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PRELIMINARY STATEMENT

- 1. These responses and objections are made without prejudice to, and are not a waiver of, SDG&E and SoCalGas' right to rely on other facts or documents in these proceedings.
- 2. By making the accompanying responses and objections to these requests for data, SDG&E and SoCalGas does not waive, and hereby expressly reserves, its right to assert any and all objections as to the admissibility of such responses into evidence in this action, or in any other proceedings, on any and all grounds including, but not limited to, competency, relevancy, materiality, and privilege. Further, SDG&E and SoCalGas makes the responses and objections herein without in any way implying that it considers the requests, and responses to the requests, to be relevant or material to the subject matter of this action.
- 3. SDG&E and SoCalGas will produce responses only to the extent that such response is based upon personal knowledge or documents in the possession, custody, or control of SDG&E and SoCalGas. SDG&E and SoCalGas possession, custody, or control does not include any constructive possession that may be conferred by SDG&E or SoCalGas' right or power to compel the production of documents or information from third parties or to request their production from other divisions of the Commission.
- 4. A response stating an objection shall not be deemed or construed that there are, in fact, responsive information or documents which may be applicable to the data request, or that SDG&E and SoCalGas acquiesces in the characterization of the premise, conduct or activities contained in the data request, or definitions and/or instructions applicable to the data request.
- 5. SDG&E and SoCalGas objects to the production of documents or information protected by the attorney-client communication privilege or the attorney work product doctrine.
- 6. SDG&E and SoCalGas expressly reserve the right to supplement, clarify, revise, or correct any or all of the responses and objections herein, and to assert additional objections or privileges, in one or more subsequent supplemental response(s).
- 7. SDG&E and SoCalGas will make available for inspection at their offices any responsive documents. Alternatively, SDG&E and SoCalGas will produce copies of the documents. SDG&E and SoCalGas will Bates-number such documents only if SDG&E and SoCalGas deem it necessary to ensure proper identification of the source of such documents.
- 8. Publicly available information and documents including, but not limited to, newspaper clippings, court papers, and materials available on the Internet, will not be produced.

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- 9. SDG&E and SoCalGas object to any assertion that the data requests are continuing in nature and will respond only upon the information and documents available after a reasonably diligent search on the date of its responses. However, SDG&E and SoCalGas will supplement its answers to include information acquired after serving its responses to the Data Requests if it obtains information upon the basis of which it learns that its response was incorrect or incomplete when made.
- 10. In accordance with the CPUC's Discovery: Custom And Practice Guidelines, SDG&E and SoCalGas will endeavor to respond to ORA's data requests by the identified response date or within 10 business days. If it cannot do so, it will so inform ORA.
- 11. SDG&E and SoCalGas object to any ORA contact of SDG&E and SoCalGas officers or employees, who are represented by counsel. ORA may seek to contact such persons only through counsel.
- 12. SDG&E and SoCalGas objects to ORA's instruction to send copies of responses to entities other than ORA.

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Subject: Prepared Testimony of D. Schneider

QUESTION 1:

Define the term "leakage history" as used in the prepared direct testimony of D. Schneider at page 8.

RESPONSE 1:

The term "leakage history" refers to the documented unintentional escape of natural gas from a pipeline.

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QUESTION 2:

The Prepared Direct Testimony of D. Schneider states at pp. 4-5 (fn omitted): *Line 1600 was installed in 1949, twelve years before the Commission first adopted pressure testing regulations. As such, as explained below, pursuant to PUC Section 958 and D.11-06-017, Line 1600 must be pressure tested, replaced, or removed from transmission service to comply with State law and D.11-06-017.*

- a. Please confirm that D.11-06-017 Ordering Paragraph 3 requires pressure tests to "include all elements required by the regulations in effect when the test was conducted. For pressure tests conducted prior to the effective date of General Order 112, one hour is the minimum acceptable duration for a pressure test."
- b. Please confirm that PUC Section 958(a) requires utilities to "either pressure test those lines or to replace all segments of intrastate transmission lines that were not pressure tested or that lack sufficient details related to performance of pressure testing."
- c. Please confirm that SoCalGas/SDG&E's Decision Tree, rather than using applicable codes or standards at the time of installation, uses 1.25 times the Maximum Allowable Operating Pressure when assessing any historical pressure tests.

