

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(DATA REQUEST ORA-44)**

**Date Requested: November 2, 2016
Date Responded: November 17, 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.

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(DATA REQUEST ORA-44)**

**Date Requested: November 2, 2016
Date Responded: November 17, 2016**

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.

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(DATA REQUEST ORA-44)**

**Date Requested: November 2, 2016
Date Responded: November 17, 2016**

Subject: Cost Effectiveness Analysis in A.15-09-013 by PWC and Mr. Neil Navin Prepared Testimony Attachment A & B PSRP Report and the Applicants' Reliability Standard

QUESTION 1:

In SDG&E's Oct.23, 2015 semi-annual report on its gas system capacity planning and demand forecasts, SDG&E reported that its system capacity continues to meet the 1-in-35 year peak day and 1-in-10 year cold day design condition forecasts for core and firm noncore customers, respectively, through the 2035/36 operating season, assuming all transmission assets are in service.¹ Table 1 of SDG&E's report showed sufficient capacity to meet the 1-in-35 year and 1-in-10 year cold day demand conditions through the forecast period. But on page 3 of the report, SDG&E notes that "even though SDG&E has capacity to serve forecasted core and *firm* noncore 1-in-10 year cold day demand, connected load in San Diego still far exceeds these forecast figures and the existing SDG&E system capacity (currently 1.3 billion cubic feet per day of demand under a 1-in-10 year cold day condition for the core with connected load for the noncore). This is because there is substantial interruptible noncore load on the SDG&E system, particularly EG load." The report states:²

SDG&E and SoCalGas are not forecasting declines in their peak day design standard demand shown in Table 1, which looks at daily demand rather than annual demand, and have experienced more sudden changes within an operating day when the gas system is called upon to replace losses from other sources of electricity, including regularly-occurring losses of renewable sources.

SDG&E states that "it is entirely possible that total *firm* and *interruptible* noncore demand in San Diego may exceed the system capacity on a day warmer than the 1-in-10 year cold day, and SDG&E may need to curtail interruptible service as necessary to maintain firm service obligations."

- (a) Please state the Applicants' current reliability standards for designing its physical delivery system to firm core and firm noncore service customers, including Electric Generators ("EGs").
- (b) Please state whether said reliability standards will be met by the Applicants without the addition of the Line 3602 project until the end of 2020. Please explain your response.
- (c) Please clarify whether the cost effectiveness analysis (CEA) in A.15-09-013 assumes the

¹ Commission approved these reliability standards in D.02-11-073 and reaffirmed in D.06-09-039.

² Pp.3-4 of the SDG&E Oct.23, 2015 semi-annual report on gas system capacity planning and demand forecasts.

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(DATA REQUEST ORA-44)**

**Date Requested: November 2, 2016
Date Responded: November 17, 2016**

Commission-approved reliability standards in D.02-11-073 which were also reaffirmed in D.06-09-039, as described in the above-mentioned SDG&E Oct. 23, 2015 semi-annual report. If not, please clarify whether this CPCN proceeding proposes a change in the SDG&E reliability standard from those approved in D.02-11-073 and reaffirmed in D.06-09-039.³

- (d) If different from the reliability standards for designing its physical delivery system in D.02-11-073 and D.06-09-039 as identified in question 1c, then please provide the basis of the reliability standard assumption in the CEA described in your response to item (c) above and cite the appropriate reference in the Applicants' testimony where the supporting documentation for the proposed change to the reliability standard is described.
- (e) Would it be accurate to say that while the Applicants have standards for designing their facilities for delivery of gas, there are also corresponding current Commission-approved reliability standards in place for supply that specify how much firm interstate and intrastate capacity contracts and storage withdrawal capacity should be held by SoCalGas and SDG&E for its Core customers? If yes, please state and provide reference for the current Commission-approved reliability standards for supply for each of SoCalGas and SDG&E for its Core customers and cite references to the relevant Commission decision.
- (f) Similarly, please state whether there are any current Commission-approved reliability standards for supply for the Applicants' Noncore customers. If there are, please provide references for them.

