

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(13th DATA REQUEST FROM SOUTHERN CALIFORNIA GAS COALITION)**

**Date Requested: March 3, 2017
Date Responded: March 17, 2017
Administrative Correction Submitted: March 22, 2017**

PRELIMINARY STATEMENT

1. These responses and objections are made without prejudice to, and are not a waiver of, SDG&E's 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 do 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, as set forth in the California Public Utilities Commission ("Commission or CPUC") Rules of Practice and Procedure. SDG&E and SoCalGas possession, custody, or control does not include any constructive possession that may be conferred by SDG&E's and 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 expressly reserves 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).
6. 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.
7. Publicly available information and documents including, but not limited to, documents that are part of the proceeding record, newspaper clippings, court papers, and materials available on the Internet, will not be produced.

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(13th DATA REQUEST FROM SOUTHERN CALIFORNIA GAS COALITION)**

**Date Requested: March 3, 2017
Date Responded: March 17, 2017
Administrative Correction Submitted: March 22, 2017**

GENERAL OBJECTIONS

1. SDG&E and SoCalGas object to each instruction, definition, and request to the extent that it purports to impose any requirement or discovery obligation greater than or different from those under the CPUC Rules of Practice and Procedure, Statutes, and the applicable Orders of the Commission.
2. SDG&E and SoCalGas object to each request that is overly broad, unduly burdensome, or not reasonably calculated to lead to the discovery of admissible evidence.
3. SDG&E and SoCalGas object to each instruction, definition and data request to the extent that it seeks information protected from disclosure by the attorney-client privilege, deliberative process privilege, attorney work product doctrine, or any other applicable privilege. Should any such disclosure by SDG&E and SoCalGas occur, it is inadvertent and shall not constitute a waiver of any privilege.
4. SDG&E and SoCalGas object to each instruction, definition and data request as overbroad and unduly burdensome to the extent it seeks documents or information that are readily or more accessible to Southern California Generation Coalition (SCGC) from SCGC's own files, from documents or information in SCGC's possession, or from documents or information that SDG&E and SoCalGas previously released to the public or produced to SCGC. Responding to such requests would be oppressive, unduly burdensome, and unnecessarily expensive, and the burden of responding to such requests is substantially the same or less for SCGC as for SDG&E and SoCalGas.
5. SDG&E and SoCalGas object to each instruction, definition and data request to the extent that it seeks the production of documents and information that were produced to SDG&E and SoCalGas by other entities and that may contain confidential, proprietary, or trade secret information.
6. To the extent any of SCGC's data requests seek documents or answers that include expert material, including but not limited to analysis or survey materials, SDG&E and SoCalGas object to any such requests as premature and expressly reserves the right to supplement, clarify, revise, or correct any or all responses to such requests, and to assert additional objections or privileges, in one or more subsequent supplemental response(s) in accordance with the time period for exchanging expert reports set by the Commission.
7. SDG&E and SoCalGas incorporate by reference every general objection set forth above into each specific response set forth below. A specific response may repeat a general objection for emphasis or some other reason. The failure to include any general objection in any specific response does not waive any general objection to that request. Moreover, SDG&E and SoCalGas do not waive their right to amend any responses.

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(13th DATA REQUEST FROM SOUTHERN CALIFORNIA GAS COALITION)**

**Date Requested: March 3, 2017
Date Responded: March 17, 2017
Administrative Correction Submitted: March 22, 2017**

QUESTION 13.1:

Please explain why the sentence, “A much smaller compressor station is located at Rainbow Station to boost pressure into Line 1600, as necessary,” is deleted from page 3, line 18-20, of Mr. Bisi’s Original Direct Testimony served on March 21, 2016. More specifically, please explain the current status of the compressor.

RESPONSE 13.1:

The Rainbow Compressor Station was decommissioned in October 2016.

