SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY

PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)

(A.15-09-013)

(DATA REQUEST ORA-DR-09)

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.

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

Subject: Prepared Testimony of S. Ali Yari

QUESTION 1:

The Prepared Direct Testimony of S. Ali Yari at page 1 states: "There is currently no requirement for electric generators to elect a firm gas supply to provide for a firm electric supply."

a. Are electric generators able to elect a firm gas supply?

b. Do any SoCalGas/SDG&E tariffs prohibit electric generators from electing firm gas supply?

c. In Application 15-06-020 (SoCalGas/SDG&E Curtailment Application) did SoCalGas/SDG&E propose to have electric generators be required to elect a firm gas supply to provide for a firm electric supply?

d. Please provide the curtailment order (e.g. the priority list for which customer classes would be curtailed) that SoCalGas/SDG&E proposed in Application 15-06-020.

RESPONSE 1:

a. Yes, electric generators can elect firm noncore service.

b. No, electric generators are not prohibited from electing firm service.

c. Application (A.) 15-06-020 removes the distinction between firm and interruptible service.

d. Please refer to this link for the proposed curtailment order: https://www.socalgas.com/regulatory/documents/a-15-06-020/Ch%202%20Curtailment%20Testimony%20-%20Watson.pdf

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QUESTION 2:

The Prepared Direct Testimony of S. Ali Yari at page 1 states "SDG&E has an obligation to serve its customers safely and reliably."

a. Has SDG&E safely and reliably served its customers with Line 1600 and Line 3010? Please explain.

RESPONSE 2:

Yes.

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Date Requested: April 27, 2016
Date Responded: May 13, 2016

Subject: Prepared Testimony of S. Ali Yari

QUESTION 3:

The Prepared Direct Testimony of S. Ali Yari at pages 2 uses the term "in-basin" generation.

a. Provide a map of the "in-basin" area referred to. Please include and identify on this map all natural gas fired generators asked about in subpart b of this question.

b. Provide a list of all natural gas fired generators, greater than 40 MW, within the "in-basin" area. The list should have the nameplate MW, name of the facility, and identification of the transmission line number to which they are connected.

RESPONSE 3:

a. Please see attached map, which contains confidential information provided pursuant to General Order (G.O.) 66-C and California Public Utilities Code (Cal. Pub. Util. Code) Section 583.

Power Plant Locations 11x17.pdf

b. Please see response to Question 14 below which requests the same or more data on all natural gas fired generators 25 MW or larger.

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QUESTION 4:

Define “firm electric load” as used on page 3 of the Prepared Direct Testimony of S. Ali Yari.

RESPONSE 4:

Firm electric load refers to all electric load (electric demand) that is not under a demand response program.

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QUESTION 5:

Has SDG&E proposed or received authorization for any new electric transmission projects that could or will make redundant the need for the proposed project? Please provide all such projects and explain.

RESPONSE 5:

No, there are no new electric transmission projects that could or will make redundant the need for the Proposed Project. There are multiple needs for the Proposed Project, only one of which involves the electric system. Although SDG&E may propose one or more electric transmission projects in the future to mitigate the electric risk described in the Prepared Direct Testimony of S. Ali Yari, depending on the outcome of this proceeding, such project(s) would not make redundant the need for the Proposed Project.

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QUESTION 6:

For how many years has the SDG&E system been operating with the "gas supply system without gas contingency planning for a similar 'N-1' single line outage of Line 3010" as described on page 4 of the Prepared Direct Testimony of S. Ali Yari.

a. Would an outage at Aliso Canyon be a similar N-1 contingency for the LA Basin?

RESPONSE 6:

Please refer to SDG&E's and SoCalGas' response to Question 6 of ORA Data Request 7. The concept of an "N-1 contingency" is applicable to electric system planning. Gas system planning has no such counterpart, and SDG&E and SoCalGas are not obligated to identify or plan for any such standard. Please refer to the Prepared Direct Testimony of David M. Bisi at page 14 for the Commission-mandated design standards for the SoCalGas and SDG&E system.