RESPONSE 2:

a. Commission Decision (D.)11-06-017, Ordering Paragraph 3 states:

A pressure test record must include all elements required by the regulations in effect when the test was conducted. For pressure tests conducted prior to the effective date of General Order 112, one hour is the minimum acceptable duration for a pressure test.

b. California Public Utilities Code (P.U. Code) Section 958(a) states:

Each gas corporation shall prepare and submit to the commission a proposed comprehensive pressure testing implementation plan for all intrastate transmission lines to either pressure test those lines or to replace all segments of intrastate transmission lines that were not pressure tested or that lack sufficient details related to performance of pressure testing. The comprehensive pressure testing implementation plan shall provide for testing or replacing all intrastate transmission lines

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as soon as practicable. The comprehensive pressure testing implementation plan shall set forth criteria on which pipeline segments were identified for replacement instead of pressure testing.

c. In their Pipeline Safety Enhancement Plan (PSEP), SDG&E and SoCalGas proposed addressing transmission pipeline segments that do not have sufficient documentation to validate post-construction pressure tests to 1.25 times the pipeline's MAOP. As explained in the 2011 Amended Pipeline Safety Enhancement Plan, at 5-6:

SoCalGas and SDG&E used a 1.25 times MAOP threshold because a United States Department of Transportation Office of Pipeline Safety publication found that "[a]ny manufacturing defect or imperfection that survives a pre-service pressure test to 1.25 times the maximum allowable operating pressure (MAOP) is stable immediately after the test." (Final Report of Evaluating the Stability of Manufacturing and Construction Defects in Natural Gas Pipelines, April 16, 2007, prepared for the United States Department of Transportation Office of Pipeline Safety by John F. Kiefner of Kiefner and Associates, with the Assistance of the Natural Gas Association of America, pp. 17-18).

Based on this scope of work, the SoCalGas/SDG&E Decision Tree provides an initial allocation of PSEP pipelines into PSEP phases.

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QUESTION 3:

The Prepared Direct Testimony of D. Schneider at page 1 (emphasis added) states: "The Proposed Project presents a *timely and rare opportunity* to cost-effectively achieve three fundamental objectives for the integrated SoCalGas and SDG&E natural gas transmission system (Gas System) for the portion that operates within San Diego County (SDG&E System)..."

- a. Has SoCalGas/SDG&E relied primarily on Line 3010 to provide most of the natural gas to San Diego since it was installed? Please explain.
- b. Prior to the San Bruno disaster, had SoCalGas/SDG&E ever requested funding in a General Rate Case or other application or filing, indicating that Line 1600 needed to be replaced? If so, please provide the relevant testimony.
- c. Prior to the San Bruno disaster, had SoCalGas/SDG&E ever requested funding in a General Rate Case or other application or filing, indicating that Line 3010 did not provide adequate capacity for San Diego? If so provide the relevant document(s).

RESPONSE 3:

- a. Yes, Line 3010 provides approximately 90% of the capacity in San Diego.
- b. No.
- c. SDG&E and SoCalGas are obligated to follow the framework established by the Commission in D.02-11-073 and D.06-09-039 to address deficiencies in capacity on the SDG&E system. Per D.02-11-073, SDG&E and SoCalGas have issued semi-annual reports to the Commission regarding the state of capacity on the SDG&E system. The report from April 2010 prior to the San Bruno incident on the PG&E system is attached.



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QUESTION 4:

The Prepared Direct Testimony of D. Schneider at page 19, lines 3-7 describes that there is "much needed reliability and resiliency for both compression and pipeline service interruptions". Provide references to any and all applications SoCalGas/SDG&E has made for new natural gas infrastructure within the San Diego System since 2000.