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(13th DATA REQUEST FROM SOUTHERN CALIFORNIA GAS COALITION)**

**Date Requested: March 3, 2017
Date Responded: March 17, 2017
Administrative Correction Submitted: March 22, 2017**

QUESTION 13.2:

Footnote 2 states: “The natural gas pipe network includes a SoCalGas pipeline that distributes gas along the Pacific coast, with product flowing from Orange County into San Diego County. This pipeline operates as part of the coastal distribution system, provides natural gas to the local area, and does not transport gas within the larger San Diego region. Less than one percent of the SDG&E system capacity enters the county through this pipeline.”

13.2.1 Please identify this line by number.

13.2.2 Please state the annual average volumes delivered over this line during 2015 and 2016.

13.2.3 What is MAOP of the line?

13.2.4 What is the maximum capability of the line to deliver gas if it was operated at its MAOP and assuming there was sufficient load to receive the gas that was delivered?

13.2.5 Are any EG or large industrial customers served from this line?

13.2.6 Could any EG or large industrial customers be served from this line if Line 3010 was undergoing an outage?

13.2.7 Please explain the reasons for the previous answer.

RESPONSE 13.2:

This response contains confidential information (shaded in gray) provided pursuant to the Nondisclosure and Protection Agreement between SCGC and SDGE/SoCalGas.

13.2.1 Line 1026.

13.2.2 Annual daily average volumes delivered to Line 1026 from the SDG&E customer meter at San Onofre were 0.2 and 3.1 MMcfd in 2015 and 2016, respectively.

13.2.3 Line 1026 has an MAOP of psig.

13.2.4 Line 1026 has a nominal capacity of approximately 5 MMcfd, and serves as a distribution pipeline in San Diego.

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

(13th DATA REQUEST FROM SOUTHERN CALIFORNIA GAS COALITION)

Date Requested: March 3, 2017

Date Responded: March 17, 2017

Administrative Correction Submitted: March 22, 2017

-
- 13.2.5 There is one EG customer served by Line 1026 and no large industrial customers.
- 13.2.6 Line 1026 is also supplied by Line 3010 at several unmetered locations in San Diego. Line 1026 does not operate at sufficient pressure and lacks capacity to serve an EG customer or large industrial customers assuming an outage on Line 3010.
- 13.2.7 See the response to Question 13.2.6 above.

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(13th DATA REQUEST FROM SOUTHERN CALIFORNIA GAS COALITION)**

**Date Requested: March 3, 2017
Date Responded: March 17, 2017
Administrative Correction Submitted: March 22, 2017**

QUESTION 13.3:

At page 5, line 12, of his Updated Direct Testimony, Mr. Yari says: “The existing in-basin gas-fired generation in SDG&E’s service territory consists of approximately 3,140 megawatts (MW) of generators that rely on natural gas supplies....” Mr. Yari’s figure of 3,140 MW is increased from 3,000 MW in his February 21, 2016 Direct Testimony. Please identify the changes in the generation mix in the SDG&E service territory that have occurred since the service of the February 21, 2016 Direct Testimony so that the total in-basin gas-fired generation capacity is now 3,140 MW.

RESPONSE 13.3:

By the end of the first quarter of 2017, three gas turbines will be retired, which amounts to 52 MW. Additionally, one of the Encina units, capable of generating 106 MW, has retired. This totals a loss of 158 MW due to retirements.

By December 2016, 3 new peakers were added to the system (the Pio Pico units), capable of generating 308 MW in total. The net total from the retired units and the added units is 150 MW in additional gas-fired generation. The total in SDGE-4-R Updated Prepared Direct Testimony of S. Ali Yari was 2,988 MW (rounded to approximately 3,000 MW).

Adding the 150 MW net additions to the existing gas-fired generation portfolio yields 3,138 MW (rounded to approximately 3,140 MW).

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(13th DATA REQUEST FROM SOUTHERN CALIFORNIA GAS COALITION)**

**Date Requested: March 3, 2017
Date Responded: March 17, 2017
Administrative Correction Submitted: March 22, 2017**

QUESTION 13.4:

Mr. Yari says at page 5, lines 14-16: “If an outage on Line 3010 occurs, as Ms. Marelli and Mr. Bisi testify, these EG plants could be curtailed to continue providing gas to serve core gas customers.”

