

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA



FILED
4-21-16
04:59 PM

In The Matter of the Application of San Diego Gas & Electric Company (U902G) and Southern California Gas Company (U904G) for a Certificate of Public Convenience and Necessity for the Pipeline Safety & Reliability Project.

A.15-09-013
(Filed September 30, 2015)

PROTEST OF THE OFFICE OF RATEPAYER ADVOCATES

DARRYL GRUEN

Attorney for the Office of Ratepayer
Advocates

California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102
Phone: (415) 703-1973
E-mail: djg@cpuc.ca.gov

April 21, 2016

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	DISCUSSION	5
A.	SEMPRA’S AMENDMENT TO APPLICATION DID NOT FOLLOW THE RULING IN NUMEROUS WAYS.	5
	1. Failure to Meet the Requirement to Provide Specific Ten-Year Forecasted Information Regarding the Area Served by Proposed Line 3602	5
	2. Failure to Provide Ten-year historic monthly, daily, and annual maximum volumes through Line 1600	6
	3. Failure to Use the PEA Definition of the No Project Alternative	6
	4. Failure to Use the PEA Definition of Replacement of Line 1600 in Place with a 16-inch Pipeline	8
	5. Failure to Identify the Storage Capacity or Physical Footprint of the LNG Storage (Peak-Shaver) Alternative.....	8
	6. Failure to Single Out and Analyze the Northern Baja Alternative as Defined in the PEA, and Instead Erroneously Grouping it with Other “Otay Mesa Alternatives”	9
B.	SUBSTANTIVE CONCERNS WITH APPLICANTS’ AMENDMENT TO APPLICATION	12
	1. Invalid Bases for Project Need and Certain Project Objectives	12
	2. What is the Basis for Certain of Applicants’ Underlying Data?	17
	3. Notwithstanding Applicants’ Cost-Effectiveness Analysis Findings, Are Other Alternatives that the Commission Has Required to Review More Cost Effective than the Proposed Project?.....	19
	4. Discrepancy in Applicants’ Analysis of Transmission Integrity Management Program Requirements Between Line 1600 and the Proposed Project.....	20
	5. Applicants’ Claims about Deliveries at the Otay Mesa Receipt Point Run Counter to Applicants’ Claims in the North-South Project Application (A.13-12-013).....	20
C.	SCHEDULE.....	21
III.	CONCLUSION.....	22

TABLE OF AUTHORITIES

California Public Utilities Code

Section 1001 and 1003(d)..... 2

Section 1005.5 3

California Public Utilities Commission Decisions

D.14-06-007.....20

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

In The Matter of the Application of San Diego Gas & Electric Company (U902G) and Southern California Gas Company (U904G) for a Certificate of Public Convenience and Necessity for the Pipeline Safety & Reliability Project.

A.15-09-013
(Filed September 30, 2015)

PROTEST OF THE OFFICE OF RATEPAYER ADVOCATES

I. INTRODUCTION

Pursuant to Rule 2.6 of the California Public Utilities Commission’s (“Commission” or “CPUC”) Rules of Practice and Procedure (“Rules”), and the Joint Assigned Commissioner and Administrative Law Judge’s (“ALJ’s”) Ruling Requiring an Amended Application Seeking Protests, Responses, and Replies (“Assigned Commissioner and Administrative Law Judge’s Ruling” or “Ruling”),¹ the Office of Ratepayer Advocates (“ORA”) hereby submits the following protest to the Amendment to the Application of San Diego Gas & Electric Company (“SDG&E”) and Southern California Gas Company (“SCG”)² for a Certificate of Public Convenience and Necessity (“CPCN”) for the Pipeline Safety & Reliability Project (“Amendment to Application”).

On September 30, 2015, Applicants filed an Application to the CPUC, in which Applicants propose to replace the transmission function of Line 1600,³ a 16-inch transmission pipeline from Rainbow Station to Miramar, with a 47 mile long, 36-inch transmission pipeline also from Rainbow Station to Miramar, at a construction cost of

¹ Ruling, 1/22/16, pp. 19-20.