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QUESTION 7:

Page 5 of the Prepared Direct Testimony of S. Ali Yari states that there are "approximately 3,000 MW of generators that rely on natural gas supplies from the two existing transmission pipelines within San Diego county."

a. Provide a list with the name, MW, and which Line (1600 or 3010) the generators are connected to.

b. Assuming Line 3010 was not in service, and with no other load than electric generators, can Line 1600 physically provide gas to all of the generators in San Diego?

RESPONSE 7:

a. Electric generation facilities on the SDG&E system are served by other pipelines than just Line 1600 or Line 3010. Please see response to Question 14 below.

b. No.

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QUESTION 8:

Has the California Independent System Operator or California Public Utilities Commission made a location-specific determination of either fast ramping or operational flexibility? If so please, provide the document(s) with specific references.

RESPONSE 8:

No.

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QUESTION 9:

Page 9 of the Prepared Direct Testimony of S. Ali Yari states that South Bay and Encina Power Plants were required to be dual-fuel.

a. When did South Bay retire?

b. How many MW was South Bay?

c. What was the connected capacity of South Bay?

d. How many MW is Otay Mesa?

e. When did Otay Mesa become operational?

f. What is the connected capacity of Otay Mesa?

g. Provide a list, with the unit number and MW, of when Encina no longer was dual fuel.

h. How many hours did it take to South Bay to change from natural gas to oil operation?

i. How many hours did it take to Encinca to change from natural gas to oil operation?

j. When is Encina scheduled to retire?

k. By facility and unit, when was oil operation eliminated from these facilities?

l. How many days would it take to restore dual-fuel capabilities?

RESPONSE 9:

Please note that some of the information provided (*e.g.*, connected capacity) is confidential information provided pursuant to G.O. 66-C and Cal. Pub. Util. Code § 583.

a. Unit 3 (175 MW) and Unit 4 (222 MW) retired in 2009. The rest of the plant, Unit 1 (145 MW) and Unit 2 (149 MW) and the combustion turbine (15 MW) retired in 2010. The combustion turbine only ran on liquid fuel and did not use natural gas.

b. See response to Question 9(a) above.

c. The connected capacity at South Bay was approximately [redacted] MMcfd.

d. 604 MW

e. 2010

f. The connected capacity at Otay Mesa is [redacted] MMcfd.

g. Dual fuel operation at Encina ended in approximately 2008.

h. It took approximately four hours to switch from natural gas to fuel oil at the former South Bay generating facility.

i. It took approximately four hours to switch from natural gas to fuel oil the Encina generating facility when it had that capability.

j. 2017

k. See response to Question 9(g) above.

l. It is not physically possible to do since infrastructure, including the storage tanks, have been removed.

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QUESTION 10:

Page 10 of the Prepared Direct Testimony of S. Ali Yari describes a scenario where "gas supply is lost to all local natural gas-fired EG during a peak electric load period; gas supply is unavailable for a four-hour period; and that no customer outages would occur."

a. Do customers within San Diego elect to have interruptible service?

b. What is the probability of the described scenario occurring? Provide the supporting calculations and data.

c. Why was a four-hour period selected?

d. How many MW of load are on the SDG&E system at the "peak electric load period"?

e. How many MW of natural-gas fired power plants within San Diego are operating during the "peak electric load period"?

f. How often do "peak electric load" periods occur simultaneously with a need for heating units to operate? Please explain.

g. Provide support for the 11,200 MWh of energy storage capacity needed, as described on page 11.