RESPONSE 1:

- a. Applicants seek to design their gas system to maintain safe, consistent and continuous service to customers. System reliability refers to Applicants' ability to maintain safe, consistent and continuous service to customers. The 1-in-35 and 1-in-10 cold day design capacity criteria set forth in D.02-11-073 and D.06-09-039 are "reliability standards" considered in planning the system to provide safe, consistent and continuous service to customers. However, they are not the only "reliability standards" considered in Applicants' planning process. As explained in Applicants' Response to ORA's Motion to Dismiss the subject Application (A.15-09-013), there is an implicit obligation that the operators of the system take prudent steps to ensure that the gas system is designed, constructed, operated and maintained so that it will provide safe and reliable service under conditions that not only consider cold weather criteria, but also emergency

³ Refer to D.02-11-073 for Findings of Fact #14 and 16, Conclusions of Law 1, 3, 7, and 10, and Ordering Paragraphs 1 and 10. Also, refer to D.06-09-039 for Findings of Fact #6, 21, and 37, Conclusion of Law #1, and Ordering Paragraph #1.

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(DATA REQUEST ORA-44)**

**Date Requested: November 2, 2016
Date Responded: November 17, 2016**

situations and other operational constraints that can happen from time to time.

As discussed in Applicants' Response to ORA's Motion to Dismiss (at pages 9 and 10, footnotes omitted):

Reliability May Establish the Need for the Proposed Project

While the Commission has established certain design criteria for natural gas systems in California, the Commission has been clear that utilities have an obligation to provide reliable service that is not limited to meeting the design criteria. Reliability means actually delivering gas to customers, and requires having reasonable capacity, operational flexibility and the ability to respond in emergency situations. Ultimately, the Commission determines what is "reasonable," here in the context of assessing what serves the public convenience and necessity.

In assessing ORA's contention that Applicants' Application should be dismissed because Applicants' long-term gas demand forecasts suggest design criteria are met by the current system, the Commission has held:

- "Emergency concerns for which utility should plan include the failure of a major component of the delivery or storage system...."
- "An exclusive reliance on long-term commitments to determine system adequacy would not do enough to ensure that the system would function well during emergencies, since an integrated system such as this must be planned and managed in an integrated way."
- "Each utility must continue to study and report on the adequacy of its entire system, including local transmission, and act to ensure that it remains reliable."
- "In addition to the use of open seasons to allocate access to constrained resources, SDG&E and SoCalGas shall include the expansion of local transmission facilities in its usual system planning process, and undertake expansion projects as needed to serve all types of customers."

In short, Applicants' obligations go beyond simply meeting the design criteria. Applicants are obligated to provide reliable gas service to their customers. As set forth below, Applicants have presented evidence that the Proposed Project is needed to provide reliable natural gas service.

In this proceeding, Applicants have not contended that the Proposed Project is necessary to meet the 1-in-35 and 1-in-10 cold day design capacity criteria set forth in D.02-11-073 and D.06-09-039. Rather, as set forth in the Application, Cost-Effectiveness Analysis

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(DATA REQUEST ORA-44)**

**Date Requested: November 2, 2016
Date Responded: November 17, 2016**

(CEA), and served Prepared Testimony, the Proposed Project is needed to provide safe, consistent and continuous service to customers, including core and noncore customers.

Applicants further note that core customers were never designated as “firm” or “interruptible”, and firm noncore service has been eliminated per Commission Decision (D.)16-07-008. For SDG&E’s and SoCalGas’ (Applicants) current design standards, please refer to the Prepared Direct Testimony of David M. Bisi in A.15-06-020:

<https://www.socalgas.com/regulatory/documents/a-15-06-020/Ch%203%20Curtailment%20Testimony%20-%20Bisi.pdf>.