- 13.4.1 If an outage on Line 3010 occurs, how is SDG&E assured that it would be able obtain sufficient gas supply to meet core gas demand even with all noncore customers being curtailed?
- 13.4.2 If service to meet core demand would be maintained in the event of an outage on Line 3010, please identify the transportation paths that SDG&E would use to transport the gas supply acquired to meet core demand.

RESPONSE 13.4:

- 13.4.1 Continuous service to core customers in San Diego is not assured during an outage on Line 3010. SDG&E’s ability to maintain continuous service to all core customers depends upon the location of the outage on Line 3010 and the availability of supply both at the Rainbow Metering Station and at the Otay Mesa receipt point. Curtailing all noncore customers would simply increase the capacity available to serve core requirements.
- 13.4.2 Transportation paths to serve core requirements not directly affected by the outage would be south from Rainbow and north from Otay Mesa.

If proposed Line 3602 were in place and there was an outage of Line 3010, it is very likely that no gas supplies would be required through Otay Mesa and no core or noncore curtailments (or only isolated curtailments in the localized area of the Line 3010 outage) would occur due to the significant improvements in reliability and resiliency that proposed Line 3602 brings.

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(13th DATA REQUEST FROM SOUTHERN CALIFORNIA GAS COALITION)**

**Date Requested: March 3, 2017
Date Responded: March 17, 2017
Administrative Correction Submitted: March 22, 2017**

QUESTION 13.5:

At page 12, line 18, through page 13, line 9, Mr. Yari identifies the capacities of five sources of electricity that total 3,115 MW. However, at line 13 on page 12 Mr. Yari says that existing gas-fired generation in the SDG&E system is a total of 3,140 MW. Please explain the 25 MW discrepancy between the 3,115 MW total and 3,140 MW.

RESPONSE 13.5:

SDGE-4-R Updated Prepared Direct Testimony of S. Ali Yari at page 12 line 18 through page 13, line 9 provides approximate (rounded) MW amounts, which is how the 3,115 MW total was derived. The MW numbers used to derive the 3,140 MW total are more precise. For a comparison of the calculation of the MW numbers, please see the following table:

	Approximate (rounded) MW provided in SDGE-4-R at pages 12-13	Actual MW numbers
Encina	850 MW	844 MW
Palomar	565 MW	565.6 MW
Otay Mesa	600 MW	603.6 MW
Pio Pico	300 MW	308 MW
Gas Turbines, Qualifying Facilities and other Peakers	800 MW	816.4 MW
MW Total	3,115 MW	3,137.6 MW (rounded to 3,140 MW)

Based on the MW numbers provided above: 3,140 MW – 3,115 MW = 25 MW.

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

(13th DATA REQUEST FROM SOUTHERN CALIFORNIA GAS COALITION)

**Date Requested: March 3, 2017
Date Responded: March 17, 2017
Administrative Correction Submitted: March 22, 2017**

QUESTION 13.6:

At page 15, line 8-11, Mr. Yari states “A simple comparison of SDG&E’s maximum electric power import capability (up to 3,500 MW) to SDG&E’s peak load (4,693 MW for 2017) shows that even under maximum import conditions, up to 1,086 MW of local generation is needed and must have a reliable gas supply to serve SDG&E’s customer peak electric demand.” Please explain how Mr. Yari derives 1,086 MW and provide Mr. Yari’s workpapers for the derivation.

RESPONSE 13.6:

The 1,086 MW was derived using the following formula:

Load forecast – import limit – local internal generation that is not gas-fired (now including batteries) = Local gen dependent on reliable natural gas.

Load (year 2017)	4693 MW
Max Import	3500 MW
Energy storage	37 MW
Renewables	70 MW
Gas fired generation needed	1086 MW

Mr. Yari does not have workpapers for the derivation of the 1,086 MW value. The formula provided above determined the value.

