SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY

PIPELINE SAFETY & RELIABILITY PROJECT (PSRP)

(A.15-09-013)

(DATA REQUEST ORA-45)

Date Requested: November 3, 2016
Date Responded: November 18, 2016

PRELIMINARY STATEMENT

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

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

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QUESTION 1:

Subject: Mr. Neil Navin's Prepared Testimony in A.15-09-013

Page 5, Lines 14-17 states:

The Proposed Project consists of the following major components: construction of approximately 47-miles of 36-inch diameter natural gas transmission pipeline (Line 3602) including the installation of ten mainline valves spaced a maximum of 5-miles apart, a cathodic protection system, an intrusion detection system, and a leak monitoring system;

Will the ten mainline valves referred to at page 5, line 16 of Mr. Navin's testimony be manual or automated? Please explain.

RESPONSE 1:

The ten mainline valves referred to in the Prepared Direct Testimony of Neil Navin at page 5, line 16 will be automated. As stated in Mr. Navin's testimony at Section III.A.i.1, "Ten new mainline valves (MLVs) will be installed along the pipeline to shut down the flow of gas during operation and maintenance activities or emergency situations. The valves will be designed for automatic shut-off without operator intervention in the event of a loss of pressure and remote operation by SDG&E and SoCalGas' Gas Control Department."

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QUESTION 2:

Page 10, lines 21-22 & Page 11, Lines 1-3 states:

The Proposed Project will be equipped with an advanced right-of-way intrusion detection and monitoring system to provide early warning when digging, drilling, boring, cutting, compacting, or unplanned vehicle operations pose a threat to pipeline integrity. The system will also continuously monitor for ground movement and temperature gradients associated with an unplanned release of gas from the pipeline.

Please provide the name and detailed information on the equipment referenced here.

RESPONSE 2:

The proposed system to be installed along the proposed Line 3602 is manufactured by Omnisens SA. The model that is currently proposed to be installed is the Asset Integrity Monitoring (AIM) system, which is a fiber-optic based distributed strain, temperature and vibration monitoring solution. The AIM system combines Omnisens DITEST distributed strain & temperature measuring system, herein referred to as DITEST interrogator, and the Omnisens DIVA distributed vibration system.

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QUESTION 3:

Page 11, Lines 3-6 states:

In addition, a 48-inch wide warning mesh/tape will be installed along the length of the pipeline trench as a visual barrier and early warning device The warning mesh/tape will be installed at least one foot below grade on top of the pipeline, except in areas where the pipeline has been installed with trenchless technology (e.g., HDDs and horizontal bores).

a). Please provide the name, model, capabilities of the 48-inch wide warning mesh/tape and how it works.

b). Is this a well-known technology?

c). How extensively is it being used in the gas pipeline industry and for how long?

d). Are there any data to demonstrate its successes and failures?

e). Approximately how many feet (or miles) of pipeline will not have the warning mesh/tape installed due to the use of trenchless technology?

RESPONSE 3:

a. Warning mesh of the type currently proposed to be installed with Line 3602 is supplied by Linemark, model LMKUWM-SCG-48Y. The warning mesh would be positioned a minimum of 18 inches above the pipe and extends a few inches beyond the pipe edge on both sides. Should someone excavate along the pipeline and not know it is there (despite pipeline markers and/or utility mark-out services), the warning mesh serves as an additional visual indicator that the pipeline is below. *See* A.15-09-013 PEA, Chapter 3, Figure 3-3 for a Typical Trench Cross Section that illustrates the use of the warning mesh. Below is a representative example of the warning mesh.

b. Warning tapes and meshes have been used in the United States and Europe for at least 25 years in the natural gas, electric, petroleum, water, sewer and communications industries. Manufacturer's websites, such as those provided below contain additional information:
http://www.linemarkusa.com/
http://www.reefindustries.com/terra-tape.php

c. See the response to Question 2(b) above. With respect to SDG&E and SoCalGas (Applicants), the 6-inch wide warning tape has been in-use for many years. SDG&E used a Terra-tape brand product in the 1990's during the installation of the 36" diameter pre-lay pipeline segment (Line 49-31C) in Poway as well as the 33 mile long Line 3600. These types of products are also currently being used with Applicants' Pipeline Safety Enhancement Plan (PSEP) construction work currently underway.

d. Applicants have not collected and do not have specific data related to the successes and failures of these products, though we continue to believe they are effective in enhancing the safety of buried infrastructure such as pipelines.

e. Approximately 98% of the proposed 47-mile Line 3602 will be constructed with warning mesh. The remaining areas (approximately 4,000 feet) will be constructed using trenchless technologies and as such, the mesh cannot be incorporated.

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QUESTION 4:

Page 11, Lines 9-12 states:

To further support the early detection and management of unplanned gas releases, gas detection sensors will be employed at key locations along the pipeline route and will provide near-real-time alarm notification to operations personnel if gas concentration levels indicate a potential gas release.

What would you consider key locations along the pipeline route?

RESPONSE 4:

Key locations along the proposed pipeline route are facilities that pose special evacuation consideration or other special commerce implications. These facilities may include: hospitals, schools, bridges, high-occupancy locations, etc., in close proximity to the proposed pipeline.

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QUESTION 5:

Page 14, Lines 1-5 states:

The proposed Line 3602 will connect with an existing pre-lay segment located in Pomerado Road. The pre-lay segment was installed in 1994 in Pomerado Road, beginning at Oak Knoll Road and traversing in southerly direction for approximately one mile to its terminus at Scripps Poway Parkway.