RESPONSE 10:

a. Please refer to the response to Question 1(a) above.

b. The described scenario is merely one possible example. No probability of that scenario example occurring has been determined. Any such example has a low probability of occurrence and very high consequences if the scenario does occur.

c. The four-hour period was randomly selected as an example.

d. The peak electric demand forecast indicated on page 10 of the Prepared Direct Testimony of S. Ali Yari was explained to be 5,372 MW in 2016, based on the California Energy Commission (CEC) forecast at the time Mr. Yari's testimony was prepared.

e. The California Independent System Operator (CAISO) dispatches generation depending on market conditions and reliability considerations. In general, all generating units would be expected to be either on line or available as reserve for contingency conditions.

f. There is always some need for heating units to operate, including water heating. Although the gas demand for heating is lower during the peak electric load period, demand still exists.

g. Please note page 16 of the Prepared Direct Testimony of S. Ali Yari, in which he states that under a scenario in which an interruption of gas supply occurred to electric generators at peak load, up to about 2,802 MW of customer load would be unserved. With some very minor rounding, the 11,200 MWh figure represents 2,800 MW for a 4-hour hour electric supply (2800 * 4 = 11,200) to serve that otherwise-unserved customer load for up to four hours.

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QUESTION 11:

Pages 11-12 of the Prepared Direct Testimony of S. Ali Yari describes San Onofre Nuclear Generation Station (SONGS) as providing 2,250 MW of baseload generation "in the region."

a. What region did SONGS provide electricity to?

b. If this region is not entirely San Diego, please provide how many MW were provided on average to San Diego.

c. How many MW of natural-gas fired generation were in San Diego in 2011, 2014, and are forecast to be in operation by 2024?

RESPONSE 11:

a. SONGS is connected at the 230 kV interface between the electric transmission systems of SDG&E and SCE, and accordingly provided electricity to Southern California, including San Diego.

b. SDG&E's ownership share of the SONGS units was 20%, however, due to characteristics of the electric transmission system, power flows well in excess of SDG&E's share would typically flow into SDG&E's system from the 230 kV interconnection at San Onofre substation, displacing other power flows.

c. The amount of natural gas fired generation was and is forecasted to be:

2011 3,081 MW
2014 3,094 MW
2024 2,743 MW

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QUESTION 12:

Pages 12-13 of the Prepared Direct Testimony of S. Ali Yari describes current natural gas generation in SDG&E's Service Territory.

a. What is the connected capacity of Palomar Energy Center?

b. Does Line 1600 or Line 3010 primarily provide natural gas to Palomar Energy Center?

c. Provide the average and peak percentage of connected capacity that the Palomar Energy Center used, by month, in 2015.

d. Would the Palomar Energy Center primarily use gas from Line 3010 or the proposed Line 3602 if it is constructed?

e. What is the connected capacity of Encina?

f. Does Line 1600 or Line 3010 primarily provide natural gas to Encina?

g. Provide the average and peak percentage of connected capacity that Encina used, by month, in 2015.

h. Would Encina primarily use gas from Line 3010 or the proposed Line 3602 if it is constructed?

i. What is the connected capacity of Otay Mesa Energy Center?

j. Does Line 1600 or Line 3010 primarily provide natural gas to Otay Mesa Energy Center?

k. Please confirm that Otay Mesa Energy Center receives natural gas piped in from the receipt point at Otay Mesa.

l. Provide the average and peak percentage of connected capacity that Otay Mesa Energy Center used, by month, in 2015.

m. Would Otay Mesa Energy Center primarily use gas from Line 3010 or the proposed Line 3602 if it is constructed?

n. What is the connected capacity of the 900 MW of Combustion Turbines?

o. Since 2013, have any changes occurred to the Combustion Turbines that increase or decrease the connected capacity? Please explain.

p. What percentage of the 900 MW of Combustion Turbines primarily receive gas from Line 1600?

q. What percentage of the 900 MW of Combustion Turbines primarily receive gas from Line 3010?

r. Provide the average and peak percentage of connected capacity that the Combustion Turbines used, by month, in 2015.

s. What percentage of the 900 MW of Combustion Turbines primarily receive gas from Line 3010 if the proposed Line 3602 is constructed?

t. What percentage of the 900 MW of Combustion Turbines primarily receive gas from Line 3602 if the proposed Line 3602 is constructed?

u. Please explain how Termoelectrica de Mexicali would be impacted by an outage of Line 1600 or Line 3010.

v. Please explain how Central La Rosita II would be impacted by an outage of Line 1600 or Line 3010.