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(13th DATA REQUEST FROM SOUTHERN CALIFORNIA GAS COALITION)**

**Date Requested: March 3, 2017
Date Responded: March 17, 2017
Administrative Correction Submitted: March 22, 2017**

QUESTION 13.7:

At page 13, lines 11-15, Mr. Yari states “Existing gas-fired generation in the Imperial Valley area is comprised of combined cycle plants located south of the USA-Mexico border. These plants play an important role in regulating the voltages in this very important hub of 500 kV lines and renewables. The lack of this generation would limit SDG&E import capability and cause issues in neighboring systems such as the Imperial Irrigation District (IID) and Comisión Federal de Electricidad (CFE).”

13.7.1 Is generation from these combined cycle plants located south of the border capable of providing electric generation that would mitigate the voltage stability limit?

13.7.2 Please explain the answer to the previous question.

13.7.3 If the answer to Q.13.6.1 is “yes,” would these plants be electrically equivalent to plants located within the San Diego service territory?

RESPONSE 13.7:

13.7.1 No.

13.7.2 The gas fired generation connected to Imperial Valley is east and outside of the SDG&E Import cut-plane. The voltage stability limitation, depicted by the horizontal line in Table 2, is a voltage instability phenomenon west of Imperial Valley. Only generation, that can provide voltage regulation, within the Import cut-plane and west of Imperial Valley, will provide voltage stability support.

13.7.3 N/A.

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(13th DATA REQUEST FROM SOUTHERN CALIFORNIA GAS COALITION)**

**Date Requested: March 3, 2017
Date Responded: March 17, 2017
Administrative Correction Submitted: March 22, 2017**

QUESTION 13.8:

At page 17, lines 8-12, Mr. Yari states “Although SDG&E does have Demand Response (DR) programs, the amount of DR is very limited and would not have any significant impact in resolving the problems of potential blackouts. The number of DR programs available depends upon the season. Some DR programs are available year round and others are available only May through October. SDG&E’s DR forecast filed April 2016 shows that SDG&E has 14 MW available in April and 80 MW available in September.”

- 13.8.1 Please provide a copy of SDG&E’s DR forecast filed in April 2016 and associated workpapers.
- 13.8.2 Does SDG&E have an air-conditioning cycling program (ACC) and/or a Base Interruptible Program (“BIP”)?
- 13.8.3 If the answer to the previous question is “no,” please explain why SDG&E does not have either ACC or BIP programs. If the answer is “yes,” please provide the most recent SDG&E reports to the Commission about the programs.

RESPONSE 13.8:

- 13.8.1 Please see the attachment to this response, which was filed by the demand response forecast group in April 2016. The work papers and details of the methodology used can be found in the reports located at the following website:
<http://www.sdge.com/regulatory-filing/10486/oir-enhance-role-dr-meeting-state-resource-planning-ops-reqmt>
- 13.8.2 Yes, SDG&E has both programs and they are both active.
- 13.8.3 Yes, please see attachments to this response.

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(13th DATA REQUEST FROM SOUTHERN CALIFORNIA GAS COALITION)**

**Date Requested: March 3, 2017
Date Responded: March 17, 2017
Administrative Correction Submitted: March 22, 2017**

QUESTION 13.9:

Regarding Figure 1, "North Baja California Pipeline Systems," please identify by name the following interconnection points:

- 13.9.1 The interconnection between North Baja Pipeline and Gasoducto Rosarito;
- 13.9.2 The interconnection between Gasoducto Rosarito and the TGN pipeline extending approximately northwest to the Otay Mesa Receipt Point;
- 13.9.3 The interconnection between the pipeline extending approximately southwest from Otay Mesa Receipt Point and the end of Gasoducto Rosarito;
- 13.9.4 The interconnection between the Gasoducto Rosarito pipeline extending approximately northeast from the ECA LNG Facility and the Gasoducto Rosarito east-west pipeline.