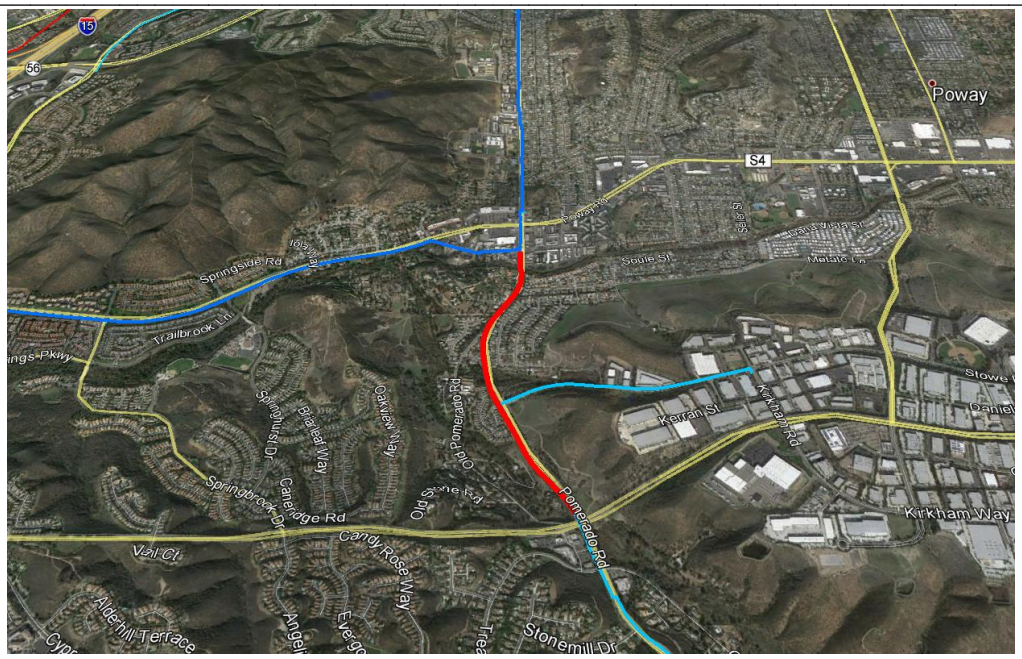
a). Please provide a schematic diagram showing the location and name of this pre-lay pipe.

b). Please describe the event or incident if any, that triggered the need to build this prelay segment.

RESPONSE 5:

a. The approximately 1 mile of pre-lay segment is currently referred to as supply line 49-31C. Information showing the location is provided in the Prepared Direct Testimony of Neil Navin at Attachment XI, *L-1600 De-rating Impact Analysis*, page 4 and also shown on the diagram presented in the last page of Appendix A of that same document.

   For your convenience, a diagram showing the southwestern portion of the city of Poway is provided below. Supply line 49-31C (shown in red) runs north-south in Pomerado Road being bounded by Oak Knoll Road in the north and Scripps Poway Parkway in the south.



b. In 1992, SDG&E planned to install an 8-inch 400 psig pipeline through Poway as an improvement to the high pressure distribution system serving the Poway-Scripps Ranch area. SDG&E was also planning the Rainbow to Santee 36-inch pipeline that would go through Poway. During discussions with Poway staff, the staff requested that SDG&E expand the planned 8-inch pipe to 36 inches and place it in Pomerado road, instead, to avoid construction twice.

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QUESTION 6:

Page 15, Lines 1-5 states:

No permanent above ground facilities will be installed at the regulator stations, with the exception of the steel vault covers and a 2-inch diameter steel pole approximately 6-feet to 10-feet high with an Electronic Pressure Monitoring (EPM) box mounted on it. Near the top of the pole will be a small solar panel measuring approximately 2 feet by 2 feet.

Will this Electronic Pressure Monitoring (EPM) box be remotely accessible?

RESPONSE 6:

Yes.

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QUESTION 7:

Page 28, Lines 6-7 states:

As further described in the Hydro test Study, hydro testing Line 1600 is technically feasible, but it would be complicated, protracted, and fraught with risk.

Do you believe hydro testing is more fraught with risk in comparison to installing a new pipeline? Please explain.

RESPONSE 7:

Applicants object to this data request on the grounds that it is vague and ambiguous. Subject to and without waiving their objections, Applicants respond as follows.

Yes. Installing a new pipeline could reduce the risk for curtailments in San Diego as identified with Line 1600 during hydrotesting. See CEA Scenario Analysis pages 63 – 71.

Furthermore, performing a hydrotest on a nearly 70-year-old line while at the same time trying to maintain uninterrupted service to existing customers, many that are solely fed by Line 1600, is an extremely complex endeavor. The challenges and risks are described in the Prepared Direct Testimony of Neil Navin at pages 28 and 29 and in more detail in Attachment B to Mr. Navin's testimony at pages 1 through 8 - *Line 1600 Hydrotest Study and Cost Estimate*. Installing the new proposed Line 3602 is a lower risk project. The vast majority of the construction of the new line will be done in isolation from the existing gas system. As outlined in the Application, the new line will be engineered, designed and constructed using modern materials, current standards and best practices. It is for all these reasons that lead the Applicants to conclude that hydrotesting Line 1600 is more fraught with risk than building a new pipeline as proposed.