- b. No. As set forth in response to Question 1(a), the Proposed Project is not necessary to meet the 1-in-35 and 1-in-10 cold day design capacity criteria set forth in D.02-11-073 and D.06-09-039 through 2020, assuming all current facilities are in operation. However, as set forth in response to Question 1(a), Applicants’ obligation is to provide safe, consistent and continuous service to customers, and the Commission has outlined such obligations in previous Decisions. Applicants have determined that the Proposed Project is necessary to meet that general reliability standard for the reasons set forth in the Application, Cost-Effectiveness Analysis (CEA), and served Prepared Testimony.
- c. System capacity related reliability benefits were considered when evaluating reliability in the CEA. An overview of the methodology used for this evaluation is presented in the CEA at pages 8 and 9. Details regarding the evaluation of reliability are set forth in the CEA at pages 41 through 48. Specifically, the CEA (at page 42) affirms that “system capacity related reliability benefits are implicit in the evaluation of increased reliability.” As set forth in response to Question 1(a), Applicants’ general reliability standard is to maintain the ability to provide safe, consistent and continuous service to customers. Applicants believe this to be the Commission’s reliability standard as well, as shown in the Commission’s statements quoted in response to Question 1(a). Therefore, the CEA also considers how the Proposed Project and Alternatives support Applicants’ ability to provide safe, consistent and continuous service to customers. Applicants are not proposing a change in the design capacity criteria set forth in D.02-11-073 and D.06-09-039, but do not understand the Commission to have limited Applicants’ obligation to provide safe and reliable service to meeting such criteria.
- d. See the response to Question 1(a and c) above.
- e. Applicants object that this question is vague and ambiguous. Subject and notwithstanding this objection, Applicants respond as follows.

Applicants clarify that “supply” is not the same as “capacity.” For example, interstate capacity requirements, described below, only lease space on a pipeline, but do not

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(DATA REQUEST ORA-44)**

**Date Requested: November 2, 2016
Date Responded: November 17, 2016**

require actual flowing supply which is necessary to serve Applicants' customer demand.

Pursuant to Commission Decision (D.) 04-09-022 and Advice Letter 4350, SoCalGas is required to hold interstate capacity on behalf of its combined SoCalGas and SDG&E retail core portfolio (Core Aggregation Transportation customers have no interstate capacity holding requirement). For example, per Advice Letter 5006 the minimum firm capacity required for the period April to October 2017 was established at 963 MDthd, while the minimum required for November 2017 to March 2018 was 1,070 MDthd. SoCalGas core customers are also allocated storage assets including withdrawal rights, most recently 2,225 MMcfd during winter and 1,081 MMcfd during summer pursuant to Table 6 of D.16-06-039 (TCAP Phase 1) and per Advice Letter 4995.

- f. Applicants object that "any current Commission-approved reliability standards for supply for the Applicants' Noncore customers" is vague and ambiguous. Further, it is SDG&E and SoCalGas' understanding that the Commission has not mandated supply reliability standards for noncore customers.

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(DATA REQUEST ORA-44)**

**Date Requested: November 2, 2016
Date Responded: November 17, 2016**

QUESTION 2:

Pages 13-14 of Mr. Bisi's testimony states:

Although the current 1-in-10 cold day peak demand forecast indicates that sufficient capacity is available through the 2035/36 operating seasons (assuming all transmission assets are in service), this demand forecast does not take into account the operational issues associated with serving the changing EG market. By definition, the peak demand forecast does not address fluctuating EG demand on a daily or hourly basis from an operational standpoint. As mentioned above, connected load in San Diego still far exceeds the forecast figures under the California Public Utilities Commission (CPUC or Commission)'s design standards (footnote omitted) and existing SDG&E system capacity. While connected load is only a broad indicator of the potential for elevated EG demand being dispatched beyond what has been forecast, if there is an issue with gas supply or capacity that results in a curtailment, interruptible gas service (much of which are EG plants) would be curtailed first to maintain firm gas service obligations (footnote omitted), which could possibly threaten electric grid reliability.

As noted above, there have been days when actual demand exceeded available system capacity, and this was not anticipated from the predicted demand forecast. For example, in January 2013, SDG&E's peak send out on the natural gas system was 674 MMcfd, which exceeds SDG&E's nominal capacity.(footnote omitted) Additional capacity would be useful in serving EG demand at levels greater than expected or forecast, such as for: (1) days when renewable sources are not available (sun not shining, no wind); (2) days when import capacity falls; and (3) days when EG outages on other parts of the CAISO grid require increased generation in San Diego.

Another example is that the 1-in-10 cold day peak demand forecast shows no EG demand anticipated in the Rainbow Corridor. In assessing the total available capacity to serve the San Diego area, upstream growth in the Rainbow Corridor is an important constraint. (footnote omitted) The Utilities' system capacity planning looks at the Rainbow Corridor and San Diego together. As demand increases in the Rainbow Corridor, pressure delivered to the SDG&E system at Rainbow Station declines, and the capacity of the SDG&E system decreases. Although the forecast shows no EG demand, if in fact the Utilities are called upon to serve an EG customer in the Rainbow Corridor during a high send out condition in the winter season, customer curtailment is a very likely possibility.