RESPONSE 13.9:

- 13.9.1 Ogilby/Algodones
- 13.9.2 Tijuana
- 13.9.3 Unknown (Interconnection is between Gasoducto Rosarito and TGN)
- 13.9.4 Tecate (Interconnection is between Gasoducto Rosarito LNG Lateral and Gasoducto Rosarito 30" mainline)

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(13th DATA REQUEST FROM SOUTHERN CALIFORNIA GAS COALITION)**

**Date Requested: March 3, 2017
Date Responded: March 17, 2017
Administrative Correction Submitted: March 22, 2017**

QUESTION 13.10:

At page 6, line 3, Mr. Borkovich says: “currently one of the three pipelines is nearly fully subscribed, with only 20 MMcfd available.”

- 13.10.1 Please confirm that the “one of the three pipelines” that is “nearly fully subscribed” is Gasoducto Rosarito.
- 13.10.2 Please identify the source of the information that the pipeline “has only 20 MMcfd available” and please provide a URL link to the source.
- 13.10.3 Is the 20 MMcf/d available on a firm basis?
- 13.10.4 Please confirm that Gasoducto Rosarito is capable of flowing gas bi-directionally (west to east as well as east to west).
- 13.10.5 Please identify the direction of gas flow (west to east or east to west) for which Gasoducto Rosarito “has only 20 MMcfd available.”
- 13.10.6 Please identify the amount of capacity that is available for transportation of gas in the direction that is opposite the direction for which Gasoducto Rosarito “has only 20 MMcfd available.”
- 13.10.7 Please identify all interconnections with upstream pipelines at the eastern end of Gasoducto Rosarito by name of pipeline and name of the geographic location of the interconnection.

RESPONSE 13.10:

- 13.10.1 Confirmed.
- 13.10.2 Gasoducto Rosarito contact information may be accessed at the following link and is listed below <http://www.gasoductorosarito.com/english/contact.html>:

Tel. +52 (55) 91380100

Contact for Complaints and Suggestions at notices@gasoductoap.com

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(13th DATA REQUEST FROM SOUTHERN CALIFORNIA GAS COALITION)**

**Date Requested: March 3, 2017
Date Responded: March 17, 2017
Administrative Correction Submitted: March 22, 2017**

Address:
Torre New York Life
Paseo de la Reforma 342 piso 24
Col. Juárez, Mexico D.F. C.P. 06600

- 13.10.3 Unknown. An informal inquiry was made almost one year ago.
- 13.10.4 Yes.
- 13.10.5 The inquiry was for capacity to move gas from the North Baja Pipeline system to TGN for delivery at Otay Mesa.
- 13.10.6 Publicly available information can only provide an approximate/speculative answer for determining the level of firm service in the west to east direction. The IEnova Annual Report indicates that the combined Rosarito pipeline system is 88% subscribed.
- 13.10.7 North Baja Pipeline System at Ogilby/Los Algodones.

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(13th DATA REQUEST FROM SOUTHERN CALIFORNIA GAS COALITION)**

**Date Requested: March 3, 2017
Date Responded: March 17, 2017
Administrative Correction Submitted: March 22, 2017**

QUESTION 13.11:

At page 6, lines 4-5, Mr. Borkovich says: “the incremental cost for this additional transportation on an interruptible basis is approximately 30-40 cents per decatherm (Dth), assuming that interruptible capacity is available.”

- 13.11.1 Please provide Mr. Borkovich’s workpapers for calculating the 30-40 cents per Dth “incremental cost for this additional transportation on an interruptible basis.”
- 13.11.2 Please define what Mr. Borkovich means by the term, “incremental cost.”
- 13.11.3 Please provide URL links to the sources for the information about the “incremental cost” for interruptible capacity on each of the three pipelines.
- 13.11.4 Please provide the “incremental cost” cost of firm capacity on each of the three pipelines.