RESPONSE 12:

Please note that some of the information provided (*e.g.*, connected capacity, % connected load) is confidential information provided pursuant to G.O. 66-C and Cal. Pub. Util. Code § 583.

a. The connected capacity of Palomar Energy Center is [redacted] MMcfd.

b. Palomar Energy Center is served from both Line 1600 and Line 3010 equally.

c. Please refer to the attached workbook 'PSRP ORA DR 9 Q12.' Monthly peak demand is non-coincident for Palomar Energy Center, Encina, and Otay Mesa Energy Center, and is coincident for the Combustion Turbines.

PSRP ORA DR 9 Q12 Confidential.xlsx

d. Palomar Energy Center would be served primarily from the proposed Line 3602.

e. The connected capacity of Encina is [redacted] MMcfd.

f. Encina is primarily served from Line 3010.

g. Please refer to Response 12c of this data request.

h. Encina would primarily be served from Line 3010, but would be able to receive supplies from the proposed Line 3602 if system conditions required.

i. The connected capacity of Otay Mesa Energy Center is 100 MMcfd.

j. Otay Mesa Energy Center is served primarily from Line 3010.

k. The power plant can use supply delivered at the Otay Mesa receipt point only to the extent that customers schedule supply at that location. Customers have historically chosen not to deliver supply at Otay Mesa.

l. Please refer to Response 12c of this data request.

m. Otay Mesa Energy Center would be served primarily from the proposed Line 3602, but would be able to receive supplies from Line 3010 if system conditions required.

n. The connected capacity of the combustion turbines in SDG&E service area are shown in response to Question 14 below.

o. Since 2013, [redacted] MW of Combustion Turbines on the SDG&E system have been retired, which decreases the connected capacity by [redacted] MMcfd.

p. Approximately 30% of the combustion turbine demand receives its gas supply primarily from Line 1600.

q. Approximately 70% of the combustion turbine demand receives its gas supply primarily from Line 3010.

r. Please refer to Response 12c from this data request.

s. Approximately 45% of the combustion turbine demand will receive its gas supply primarily from Line 3010 if Line 3602 is constructed.

t. Approximately 55% of the combustion turbine demand will receive its gas supply primarily from Line 3602 if Line 3602 is constructed.

u. Termoelectrica de Mexicali is not connected to the SDG&E gas system.

v. Central La Rosita II is not connected to the SDG&E gas system.

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QUESTION 13:

Pages 13-14 of the Prepared Direct Testimony of S. Ali Yari describes forecast natural gas generation in SDG&E's Service Territory.

a. What is the connected capacity of Pio Pico Generation?

b. When Pio Pico goes into service, will Line 1600 or Line 3010 primarily provide natural gas to Pio Pico Generation?

c. By the time it goes into service, will Pio Pico Generation receive gas piped in from the Otay Mesa receipt point?

d. Provide the forecast average and peak percentage of connected capacity for Pio Pico Generation.

e. Would Pio Pico Generation primarily use gas from Line 3010 or the proposed Line 3602 if it is constructed?

f. What is the connected capacity of the Carlsbad Energy Center?

g. Would Line 1600 or Line 3010 primarily provide natural gas to the Carlsbad Energy Center?

h. Provide the forecast average and peak percentage of connected capacity for the Carlsbad Energy Center.

i. Would the Carlsbad Energy Center primarily use gas from Line 3010 or the proposed Line 3602 if it is constructed?

