

**SAN DIEGO GAS & ELECTRIC COMPANY
SOUTHERN CALIFORNIA GAS COMPANY**

**CERTIFICATE OF PUBLIC CONVENIENCE & NECESSITY FOR THE
PIPELINE SAFETY & RELIABILITY PROJECT - CPCN**

(A.15-09-013)

**(Data Request TURN-SDG&E-01)
Date Requested: November 6, 2015
Date Responded: November 23, 2015**

QUESTION 1:

Please provide a table showing:

- a. The existing summer and winter capacities of pipelines 1600, 3010, the coastal line, line 3600 and the Otay Mesa receipt point and interconnect pipeline
- b. The existing summer and winter capacities of pipelines 1600, 3010, the coastal line, line 3600 and the Otay Mesa receipt point and interconnect pipeline assuming Line 1600 has been successfully pressure tested and put into service without the new 36" pipeline.
- c. Please provide a table showing the summer and winter capacities of pipelines 1600, 3010, the coastal line, line 3600 and the Otay Mesa receipt point and interconnect pipeline if the new 36" pipeline is put into service.

RESPONSE 1:

The capacity of Line 3600 is dependent upon local demand, which ranges from 100 to 400 MMcfd. The coastal pipeline has been derated and serves a distribution function; as such, contribution to SDG&E system capacity is negligible.

Response 1a: NOMINAL CAPACITIES,¹ MMCFD

	<u>Summer</u>	<u>Winter</u>
Line 1600	100	100
Line 3010	490	530
Otay Mesa	400	400

Response 1b: NOMINAL CAPACITIES, MMCFD

	<u>Summer</u>	<u>Winter</u>
Line 1600	100	100
Line 3010	490	530
Otay Mesa	400	400

¹ Actual capacities are a function of how large the load is and where it is located on the system. The amount of gas being pushed through SDG&E's two transmission lines can fluctuate on any given day. Available system pressures affect SDG&E's ability to serve a certain level of customer demand.

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Response 1c:

NOMINAL CAPACITIES, MMCFD

	<u>Summer</u>	<u>Winter</u>
Line 1600	0	0
Line 3010	300	325
Line 3602	490	505
Otay Mesa	400	400

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QUESTION 2:

Please verify that after Line 1600 has been in-line inspected and pressure-tested that it would meet all the requirements of the CPUC's Pipeline Safety Requirements.

RESPONSE 2:

Yes.

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QUESTION 3:

Please provide the cost estimate completing the in-line inspection of Line 1600.

RESPONSE 3:

16-inch diameter pipe of Line 1600 has been in-line inspected. Approximately 2,500 feet of the pipeline is 14 inches in diameter, and is scheduled to be in-line inspected in December 2015. The estimated inspection cost to complete Phase 3 (approximately 2,500 feet in the Lake Hodges area) is \$175,000, not including construction and field support expenses.

Recurring in-line inspection costs to comply with TIMP requirements are anticipated to approximate the costs incurred for the existing inspection runs on Phase 1 and Phase 2:

Phase 1 (16"): \$660,000

Phase 2 (16"): \$770,000

Remediation work to address in-line inspection results is not forecast.

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QUESTION 4:

Please provide a cost estimate, disaggregated by major cost components, of pressure-testing Line 1600 after the in-line inspection has been completed.

RESPONSE 4:

Description	Total (\$ MM)
Materials	\$ 3.1
Construction	\$ 61.8
Engineering & Design	\$ 4.8
Environmental	\$ 0.7
Company Labor	\$ 3.0
Major Bypasses	\$ 11.3
Other Project Execution Activities	\$ 6.9
TOTAL	\$ 91.6

The direct cost estimate to hydrostatic test Line 1600 is based on completing the work by beginning at one end of the pipeline and testing contiguous segments from start to finish.

Executing the hydrostatic testing in a non-contiguous manner due to operational/seasonal/permitting constraints would require shifting hydro-test breaks from one location to another, resulting in lost efficiency and higher costs for mobilization and demobilization.

The cost estimate does not include allowance for locating leaks and making repairs that can range from \$ 300,000 for simple repairs to \$18 million for pipeline relocations.