RESPONSE 4:

Notwithstanding the instant Application, SDG&E and SoCalGas have made no applications for new natural gas infrastructure within the SDG&E system since 2000.

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QUESTION 5:

By year, starting with the installation of Line 3010, please provide a table with the number of times SoCalGas/SDG&E was not able to "reliably [provide] natural gas service" as described on p. 3, lines 14-18 to 1) core customers; 2) non-core customers. For each item identify if nonelective (e.g. those customers not volunteering for interruptible service) curtailments were required, and if the curtailment occurred due to gas supply constraints outside of California or due to infrastructure constraints or repairs within the SoCalGas/SDG&E system.

RESPONSE 5:

As shown in the table below, there have been 12 curtailment events on the SDG&E system since January 2011. Reliable service was maintained to core customers in all instances. Service to noncore customers was affected by all 12 curtailment events. All events were non-elective (*i.e.*, customers were ordered to comply in order to avoid curtailment violation charges).

Start Date and Time	End Date and Time	Duration	Trigger	Affected Utility	
Feb 3, 2011 3PM	Feb 4, 2011 12 noon	21 hours	Lack of Supply	SCG/SDGE	
Oct 1, 2011 6AM	Oct 1, 2011 9PM	13 hours	Planned	SDGE	
			Maintenance		
Oct 8, 2011 6AM	Oct 8, 2011 11PM	17 hours	Planned	SDGE	
			Maintenance		
Oct 15, 2011 6AM	Oct 15,2011 11PM	17 hours	Planned	SDGE	
			Maintenance		
Oct 22, 2011 6AM	Oct 22, 2011 9PM	15 hours	Planned	SDGE	
			Maintenance		
Oct 29, 2011 6AM	Oct 30, 2011 4AM	22 hours	Planned	SDGE	
			Maintenance		
Nov 5, 2011 6AM	Nov 5, 2011 1PM	7 hours	Planned	SDGE	
			Maintenance		
Nov 12, 2011 6AM	Nov 12, 2011 10PM	16 hours	Planned	SDGE	
			Maintenance		
Nov 19, 2011 6AM	Nov 19, 2011 8PM	14 hours	Planned	SDGE	
			Maintenance		
Dec 6, 2013 12AM	Dec 11, 2013 11:59 PM	6 days	Lack of Supply	SCG/SDGE	
Feb 6, 2014 8AM	Feb 10, 2014 11:59 PM	4 days 16	Lack of Supply	SCG/SDGE	
		hours			
Feb 6, 2014 6:45AM	Feb 7, 2014 12AM	17 hours 15	Emergency	SCG/SDGE	
		minutes			

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QUESTION 6:

For how many years have "the Utilities primarily [relied] on three major components of the SDG&E system to deliver gas from north to south into San Diego County: (1) Line 1600, (2) Line 3010, and (3) Moreno Compressor Station." as described on p. 4 lines 8-11 (referring to Mr. Bisi's testimony.)

RESPONSE 6:

Line 1600 was installed in 1949. Line 3010 was installed in 1960. The first engines were installed at the Moreno Compressor Station in 1955.

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QUESTION 7:

The Prepared Direct Testimony of D. Schneider at page 11, lines 10-13 describes how there would be a "greater margin of safety" with converting Line 1600 to distribution service. Please provide:

- a. The number of people currently within the potential impact radius of Line 1600.
- b. The number of people within the potential impact radius of Line 1600, assuming it was derated today.
- c. The number of people that will be within the potential impact radius of Line 3602, assuming it was installed today using the primary proposed route.
- d. The highest number of people that will be within the potential impact radius of Line 3602, assuming it was installed using each of the alternate proposed routes.