RESPONSE 13:

Please note that some of the information provided (*e.g.*, connected capacity, % connected load) is confidential information provided pursuant to G.O. 66-C and Cal. Pub. Util. Code § 583.

a. The connected capacity of Pio Pico Generation will be [redacted] MMcfd.

b. Pio Pico Generation will be served primarily by Line 3010.

c. Please refer to the response to Question 12(k) of this data request.

d. SoCalGas and SDG&E do not forecast usage for plants yet to be placed into service.

e. Pio Pico Generation would primarily receive supplies from the proposed Line 3602, but would be able to receive supplies from Line 3010 if system conditions required.

f. The connected capacity of the Carlsbad Energy Center will be [redacted] MMcfd

g. Carlsbad Energy Center would be served primarily by Line 3010.

h. Please refer to response 13d of this data request.

i. Carlsbad Energy Center would be served primarily by Line 3010, but would be able to receive supplies from the proposed Line 3602 if system conditions required.

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QUESTION 14:

For each natural-gas fired generator of 25 MW or more located in San Diego online today or forecast to be online by 2020, provide the:

a. Name

b. Nameplate MW

c. Net Qualifying Capacity

d. Connected Capacity

e. Heat Rate at PMin

f. Heat Rate at PMax

RESPONSE 14:

Please see the attached document and note that some of the information provided in the attachment (*e.g.*, connected capacity and heat rate) is confidential information provided pursuant to G.O. 66-C and Cal. Pub. Util. Code § 583.

The heat rate data is indicative for the type of capacity installed at each site. The actual rates will vary based on plant specifics, temperatures and operating limits.

ORA DR 9 Q14 Confidential.xlsx

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QUESTION 15:

Page 14 of the Prepared Direct Testimony of S. Ali Yari states "although the installed capacity at Encina will be reduced from 950 MW to approximately 500 MW, the increased efficiency of the new units will likely mean they will be run more often than the existing units."

a. How much more efficient are the new units than the old units? Please quantify.

b. Is it possible that the increased efficiency, even if run more often, means Carlsbad would burn less gas than Encina? Is it likely that this would be the case? Please explain.

RESPONSE 15:

Please note that some of the information provided (*e.g.*, heat rate in part a.) is confidential information provided pursuant to G.O. 66-C and Cal. Pub. Util. Code § 583.

a. The new units at Encina are expected to have a full load heat rate of about [redacted] BTU/KWHR. The existing units at Encina had full load heat rates of about [redacted] to [redacted] BTU/KWHR depending on the unit.

b. SDG&E and SoCalGas object to this request on the grounds that it is speculative 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: Gas usage will be driven by many factors so it is not possible to draw a specific conclusion.

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QUESTION 16:

Page 14 of the Prepared Direct Testimony of S. Ali Yari describes the Maximum Power Import Capability (MIC) into San Diego is 3,500 MW.

a. Are there any transmission projects that would increase the MIC into San Diego? Please explain and include when the projects would become operational.

b. How many MW need to operate within San Diego for the 3,500 MW MIC to occur?

c. Does SDG&E's latest Standard Operating Procedures show the MIC into San Diego is 3,500 MW?

d. Please provide a copy of SDG&E's latest Standard Operating Procedures that prescribes MIC into San Diego.

RESPONSE 16:

a. There have been proposals made that could increase the Maximum Import Capability (MIC); however, none of those proposals have regulatory approval nor would any of them go in service before 2025.

b. There is no specific number of MW that can be provided for the 3,500 MIC to occur, since the number varies based on system operating conditions. During day-ahead and real-time operation of the electric power grid, studies are performed to determine actual operating limitations.

c. Yes.

d. Please note that information provided in the attachment contains confidential information provided pursuant to G.O. 66-C and Cal. Pub. Util. Code § 583. The attached excerpt from SDG&E's Import and Export Capabilities Standard Operating Procedures (SOP) - GIP2005 provides the basis for SDG&E's 3,500 MW maximum electric power import capability.

Page 8 from GIP2005.pdf

QUESTION 17:

Page 15 of the Prepared Direct Testimony of S. Ali Yari provides a simplified load and resource assessment of the San Diego area. Provide any power flow or other technical studies supporting the amount of local generation needed with 3,500 MW of imports.

RESPONSE 17:

Refer to responses to Questions 16 (b) and 16(d) above.