Additionally, depending on the hydro-testing process and progress, natural gas may need to be supplied to the system via the Otay Mesa receipt point. This will add costs to the hydro-testing, which have not been determined. Such costs are dependent on

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the duration of the needed supplies, volume of needed supplies, and the ability to purchase capacity on the upstream pipelines.

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QUESTION 5:

Please provide a cost estimate to:

- a. Hydrostatically test Line 1600 before the end of the 10 year PSEP period with doing the highest risk segments in the first Phase.
- b. The cost of ensuring that all customers had sufficient gas supply during the hydrostatic testing period

RESPONSE 5:

- a. See response to Question 4. The cost estimate to hydrostatic test Line 1600 was done based on completing the work from start to finish and not by highest risk segments.
- b. To manage customer impacts, the cost estimate included costs for using CNG or installing by-passes:

CNG Cost = \$255,000

By-Pass Installation = \$11.3 million

Additionally, depending on the hydro-testing process and progress, natural gas may need to be supplied to the system via the Otay Mesa receipt point. This will add costs to the hydro-testing, which have not been determined. Such costs are dependent on the duration of the needed supplies, volume of needed supplies, and the ability to purchase capacity on the upstream pipelines.

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QUESTION 6:

Please provide the length of the 14" pipeline segment of line 1600 as described in footnote 4 in PEA, page 2-5.

RESPONSE 6:

The 14-inch pipe segment that extends beneath Lake Hodges is approximately 2,500 feet.

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QUESTION 7:

Please provide a cost estimate of replacing that 14" segment and indicate the capacity of line 1600 after that 14" segment has been replaced by a new 16" segment.

RESPONSE 7:

The estimated direct cost to replace approximately 2,500 feet of 14-inch segment under Lake Hodges is approximately \$6.2 million. This estimate is based on installing the pipe under Lake Hodges utilizing a typical horizontal directional drill (HDD) method. This estimate excludes costs associated with potential site-specific issues including: recreation areas, water shed, cultural and historic resources along with permit requirements and restrictions.

No capacity increase is expected once the 14-inch segment is replaced by a 16-inch diameter segment.

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QUESTION 8:

Please provide the number of interruptions of electric service to SDG&E's customers in the past five years. Please provide any reports, either internal or submitted to the CPUC, concerning each interruption event.

RESPONSE 8:

SDG&E interprets the word "interruptions" to mean the generation interruption or curtailment to a customer. The number of interruptions of electric service to SDG&E's customers in the past five years is provided in the attached annual Electric System Reliability Annual Reports from 2010-2014.



TURN DR 1 Q8
attachments.zip

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QUESTION 9:

Please provide a projection of future electric service interruption in the next 20 (2010-2030) years if the new 36" pipeline is not built and if the 36" pipeline is built.

RESPONSE 9:

No such forecasts are available.

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QUESTION 10:

Please provide data for the past 5 years (2010-2015) that shows the daily and hourly peak demand for gas service for gas-fired electricity generation facilities in SDG&E's service territory and a projection of likely swings in daily and hourly requirements in the next 20 years as more renewable electricity is placed into service to meet SDG&E's electricity requirements.

RESPONSE 10:

The following table compiles peak hourly and daily demand of electric generation facilities in San Diego (excluding cogeneration facilities) for 2010-2015 (to date). No such forecast is available regarding changes in electric generation daily or hourly demand swings over the next 20 years.

Year	Hourly Max (MMcfh)	Gas Day Daily Max (MMcfd)*
2010	22.5	311
2011	20.1	268
2012	24.8	343
2013	22.1	348
2014	22.2	370
2015	23.8	321

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QUESTION 11:

Please provide the following recorded data for 2010-2014:

- a. Daily flows on Line 1600 (please identify meter location)
- b. Maximum hourly flow each year on Line 1600

RESPONSE 11:

The annual maximum hour throughput of Line 1600, as measured at Rainbow Meter Station, for the period 2011-2014 are listed below, and daily throughput for this same period are available in the attached spreadsheet. Data prior to May 2011 are unavailable.

	Line 1600 Max Hourly Flow
	<u>MMcfh</u>
2011	5.44
2012	5.95
2013	5.97
2014	5.50



TURN DR11A.xlsx

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QUESTION 12:

Please provide the forecast annual average and maximum daily flows for proposed Line 3602 for 2020-2030.