² When referred to collectively in this protest, SCG and SDG&E will be called “Sempra Utilities”, “Sempra” or Applicants.

³ Amendment to Application, p. 5.

\$595 million,⁴ for a planned in-service date of 4th quarter of 2020.⁵ Applicants claim this proposal avoids the need to pressure-test Line 1600 – avoiding both the direct costs of pressure testing and the costs of loss of service of taking Line 1600 out of service for pressure testing – and allows Line 1600 to serve as a lower-pressure distribution pipeline without the need for pressure testing.

On January 22, 2016, the Assigned Commissioner and Administrative Law Judge issued a Ruling, which explained that Energy Division (“ED”) provided a list of deficiencies with Applicants’ Preliminary Environmental Assessment (“PEA”) on October 30.⁶ The Ruling further explained that Applicants submitted responses from November 30, 2015 through December 21, 2015, and that ED provided a second list of PEA deficiency items to the Applicants on December 30, 2015.⁷ The Ruling ruled that Applicants “shall file and serve an amended application by March 21, 2016 that addresses deficiencies pursuant to California Public Utilities Code Sections 1001 and 1003(d), Rules 3.1 (b), 3.1(c), 3.1(e), 3.1(f), 3.1(h), 3.1(i), 3.1(k)(1), 3.1(k)(1)(A), 3.1(k)(B), 3.1(k)(2), 3.1(k)(3), 3.1(k)(3)(A), 3.1(k)(3)(B), and 3.1(o) of the Commission’s Rules or Practice and Procedure; and safety evaluation and compliance analysis, as detailed in the Ruling.”⁸

As required by the Ruling, Applicants submitted their Amendment to Application on March 21, 2016.⁹ Applicants’ Amendment to Application states, “Except as stated below, the original Application, which includes the Applicants’ Proponents Environmental Assessment (PEA), is unchanged and incorporated by reference.”¹⁰

⁴ Application, p. 24, *citing* Proponent’s Environmental Assessment (PEA), pp. 3-66 to 3-67, Table 3-7.

⁵ PEA, p. 3-67, fn. 36.

⁶ Assigned Commissioner and Administrative Law Judge’s Ruling, p. 18.

⁷ Assigned Commissioner and Administrative Law Judge’s Ruling, p. 18.

⁸ Assigned Commissioner and Administrative Law Judge’s Ruling, p. 21.

⁹ Assigned Commissioner and Administrative Law Judge’s Ruling, p. 20.

¹⁰ Amendment to Application, p. 1.

Similarly, ORA incorporates its initial Protest¹¹ (“Initial Protest”) to Applicants’ initial original Application by reference into this protest.

As noted in ORA’s Initial Protest, a preliminary list of issues included:

- The reasonableness of SCG and SDG&E’s decision to replace the 16-inch Line 1600 with a new 36-inch pipeline and converting the existing transmission assets to distribution assets;¹²
- The sufficiency of SCG and SDG&E’s showing of purpose and need;¹³
- The reasonableness of the project’s scope and size, costs and proposed rate design;¹⁴ and
- Compliance with California Law and Commission Rules of Practice and Procedure with respect to CPCNs, including providing the demonstrated need for the project, design criteria and expected throughput, and cost estimates for the cost caps required in Public Utilities Code Section 1005.5.¹⁵

ORA has had limited time and resources to review SCG and SDG&E’s Amendment to Application, testimony, and Cost-Effectiveness Analysis (“Cost Effectiveness Analysis” or “Analysis”). However, based upon our review to date, the Amendment to Application raises at least the following issues, many of which require further discovery.

First, Sempra’s Amendment to Application failed to follow the requirements of the Ruling in a number of ways. As a result, ORA recommends another ruling finding that the Amendment to Application is deficient. At a minimum, the Amendment to the Application:

- Failed to meet the requirement to provide specific ten-year forecasted information regarding the area served by proposed Line 3602;¹⁶

¹¹ ORA’s initial Protest was filed October 30, 2015.