RESPONSE 7:

- a. SDG&E and SoCalGas do not tabulate the number of people within the potential impact radius (PIR) and therefore do not have this information available. Instead, per regulation, SDG&E and SoCalGas monitor the number of structures that may be located within the PIR of its transmission pipelines. Line 1600 at its current MAOP of 640 psig, has 3,585 structures within its PIR.
- b. If Line 1600 was derated to an MAOP of 320 psig, it would have 2,689 structures located within its PIR.
- c. Assuming the proposed Line 3602 was installed using the primary proposed route outlined in SDG&E's and SoCalGas' Proponent's Environmental Assessment and operated with an MAOP of 800 psig and a diameter of 36 inches, it would have 7,362 structures within its PIR.
- d. SDG&E and SoCalGas have not quantified the number of structures along the alternate routes. As such, it currently does not have this value available.

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QUESTION 8:

The Prepared Direct Testimony of D. Schneider at page 19, lines 11-14 states that "no new pipeline capacity has been built for 15 years, despite the construction of more natural gas fired power plants during that timeframe."

- a. Provide the Name, nameplate MW, heat rate at PMax, connected capacity, and average summer consumption for each power plant built within the San Diego System since January 1, 2000.
- b. Provide the Name, nameplate MW, heat rate at PMax, connected capacity, and average summer consumption for each power plant retired within the San Diego System since January 1, 2000.
- c. Provide the Name, change in nameplate MW, change in heat rate at PMax, change in connected capacity, and change in average summer consumption for any power plant within the San Diego System that has been refurbished or retrofitted since January 1, 2000.

RESPONSE 8:

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



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QUESTION 9:

The Prepared Direct Testimony of D. Schneider at page 20, lines 4-7 states in part "... the capacity of the San Diego gas system will be increased by approximately 30 percent, or 200 MMCfd..." and at lines 8-10 "... it is prudent to build a 36-inch pipeline to not only provide redundancy for Line 3010 and Moreno Compressor Station, but also to build incremental capacity..."

- a. Provide the line number, pipeline diameter, maximum capacity, and average daily capacity of each of the pipelines providing gas into the Moreno Compressor Station. Also identify if any of lines providing gas into the Moreno Compressor Station are subject to the SoCalGas/SDG&E PSEP.
- b. Provide the line number, pipeline diameter, maximum capacity, and average daily capacity of each of the pipelines providing gas out of the Moreno Compressor Station and towards Los Angeles or San Diego. Also identify if any of the lines providing gas out of the Moreno Compressor Station are subject to the SoCalGas/SDG&E PSEP.

RESPONSE 9:

a. Please note that some of the information provided in the table (*e.g.*, diameter and capacity) is confidential information provided pursuant to G.O. 66-C and Cal. Pub. Util. Code § 583. Please refer to the following table for data on the pipelines supplying the Moreno Compressor Station. Average capacities are unavailable because SoCalGas lacks measurement on the individual pipelines. There are no pipelines subject to PSEP providing gas into the Moreno Compressor Station.

			Capacity (MMCFD)					
Pipeline	Diameter (in)		Nominal		Maximum			
1027								
1028								
6900								

b. Moreno Compressor Station discharges into the same pipelines that supply it. Please refer to Response 9(a) of this data request

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QUESTION 10:

The Prepared Direct Testimony of D. Schneider at page 20 states that "D.11-06-017 instructs the Utilities to address pipelines as part of PSEP so as to better enable for the use of in-line inspection tools." The statement then has a footnote referencing D.11-06-017, Conclusion of Law 9 (emphasis added): "The Implementation Plan should also address retrofitting pipeline **to allow for in-line inspection tools** and, where appropriate, automated or remote shutoff valves."

- a. What does "better enable for the use of in-line inspection tools" mean?
- b. Confirm that Line 1600 is piggable. If Line 1600 is piggable, when was it made piggable?
- c. Confirm that Line 3010 is piggable. If Line 3602 is piggable, when was it made piggable?
- d. Could the 36" segment of pipe in Poway (referenced at page 20, lines 14-15) be replaced with a smaller or larger segment of pipe? Please explain.

