGas object to this question as 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.
The average heat rate of a plant or group of plants depend on many factors, such as the technology, the number of starts and stops, and how it is dispatched between minimum

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and maximum output. Thus this value could change from year to year even with the same plants being in service. Please refer to SDG&E's and SoCalGas' response to ORA Data Request 7 Question 8, and ORA Data Request 9 Question 14, which asked for plant-specific heat rate data.

- d. Please refer to Response 15(c) above.
- e. Please refer to Response 15(c) above.
- f. When faced with the need to lower operating pressures on its gas transmission pipeline assets in San Diego, SDG&E and SoCalGas operations relinquished capacity previously held on the SDG&E system for an operating margin and lowered the Minimum Operating Pressure on the southern portion of the SDG&E system to recover for the market the capacity lost due to the pressure deratings.

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QUESTION 16:

Describe each of the eight curtailments related to pipeline maintenance on the SDG&E gas system described on page 15 of the Prepared Direct Testimony of D. Bisi.

RESPONSE 16:

Advanced notice for these curtailments was provided over one month in advance of the first outage scheduled for October 1 on August 30, 2011. An updated notice was provided approximately three days prior to each scheduled outage.

The table below describes start and end time for each of the scheduled Line 3010 maintenance outages.

Start Date and Time	End Date and Time	Duration	Trigger
Oct 1, 2011 6AM	Oct 1, 2011 9PM	13 hours	Planned Maintenance
Oct 8, 2011 6AM	Oct 8, 2011 11PM	17 hours	Planned Maintenance
Oct 15, 2011 6AM	Oct 15, 2011 11PM	17 hours	Planned Maintenance
Oct 22, 2011 6AM	Oct 22, 2011 9PM	15 hours	Planned Maintenance
Oct 29, 2011 6AM	Oct 30, 2011 4AM	22 hours	Planned Maintenance
Nov 5, 2011 6AM	Nov 5, 2011 1PM	7 hours	Planned Maintenance
Nov 12, 2011 6AM	Nov 12, 2011 10PM	16 hours	Planned Maintenance
Nov 19, 2011 6AM	Nov 19, 2011 8PM	14 hours	Planned Maintenance

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QUESTION 17:

Why is there only one opportunity to construct an additional pipeline in San Diego, as described on page 16 of the Prepared Direct Testimony of D. Bisi?

RESPONSE 17:

As stated in the Prepared Direct Testimony of David Bisi, the “Utilities considered a wide range of potential alternative routes for a new pipeline project of this magnitude and scope in San Diego County . . . and determined that just one route was clearly the most suitable . . .” Without another viable route, there is no other opportunity to construct an additional pipeline.

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QUESTION 18:

Provide a list of any other pipelines SoCalGas/SDG&E has built to allow redundancy for a compressor station.

RESPONSE 18:

All additional pipelines installed to provide redundancy for other pipelines in the gas transmission system also provide some level of redundancy for existing compressor stations. On the SoCalGas system, the installation of Line 5000 on the Southern System and Line 335 on the Northern System provided some redundancy for compressor stations located on those specific systems.