RESPONSE 13.11:

- 13.11.1 Information is based on actual costs incurred by Operational Hub to transport gas from the El Paso Natural Gas (EPNG) South Mainline through the North Baja Pipeline, Gasoducto Rosarito and TGN systems to the SDG&E system at Otay Mesa.
- 13.11.2 See response to Question 13.11.1 above.
- 13.11.3 Links for the three pipeline’s web pages are:
 - North Baja Pipeline - <http://www.tcplus.com/North%20Baja>
 - Gasoducto Rosarito - <http://www.gasoductorosarito.com/english/information.aspx>
 - TGN - <http://www.tgndebajacalifornia.com/english/index.html>
- 13.11.4 See the response to Question 13.11.3 above for information on contacting the respective pipelines to inquire about the cost for firm service on their respective systems.

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(13th DATA REQUEST FROM SOUTHERN CALIFORNIA GAS COALITION)**

**Date Requested: March 3, 2017
Date Responded: March 17, 2017
Administrative Correction Submitted: March 22, 2017**

QUESTION 13.12:

At page 6, line 9, Mr. Borkovich cites the alternative of LNG from ECA. At page 6, line 12, Mr. Borkovich identifies three holders of gas supply at ECA: Shell Mexico Gas Natural, Gazprom Trading Mexico, and Sempra LNG.

- 13.12.1 Please confirm that “ECA means “Energia Costa Azul.”
- 13.12.2 Please identify the amount of LNG storage capacity each holder of gas supply holds at ECA.
- 13.12.3 Please provide URL links to the information about each holder’s LNG storage capacity at ECA.
- 13.12.4 Please identify the volume of gas that each of the three holders of gas supply at ECA currently holds in storage at ECA.
- 13.12.5 Please identify current price per dth charged by the three holders of gas supply for re-gasified LNG from ECA.

RESPONSE 13.12:

- 13.12.1 Yes.
- 13.12.2 The IEnova 2015 Annual Report (page 56) states that Shell and Gazprom hold 50% of the capacity and IEnova LNG holds 50%. Storage capacity is 320,000 cubic meters.
- 13.12.3 The IEnova annual reports can be found at <http://phx.corporate-ir.net/phoenix.zhtml?c=251832&p=irol-reportsannual>.
- 13.12.4 Unknown, IEnova has disclosed that as of December 31, 2015 Shell and Gazprom have not used their storage capacity since the facility started operation.
- 13.12.5 Unknown.

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(13th DATA REQUEST FROM SOUTHERN CALIFORNIA GAS COALITION)**

**Date Requested: March 3, 2017
Date Responded: March 17, 2017
Administrative Correction Submitted: March 22, 2017**

QUESTION 13.13:

What is the distance in pipeline miles from ECA to the Otay Mesa Receipt Point?

RESPONSE 13.13:

Approximately 100 kilometers.

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(13th DATA REQUEST FROM SOUTHERN CALIFORNIA GAS COALITION)**

**Date Requested: March 3, 2017
Date Responded: March 17, 2017
Administrative Correction Submitted: March 22, 2017**

QUESTION 13.14:

At page 11, line 7, Mr. Borkovich says that during periods other than the peak summer months, up to 100 MMcf/d of interruptible capacity would be expected to be available upstream of Otay Mesa.

- 13.14.1 Please identify the source for Mr. Borkovich's statement about the availability of 100 MMcf/d of interruptible capacity, and please provide a link to the source to Mr. Borkovich's information.
- 13.14.2 Please identify specifically by date the times, if any, when SoCalGas/SDG&E sought but were unable to obtain interruptible transportation service from Ehrenberg to Otay Mesa
- 13.14.3 If there have been any such times when SoCalGas/SDG&E have been unable to obtain interruptible transportation service from Ehrenberg to Otay Mesa, for each time please identify the amount of capacity that was obtained and the amount of the shortfall, i.e. the amount of capacity that SoCalGas/SDG&E needed but could not obtain.