Accordingly, it is possible that demand in San Diego may exceed the system capacity on a day with conditions that are higher than normal, but less than the CPUC's 1-in-10 year cold day firm demand standard, or during a high hourly peak condition. Either scenario may result in gas curtailments that also risk electric blackouts. (footnote omitted)

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(DATA REQUEST ORA-44)**

**Date Requested: November 2, 2016
Date Responded: November 17, 2016**

- (a) Please define “connected load” as used in the above statements.
- (b) Is it reasonable to assume that SoCalGas/SDG&E is able to determine whether “connected load” is firm or interruptible load? Please explain your response if the answer is no. If yes, can SoCalGas/SDG&E quantify the amount of “connected” load that has been interruptible? If so, please provide that information.
- (c) Please explain whether the above statements should be understood to mean that SDG&E proposes to change its design reliability standards to include “connected load” in San Diego for purposes of SDG&E’s peak demand forecast. If not, please explain.
- (d) Please confirm whether “connected load” is being factored into the reliability standard assumed for purposes of the CEA.
- (e) Is there any requirement (including CPUC decisions or other requirements) that mandates that SDG&E and/or SoCalGas system capacity meet connected load in San Diego? If so, please provide the reference to such requirements.
- (f) Please explain whether “fluctuating EG demand on a daily or hourly basis” from an operational standpoint refers to managing fluctuating intraday demands due to hourly variability. Provide the reasons for the occurrence of hourly variability.
- (g) Please confirm whether “fluctuating EG demand on a daily or hourly basis” referenced in the above statements is being factored into the reliability standard assumed for purposes of the CEA.
- (h) Is there any requirement (including CPUC decisions or other requirements) that mandates that system capacity accommodate for fluctuating EG demand on a daily or hourly basis? If so, please provide the reference to such requirements.
- (i) Please explain whether the reliability need asserted by Mr. Bisi’s testimony which will be served by the Line 3602 project exists only under abnormal or extreme weather conditions rather than normal weather conditions.
 - a. If not, please describe the circumstances under normal weather conditions where the reliability need will be served by Line 3602.
 - b. If so, please describe the abnormal or extreme weather conditions that would cause the reliability need that Mr. Bisi asserts will be served by Line 3602. (Eg-Will it take a 1 in 35 year cold day to trigger such conditions?)

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(DATA REQUEST ORA-44)**

**Date Requested: November 2, 2016
Date Responded: November 17, 2016**

(j) Please explain whether the Applicants have explored the potential for the allocation of additional gas storage injection and withdrawal capacity to the load balancing function that could potentially address “the fluctuating EG demand on a daily or hourly basis” from an operational standpoint in lieu of increasing system capacity, and if so, state whether the Applicants have studied this possibility.

RESPONSE 2:

- a. “Connected load” as used in the Prepared Direct Testimony of David Bisi, is defined in the referenced testimony at page 11, footnote 20.
- b. No. Core customers were not designated as “firm” or “interruptible”, and firm noncore service has been eliminated per Commission Decision (D.)16-07-008. Please refer to the response to Question 1(a) above.
- c. No. Please refer to the response to Question 2(a) above.
- d. As stated in the Prepared Testimony of David Bisi at 13: “Although the predicted future demand is far less than the current connected load, a change in use patterns by the connected load could quickly increase the demand. Accordingly, although connected load is not the standard that should be used to design capacity on the system, as explained below, 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.” The utilization of connected load by customers results in real demand that the gas system must supply. How and when customers choose to utilize their connected load varies based on choices made by the customer. The gas system has a certain capacity to meet a range of demand profiles. The CEA evaluated and scored the ability of the Proposed Project and Alternatives to meet this customer demand over a variety of operating scenarios. It is through this relationship that connected load is considered in the reliability section of the CEA.
- e. As set forth in response to Question 1(a) above, Applicants have an implicit obligation to provide safe, consistent and continuous service to customers. Under this general reliability standard, the existence of connected load may be considered in planning the system. Connected load is not used to assess the system’s ability to meet the 1-in-35 and 1-in-10 cold day design capacity criteria set forth in D.02-11-073 and D.06-09-039.
- f. Yes. EG demand fluctuates throughout the day in response to customer demand on the electric system and the availability of other electric resources, notably renewable resources.