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QUESTION 18:

Given the availability of the new demand forecast, why did SDG&E use the older demand forecast?

RESPONSE 18:

The CEC's long term peak demand forecast for 2015-2025 was used because that was the forecast available at the time of Mr. Yari's testimony preparation. The 2016-2026 forecast was not approved until January 27, 2016, after substantial preparation and near-completion of Mr. Yari's testimony.

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QUESTION 19:

Please confirm that the 2016 updated California Energy Commission demand forecast, mid load is 5,136 MW under 1-in-10 temperatures, as compared to the 5,372 MW forecast used in the Prepared Direct Testimony of S. Ali Yari at page 15.

RESPONSE 19:

Yes.

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SOUTHERN CALIFORNIA GAS COMPANY

PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)

(A.15-09-013)

(DATA REQUEST ORA-DR-09)

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

QUESTION 20:

Please confirm that the 2026 peak demand from the 2016 updated California Energy Commission demand forecast is 5,246 MW, or approximately 130 MW lower than the 2016 demand used in the Prepared Direct Testimony of S. Ali Yari at page 15.

RESPONSE 20:

SDG&E and SoCalGas agree that the updated forecast for 2026 is 5,246 MW. SDG&E and SoCalGas calculate that as 126 MW lower than the 2016 forecast of 5,372 MW used by Mr. Yari.

SAN DIEGO GAS & ELECTRIC COMPANY
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Date Requested: April 27, 2016
Date Responded: May 19, 2016

QUESTION 21:

The Prepared Direct Testimony of S. Ali Yari at page 18 lists three events allegedly demonstrating the "interdependency of the gas and electric systems". For each of the three events explain if there were any gas system constraints, the weather at the time of the event, if there were any electric transmission outages, the quantity of gas curtailments requested by SoCalGas/SDG&E and the amount actually curtailed. Also provide the core gas demand, non-core gas demand, and electric generator gas demand during each of those three events.

RESPONSE 21:

SDG&E and SoCalGas object to this request insofar as it is overbroad, compound, 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.

Event 1: January 15, 2013 Gas Curtailment Watch

Core gas demand: 2,353 MMcf
Noncore gas demand: 482 MMcf
EG demand: 865 MMcf
Forecasted System Sendout: 4,507,695 Dth
Number of electric transmission outages: 1
Miramar Weather (High/Low/Weather): 59°/32°/Fair,sunny
The gas system constraints at time of the event can be found in the attached document:

MaintenanceSchedule
_2013-01-12.pdf

Since this event was a curtailment "watch" SDG&E and SoCalGas did not request curtailments.

Event 2: December 9, 2013 Gas Curtailment Watch

Core gas demand: 2,679 MMcf
Noncore gas demand: 418 MMcf
EG demand: 995 MMcf
Forecasted System Sendout: 4,761,093 Dth

Number of electric transmission outages: 5
Miramar Weather (High/Low/Weather): 62°/37°/Partly to mostly cloudy
The gas system constraints at time of the event can be found in the attached document:

MaintenanceSchedule_2013-12-04.pdf

Since this event was a curtailment "watch" SDG&E and SoCalGas did not request curtailments.

Event 3: February 6, 2014 Gas Emergency Curtailment Notice

Core gas demand: 1,836 MMcf
Noncore gas demand: 456 MMcf
EG demand: 764 MMcf
Forecasted System Sendout: 3,776,462 Dth
Number of electric transmission outages: 8
Miramar Weather (High/Low/Weather): 61°/49°/Overcast, PM rain
The gas system constraints at time of the event can be found in the attached document:

MaintenanceSchedule_2014-02-06.pdf

SDG&E and SoCalGas called an Emergency Localized Southern System Curtailment (which includes the SDG&E service area). For SDG&E, one electric generation customer was curtailed. All other noncore electric generation (non-cogen) customers were instructed to hold their current load. None of SDG&E electric generation customers violated the order.