RESPONSE 12:

No such forecast is available.

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QUESTION 13:

Please provide the forecast of LNG prices over the next 20 years (2015-2035) delivered at Energia Costa Azul (ECA) used as a basis of to eliminate gas supplies from ECA as an alternative to the proposed project (PEA, p. 5-12) and a forecast of natural gas prices from 2015 to 2035 delivered to SDG&E over the proposed new 36" line.

RESPONSE 13:

No forecast of either LNG prices or SoCalGas/SDG&E City Gate prices for 2015-2035 was used as a basis to eliminate ECA as an alternative to the Proposed Project. Neither forecast is available.

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QUESTION 14:

Re: PEA, p. 5-13. Please provide the cost of a 200 MMcfd LNG withdrawal and 1 BCF of LNG storage facility in San Diego County. The 200 MMcfd is in reference to the projected increased capacity available to SDG&E if the proposed project is built as shown in Chapter 2.1.3 page 2-5.

RESPONSE 14:

SDG&E did not develop a cost estimate for a 200 MMcfd withdrawal and 1 BCF of LNG storage facility.

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QUESTION 15:

For the 'No Project alternative,' were portable LNG/CNG supply options considered? If yes, please explain why they are not discussed. If no, please explain why not.

RESPONSE 15:

Yes, using portable CNG options were considered; however, under the Alternatives section, they did not require the same level of analysis as the Proposed Project.

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QUESTION 16:

Re. PEA, p. 5-15 - North Baja Alternative. Please provide a cost estimate of increasing the capacity of The North Baja pipeline by 200 MMcfd as an alternative to the proposed 36" pipeline.

RESPONSE 16:

No such cost estimate is available. SoCalGas and SDG&E cannot speculate on the costs of another provider's pipeline located outside their service territory.

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QUESTION 17:

Please provide the cost estimates for:

- a. The costs to reconfigure the supply points to Line 1600 if it were converted to distribution.
- b. The costs to convert the customers along Line 1600 from transmission to distribution supply.

RESPONSE 17:

- a. The estimated cost to reconfigure the supply points for Line 1600 as a result of the reduced pressure is approximately \$2.4 million.
- b. The estimated cost to convert customers along Line 1600 from transmission to distribution is approximately \$29.8 million.

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Date Responded: December 14, 2015

QUESTION 18:

Please provide a table showing all transmission pipeline replacement projects completed in 2005-2014 that provides, at a minimum: Project location; replacement length; new pipeline diameter.

RESPONSE 18:

SoCalGas and SDG&E object to this request on the grounds that it is beyond the scope of the PEA, unduly burdensome, and not reasonably calculated to lead to the discovery of relevant evidence. This request makes no reference to the PEA and is beyond the scope of evidence relevant to the Proposed Project. Subject to and without waiving these objections, SoCalGas and SDG&E interpret this request as seeking information in SDG&E's service territory and respond as follows:

The following table contains confidential information (e.g. pipe diameter) that is submitted pursuant to the Nondisclosure and Protection Agreement between TURN and SoCalGas/SDG&E.

SDG&E Transmission Pipeline Replacement Projects 2005-2014			
Project Number	Replacement Footage (Feet)	Pipe Diameter (Inches)	Location (County)
1545049	1,212	█	San Diego
1545157	990	█	San Diego
1544826	2,702	█	San Diego
1810060	910	█	San Diego

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Date Responded: December 14, 2015

QUESTION 19:

Please provide a table showing all transmission new pipeline projects in 2005-2014 that provides, at a minimum: Project location; replacement length; new pipeline diameter.

RESPONSE 19:

SoCalGas and SDG&E object to this request on the grounds that it is beyond the scope of the PEA, unduly burdensome, and not reasonably calculated to lead to the discovery of relevant evidence. This request makes no reference to the PEA and is beyond the scope of evidence relevant to the Proposed Project. Subject to and without waiving these objections, SoCalGas and SDG&E interpret this request as seeking information in SDG&E's service territory and respond as follows:

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SDG&E - New Transmission Pipelines 2005-2014			
Project Number	New Pipeline Footage (Feet)	Pipe Diameter (Inches)	Location (County)
1810040	2,570	■	San Diego
1544937	12,961	■	San Diego