RESPONSE 13.14:

- 13.14.1 BenteK Services. Data is available to subscribers.
- 13.14.2 To this point, SoCalGas/SDG&E has not been denied interruptible service on the Ehrenberg to Otay Mesa path when nominated. Be advised that SoCalGas has never tried to schedule gas on this path during a summer peak day when cuts are more likely to occur and the availability of capacity for needed volumes in the future cannot be assured.
- 13.14.3 N/A

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(13th DATA REQUEST FROM SOUTHERN CALIFORNIA GAS COALITION)**

**Date Requested: March 3, 2017
Date Responded: March 17, 2017
Administrative Correction Submitted: March 22, 2017**

QUESTION 13.15:

Please provide all data that is in SoCalGas/SDG&E's possession regarding the daily availability of capacity on Gasoducto Rosarito during the past three years.

RESPONSE 13.15:

Please see attached the file.

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(13th DATA REQUEST FROM SOUTHERN CALIFORNIA GAS COALITION)**

**Date Requested: March 3, 2017
Date Responded: March 17, 2017
Administrative Correction Submitted: March 22, 2017**

QUESTION 13.16:

Please provide all data that is in SoCalGas/SDG&E's possession regarding the daily availability of capacity on TGN during the past three years.

RESPONSE 13.16:

No data regarding the daily availability of capacity on TGN during the past three years is in our possession.

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(13th DATA REQUEST FROM SOUTHERN CALIFORNIA GAS COALITION)**

**Date Requested: March 3, 2017
Date Responded: March 17, 2017
Administrative Correction Submitted: March 22, 2017**

QUESTION 13.17:

At page 7, lines 8-9, Mr. Borkovich states “The Utilities estimate that the low end cost would be approximately \$45 million per year based on current rates.”

- 13.17.1 Please provide the workpapers showing the derivation of the \$45 million/year figure.
- 13.17.2 Please specify the rates of the three pipelines that result in the \$45 million/year figure.
- 13.17.3 Would the projected \$45 million/year be for firm service or interruptible service?
- 13.17.4 Please provide a URL link to the rate schedules for each of the three pipelines that present the rates that result in the \$45 million/year figure.
- 13.17.5 Please identify all periods during which SoCalGas/SDG&E have transported gas across the three pipelines from Ehrenberg to Costa Azul.

RESPONSE 13.17:

- 13.17.1 The annual cost of the low-end alternative for firm service was calculated by multiplying 400 MMcf of throughput times the 30 cent per decatherm rate for 365 days per year. The firm rate is assumed to equal the interruptible rate that SoCalGas pays for service through these systems when required at a 100% load factor. This alternative assumes we would be able to persuade North Baja shippers to release 400 MMcf of capacity to us on a long-term basis. This is not a reasonable assumption because securing this much release capacity from the existing shippers would require the North Baja electric generators to be interruptible which probably violates their power sale agreements with CFE.
- 13.17.2 The \$45 million figure was based on a 30 cent per decatherm rate. Actual costs incurred by the Operational Hub to deliver gas to Otay Mesa have been higher.
- 13.17.3 See the response to Question 13.17.1 above.
- 13.17.4 URLs for Baja pipelines are provided in the response to Question 13.11.3 above.
- 13.17.5 It is SoCalGas/SDG&E's understanding that it has not transported gas to Costa Azul.

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(13th DATA REQUEST FROM SOUTHERN CALIFORNIA GAS COALITION)**

**Date Requested: March 3, 2017
Date Responded: March 17, 2017
Administrative Correction Submitted: March 22, 2017**

QUESTION 13.18:

In response to SCGC-10, Q.10.16.4, the Applicants state “Cost estimates for a high-voltage connection from SDG&E to SCE’s Valley Substation would be on the order of \$1.6 - \$4.0 billion.”

- 13.18.1 Does this range of costs contemplate both the cost of an overhead and an underground alternative?
- 13.18.2 If the answer to the previous question is “yes,” please provide the range of costs associated with the overhead alternative and the range of cost associated with the underground alternative.