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(DATA REQUEST ORA-44)**

**Date Requested: November 2, 2016
Date Responded: November 17, 2016**

- g. As set forth in response to Question 1(c) above, Applicants' general reliability standard is to maintain the ability to provide safe, consistent and continuous service to customers. Applicants believe this to be the Commission's reliability standard as well, as shown in the Commission's statements quoted in response to Question 1(a). The CEA considers how the Proposed Project and Alternatives support Applicants' ability to provide safe, consistent and continuous service to customers. Among other things, the Proposed Project and Alternatives were evaluated and scored in terms of their impact on increasing the current reliability/redundancy of the Applicants gas transmission system (CEA, page 41-48). Furthermore, "Fluctuating EG demand on a daily or hourly basis" is evaluated in the CEA under Increased Operational flexibility. See CEA pages 48-49.
- h. Maintaining uninterrupted service throughout the day is inherent in the Commission's reliability standards for core and noncore service. See response to Question 1(a) above.
- i. The reliability need exist under all operating conditions as upsets in electric resources may occur for reasons that are not weather driven.
- j. The SDG&E system lacks underground storage facilities, and gas from SoCalGas' storage facilities is not physically delivered into the SDG&E system.

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(DATA REQUEST ORA-44)**

**Date Requested: November 2, 2016
Date Responded: November 17, 2016**

QUESTION 3:

Page 6 of Mr. Bisi's testimony states:

As previously stated, the integrity of the SDG&E system is highly dependent upon two transmission assets: Line 3010 and the Moreno Compressor Station. An outage at either of these two facilities may impact the Utilities' ability to maintain continuous service to their customers, including core customers; an outage at both facilities certainly will. (footnote omitted)

- (a) Please state the probability of an outage at either of these two facilities (i.e., Line 3010 and the Moreno Compressor Station) occurring in any one year based on the assumptions in the CEA.
- (b) Please state the probability of an extreme cold peak day event occurring in any one year based on the assumptions in the CEA described in your responses to Question 1.
- (c) Please state the Applicants' expected probability that the two events (i.e., extreme cold day peak event and outage at either Line 3010 and Moreno Compressor Station) will overlap in time. Please also state the Applicants' expected probability that these two events will occur at the same time. Please cite reference to the Applicants' testimony where these probabilities are discussed.
- (d) Please provide the Applicants' estimate of the potential costs of an outage at either a Line 3010 and the Moreno Compressor Station combined with an extreme cold day event occurring at the same time.
- (e) If there is an outage at Moreno Compressor Station, what range of time do Applicants anticipate before it can be made operational?
- (f) If there is an outage of Line 3010, what range of time do Applicants anticipate before it can be made operational?

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(DATA REQUEST ORA-44)**

**Date Requested: November 2, 2016
Date Responded: November 17, 2016**

RESPONSE 3:

- a. SoCalGas and SDG&E have not calculated this probability.
- b. Applicants object that this Question is vague and ambiguous in referring to “the assumptions in the CEA.” To the extent that Applicants understand the question, please see the response to Question 3(a) above.
- c. Please refer to the response to Question 3(a) above.
- d. The consequences of an outage of either Line 3010 or the Moreno Compressor Station are situation specific and dependent on the details of what equipment is out of service, how long it will be out of service, and for the pipeline system, at what location the loss occurred. The severity of the disruption is also dependent on gas demand during the outage period and whether there are other options available for mitigating the consequences of the outage.

The Prepared Direct Testimony of Jani Kikuts provides a description of how quickly the loss of Line 3010 could lead to the loss of service for several hundred thousand customers. Mr. Kikuts’ testimony describes the difficulty and time consuming process required to re-establish service for affected gas customers. Restoration of an outage of this magnitude may take many weeks. During this time affected customers will not be able to utilize natural gas in their homes for cooking, water heating, space heating and other needs. Businesses would not be able utilize gas for their business needs, resulting in economic impacts. Schools, hospitals, the military and other government services will also be impacted, resulting in socio-economic losses. Local electric generation would almost assuredly also be impacted. The loss of the Moreno Compressor Station for an extended period of time could also result in significant impacts and loss of service to customers, much the same way a loss of Line 3010 would.