RESPONSE 10:

- a. The statement means retrofitting a pipeline to better accommodate the passage of in-line inspection (ILI) tools.
- b. Line 1600 is piggable. Retrofitting of Line 1600 was performed in three separate phases to accommodate the passage of ILI tools. Phase 1 (Rainbow Compressor Station to Lake Hodges) was made piggable in 2012, Phase 2 (Lake Hodges to Mission Base) was made piggable in 2013, and Phase 3 (north and south sections of Lake Hodges) was made piggable in 2015.
- c. Line 3010 was made piggable in 2012.¹
- d. The 36-inch segment of pipe in Poway is an existing asset that currently provides valuable benefits to the SDG&E gas system. It was designed and constructed so that it could

¹ SDG&E and SoCalGas believe there is a typographical error in this question and that ORA intended to request information regarding whether "Line 3010" rather than "Line 3602" is piggable. As such, SDG&E and SoCalGas provide the year when Line 3010 was made piggable. If however, ORA intended to inquire if/when the proposed Line 3602 is piggable, SDG&E and SoCalGas respond as follows. The proposed Line 3602 has not been constructed and the installation of the pipeline is the focus of this proceeding.

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operate as a transmission line with a MAOP of 800 psig. Given this and the fact that it is 36 inches in diameter, it is optimally suited to be integrated into the Proposed Project and provides the optimal pigging configuration. As for whether this segment of pipe could be replaced with a smaller or larger segment of pipe, SDG&E and SoCalGas believe it is technically possible to do so, but urge that consideration be given to the value that this existing asset provides before making the decision to do so.

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QUESTION 11:

The Prepared Direct Testimony of D. Schneider at page 22 generally describes environmental benefits from "potential emission reductions" (fn 46) associated with potential reductions in engine utilization for Moreno Compressor Station.

- a. What is the fuel source for Moreno Compressor Station?
- b. If the fuel source is natural gas, what would the emissions benefits be of converting the engines to electricity?
- c. If the fuel source is natural gas, are there any reliability benefits or costs in converting the engines to electricity?
- d. What precipitated the decrease in emissions for Moreno Compressor Station from 2013 to 2014?
- e. Provide the emissions for Moreno Compressor Station in 2015.
- f. Provide any forecast of emissions for Moreno Compressor Station in 2016, 2017, and 2018 in the absence of Line 3602, and assuming current system conditions remain the same.

RESPONSE 11:

- a. Natural Gas
- b. SDG&E and SoCalGas object to this request on the grounds that it seeks calculations that are unduly burdensome, appears to seek information that is outside the scope of this proceeding, neither admissible in evidence, nor likely to lead to the discovery of admissible evidence.
- c. SDG&E and SoCalGas object to this request on the grounds that it appears to seek information that is outside the scope of this proceeding, neither admissible in evidence, nor likely to lead to the discovery of admissible evidence.

Subject to and without waiving these objections, SDG&E/SoCalGas will address the reliability element of the question:

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Reliability decreases with replacement with electric motors. Per Mr. David Bisi's direct testimony in A.13-12-013, "Electric drive compression may be suitable for some applications that are not critical to reliably serve customer demand or manage system deliveries, such as our project to replace the compressors at our Aliso Canyon storage field. However, SoCalGas cannot tolerate an impact to its critical gas operations when the electric grid is down, or even just resulting from a simple electric service interruption to its facility. An interruption at a major mainline compressor station could certainly lead to noncore customer curtailment and may also jeopardize core reliability. In addition, an electric service interruption to an electric grid if needed flowing natural gas supplies are not able to reach electric generators. Conversely, natural gas mainline compressors act as a backstop to electric grid reliability by enabling local generators to come back on line in the event of a large-scale grid outage."

- d. Mild weather. 2014 was San Diego's warmest year on record per San Diego Union Tribune, January 2, 2015.
- e. NOx emissions for 2015 were 118,898 lbs. This is consistent with the 120,000 lbs. identified in the Prepared Direct Testimony of Neil Navin, Attachment A: Pipeline Safety and Reliability Report, Attachment XII – Moreno Compressor Station Report, page 3, Table 5.
- f. SDG&E and SoCalGas have not and do not forecast emissions at Moreno Compressor Station.