RESPONSE 13.18:

- 13.18.1 Yes.
- 13.18.2 Overhead option: \$1.6B ~1.9B; Underground option: \$3.3B ~\$4.0B

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(13th DATA REQUEST FROM SOUTHERN CALIFORNIA GAS COALITION)**

**Date Requested: March 3, 2017
Date Responded: March 17, 2017
Administrative Correction Submitted: March 22, 2017**

QUESTION 13.19:

In response to SCGC-6, Q. 6.5.13, the Applicants state “In an earlier CAISO planning cycle (2013/2014), SDG&E submitted a transmission expansion project to extend a high-voltage connection from northern San Diego County to connect with Southern California Edison’s system at Valley substation. This interconnection was proposed as either 500 kV AC or as an HVDC connection, and would have increased the import capability into the San Diego load center. This proposed project was not selected for further analysis by the CAISO and SDG&E is no longer pursuing this proposed project.

- 13.19.1 Please identify the amount to which the interconnection would have increased the import limit.
- 13.19.2 Did SDG&E submit this transmission expansion project during any other CAISO planning cycles?
- 13.19.3 Did SDG&E conduct any other studies of this transmission expansion project outside of the CAISO planning process?
- 13.19.4 If the answer to the previous question is “yes,” please provide a description of those studies and the findings from those studies.
- 13.19.5 Please explain why SDG&E is no longer pursuing this project?

RESPONSE 13.19:

- 13.19.1 The submission claimed the reduction of San Diego in-basin generation need of 1,450MW as a major benefit of the project. The total amount of actual import capability increase would be determined by the approved plan of service.
- 13.19.2 Yes. After the initial submission for 2013-2014 CAISO Planning Cycle, the 500 kV projects were submitted to CAISO in the following CAISO Planning cycles:
 - 2014-2015 planning cycle
 - 2015-2016 planning cycle
- 13.19.3 Yes.

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

(13th DATA REQUEST FROM SOUTHERN CALIFORNIA GAS COALITION)

Date Requested: March 3, 2017

Date Responded: March 17, 2017

Administrative Correction Submitted: March 22, 2017

-
- 13.19.4 Major resource portfolio changes in California, including San Onofre Nuclear Generating Station (SONGS) retirement and later “shutdown”, Once-Through Cooling (OTC) retirement and high renewable portfolio targets, have driven long term transmission reliability evaluations for many years. There were many joint studies and study attempts among SDG&E, SCE and CAISO trying to plan the transmission system in order to maintain reliable services while dealing with such significant system changes. Among many, following are some of the joint studies that indicated and/or concluded needs for major transmission lines into the San Diego load center:
- 2010-2012 SCE and SDG&E joint study (evaluated many alternatives including various 500 kV lines connecting SDG&E with SCE)
 - 2012 joint “no SONGS” study between Participating Transmission Owners (PTOs) and CAISO that later become CAISO Nuclear Generation Studies (including a proposal of a 500 kV line connecting SDG&E to SCE).
 - 2012-2013 SDG&E Internal Long-Term Procurement Plan (LTPP) Track 4 study that included proposals for a 500 kV line for “balanced” alternative.
 - 2013 joint effort with SCE that led to SDG&E later submission of the high voltage (HV) projects.
- 13.19.5 The previously mentioned projects are no longer being pursued due to project-related challenges and SDG&E is now focusing on the latest project proposal, a new HVDC conversion (the Renewable Energy Express, or REX) project. The REX project would attempt to avoid or minimize environmental impacts and permitting requirements by staying within existing right of way (ROW) or substations, while providing as much essential system reliability support as possible. The REX project provides similar reliability, economic, and policy benefits as the northern connection to SCE, and thus supersedes it. The REX project is pending approval by the CAISO; if it is not approved in the current 2016/2017 Transmission Planning Process (TPP) cycle, SDG&E will update the project costs and scope and resubmit in the next planning cycle (2017/2018).