As explained above and in the testimony of Mr. Kikuts, the impacts to customers and the community in general could be large, and the utility’s effort to restore service would be extensive. While the Applicants have not completed a study that quantifies the cost of losing Line 3010 or the Moreno Compressor Station under different scenarios of damage and demand, it can be reasonably assumed that the overall direct and indirect financial impacts could be very significant. The cost of an outage not only includes the direct costs associated with the outage, including the tangible losses by customers and the utility, but also the value that the customer assigns to the intangible losses the customer believes they have suffered as a result of the gas outage and having to deal with the disruption and the consequences. The total value of the losses could be in the tens of

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(DATA REQUEST ORA-44)**

**Date Requested: November 2, 2016
Date Responded: November 17, 2016**

millions of dollars or greater, depending on the extent and duration of the loss of service to customers.

- e. Depending on the nature of the outage, it could take hours to months or longer to be operational again.
- f. Please refer to the response to Question 3(e) above.

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(DATA REQUEST ORA-44)**

**Date Requested: November 2, 2016
Date Responded: November 17, 2016**

QUESTION 4:

At page 8, Mr. Bisi states in his testimony:

More importantly, a 36-inch diameter pipeline operating alongside Line 3010 can theoretically support the current SDG&E system capacity of 630 MMcfd without any compression required at Moreno. Under either outage scenario, a 36-inch pipeline would provide enough capacity to meet the demand forecast for the Commission-mandated 1-in-10 year cold day design standard through the 2035/36 winter operating season. By contrast, construction of a new 30-inch diameter pipeline would not meet the demand forecast for the Commission mandated 1-in-10 year cold day design standard under either outage scenario.

In Response to SCGC DR#4 Q.4.22.2, SoCalGas/SDG&E confirmed that Mr. Bisi did not take into account the 400 MMcf/d that could be delivered through Otay Mesa and into the SDG&E service territory on Line 3012/3600/2010 path when making the statement quoted immediately above.

- (a) Please fully explain the implications of not taking into account the ability to deliver 400 MMcf/d through Otay Mesa on the above statement by Mr. Bisi that “construction of a new 30-inch diameter pipeline would not meet the demand forecast for the Commission mandated 1-in-10 year cold day design standard under either outage scenario.”
- (b) Please fully explain the implication of taking into account the ability to deliver 400 MMcf/d through Otay Mesa under the same scenario stated above.
 - 1. Please include in your answer whether the ability to deliver 400 MMcf/d through through Otay Mesa would mean that construction of a new 30-inch diameter 10 pipeline would meet demand forecast for the Commission mandated 1-in-10 year cold day design standard under either outage scenario.
 - 2. Please also include in your answer whether the ability to deliver 400 MMcf/d through Otay Mesa would mean that no new pipeline is necessary to meet demand forecast for the Commission mandated 1-in-10 year cold day design standard under either outage scenario.
 - 3. If the answer to question 4(b)(2) is anything other than an unqualified admission that the ability to deliver 400 MMcf/d through Otay Mesa would mean that no new pipeline is necessary to meet demand forecast for the Commission mandated 1-in- 10 year cold

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)
(A.15-09-013)
(DATA REQUEST ORA-44)**

**Date Requested: November 2, 2016
Date Responded: November 17, 2016**

day design standard under either scenario, please explain and provide all documentation supporting your answer.

RESPONSE 4:

The “implication” of assuming that supply at Otay Mesa would somehow always be available when needed in planning SDG&E’s system would be to put at risk the integrity of the entire SDG&E system to maintain reliable service to our customers under the Commission’s mandated design criteria and under reasonable facility outage scenarios.

Applicants have extensively addressed and discussed the availability of supply at Otay Mesa throughout this Application, supporting prepared direct testimony and in numerous responses to data requests issued by ORA and other parties to this proceeding. There are several reasons why Applicants did not take into account the ability to deliver 400 MMcf/d through Otay Mesa, including the lack of customer interest in scheduling supplies to Otay Mesa and the lack of available capacity on the entire pipeline path necessary to transport supplies to Otay Mesa. (see the Prepared Direct Testimony of Gwen Marelli; responses to ORA DR 8 Q1, ORA DR 10 Q4, ORA DR 26 Q9, and ORA DR 41 Q1).