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QUESTION 22:

Provide a list of every "Gas Curtailment Watch" issued between January 1, 2010 and April 1, 2016.

RESPONSE 22:

Curtailment Watch List		
Start Date and Time	**End Date and Time**	**Utility Affected**
02/03/2011 10:53 AM		SCG/SDGE
12/07/2011 2:11 PM	12/07/2011 9:10 PM	SCG/SDGE
01/15/2013 7:18 AM	01/15/2013 4:05 PM	SCG/SDGE
12/09/2013 7:14 AM		SCG/SDGE
12/09/2013 9:03 PM	12/11/2013 8:44 AM	SCG/SDGE
12/09/2013 9:07 PM	12/10/2013 12:00 PM	SCG
02/25/2014 11:41 AM		SCG/SDGE
06/30/2015 8:15 AM	07/02/2015 7:30 AM	SCG/SDGE
07/29/2015 12:00 AM	07/31/2015 10:30 AM	SCG
12/29/2015 12:00 AM	12/29/2015 2:00 PM	SCG/SDGE

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QUESTION 23:

Provide a list and description for the categorization of events such as "Gas Curtailment Watch" and "Gas Emergency Localized Curtailment Notice" as used in the Prepared Direct Testimony of S. Ali Yari at page 18.

RESPONSE 23:

January 15, 2013
On the morning of January 15, 2013, SoCalGas and SDG&E were experiencing difficulties that may have affected service to noncore customers in Riverside, Imperial, and San Diego Counties. Deliveries into the Southern System were less than necessary to meet the projected Southern System load. A curtailment watch was posted on SoCalGas ENVOY® (ENVOY) that advised customers that they may receive a notice to curtail service on that day. In the late afternoon of that day, the curtailment watch was lifted.

December 9, 2013
On the morning of December 9, 2013, SoCalGas and SDG&E were experiencing difficulties that may have affected service to noncore customers in the Rainbow Corridor and SDG&E service territories. The loads in the Rainbow Corridor and SDG&E may have exceeded the capacity of those systems. A curtailment watch was posted on ENVOY that advised customers that they may receive a notice to curtail service on that day. Later that morning, a schematic of the SoCalGas and SDG&E System that highlighted the Rainbow Corridor was posted on ENVOY as well as a description of the Rainbow Corridor boundaries.

In the late afternoon of that day, customers were alerted through ENVOY that SoCalGas and SDG&E were continuing to experience difficulties that may affect service to noncore customers in the Rainbow Corridor and SDG&E service territories through December 11, 2013. Customers were advised that they may receive a notice to curtail service at any time through Wednesday of that week unless weather improved. That same ENVOY posting requested that customers, to the extent possible, limit discretionary operations over the next several days and to continue to practice energy conservation whenever possible.

In the evening of that day, a curtailment watch was posted on ENVOY for the Southern System, including the SDG&E service area. Additionally, a curtailment watch was posted on ENVOY for Los Angeles County and Orange County. The Localized Los Angeles County and Orange County curtailment watch ended on December 10, 2013 at 12:00 PM. The Localized Southern System curtailment watch ended on December 11, 2013 at 8:44 AM.

February 6, 2014

On the morning of February 6, 2014, SoCalGas was experiencing low gas deliveries due to higher upstream gas prices on its system. This affected SoCalGas' ability to meet forecasted customer requirements. SoCalGas and SDG&E declared an Emergency Localized Curtailment on the SoCalGas Southern System and the entire SDG&E service area. One electric generation customer was curtailed while the other electric generation customers were instructed to hold to their current load. SoCalGas alerted noncore customers that they may be required to curtail later that day.

Due to the continued low system receipts and high electric generation demand, SoCalGas extended the emergency curtailment to the remainder of its system in the early afternoon of that day. On February 7, 2014 at 12:00 AM, the Emergency Localized Curtailment of the SDG&E and SoCalGas Southern System to large electric generation customers ended. On that same day at 7:00 AM, the Emergency Curtailment of affected customers on the remainder of the SoCalGas system ended.