¹² ORA Protest, p. 4, citing Application, p. 4-5.

¹³ ORA Protest, p. 4, citing Application, p. 4-7; and citing PEA pp. 2-5 to 2-7.

¹⁴ ORA Protest, p. 4, citing Application, p. 4-7; and citing PEA pp. 2-5 to 2-7.

¹⁵ PEA, p. 2-5.

¹⁶ See Ruling, pp. 16-17 and Amendment to Application, p. 40. For more detailed analysis, See Section II.A.1.

- Failed to provide ten-year historic monthly, daily, and annual maximum volumes through Line 1600;¹⁷
- Failed to use the PEA Definition of the No Project Alternative;¹⁸
- Failed to use the PEA definition of replacement of Line 1600 in place with a 16-inch pipeline;¹⁹
- Failed to identify the storage capacity or physical footprint of the Liquefied Natural Gas (“LNG”) Storage (Peak-Shaver) Alternative;²⁰ and
- Failed to properly analyze the Northern Baja Alternative,²¹ as defined in the PEA.²²

Second, Applicants’ Amendment to Application raises a number of substantive issues or concerns, including at least the following:

- Applicants’ Amendment to Application has provided invalid bases for project need and at least one of its asserted project objectives;²³
- Applicants’ Cost Effectiveness Analysis has certain deficiencies, and the basis for some of the information provided in the Analysis is unclear;²⁴
- Notwithstanding the findings in Applicants’ testimony and the Cost Effectiveness Analysis, are other alternatives that the Ruling required for review more cost effective than the Proposed Project?²⁵
- Applicants’ Analysis of Transmission Integrity Management Program requirements between Line 1600 and the Proposed Project;²⁶

¹⁷ See Ruling, p. 16 and Amendment to Application, p. 41. For more detailed analysis, See Section II.A.2.

¹⁸ See Ruling, p. 12; PEA, pp. 5-35, 5-36, and 5-37; Analysis pp. 11, and 12 fn. 25; and Prepared Direct Testimony of Neil Navin on Behalf of San Diego Gas & Electric Company and Southern California Gas Company, Attachment B, p. 2. For more detailed analysis, See Section II.A.3.

¹⁹ See Ruling, p. 13; PEA, p. 5-9; and Analysis, p. 12. For more detailed analysis, See Section II.A.4.

²⁰ See Ruling, p. 13; PEA, p. 5-13; and Analysis, pp. 13-14. For more detailed analysis, See Section II.A.5.

²¹ The Northern Baja Alternative is also referred to as “North Baja Alternative”.

²² See Ruling, pp. 11, 12 and 13; PEA, p. 5-15; Analysis p. 13; and Prepared Direct Testimony of Gwen Marelli on Behalf of San Diego Gas & Electric Company and Southern California Gas Company, March 21, 2016, p. 5. For more detailed analysis, See Section II.A.6.

²³ See Section II.B.1.

²⁴ See Section II.B.2.

²⁵ See Section II.B.3.

²⁶ See Section II.A.4.

- Applicants’ claims about deliveries at the Otay Mesa receipt point,²⁷ which are counter to their claims in the Applicants’ North-South Project Application (A.13-12-013).²⁸

Finally, ORA proposes a schedule, which includes timing for Applicants to correct the deficiencies in the Amendment to Application, including those identified in Section II.A.

II. DISCUSSION

ORA identifies in more detail Applicants’ numerous failures to follow the Ruling it has identified to date, and its substantive concerns with Applicants’ Amendment to Application at this time.

A. Sempra’s Amendment to Application Did Not Follow the Ruling in Numerous Ways

Because Sempra’s Amendment to Application did not follow the Assigned Commissioner and ALJ Ruling in a number of ways, ORA recommends the Assigned Commissioner and ALJ issue a ruling finding that the Amendment to Application is deficient. ORA briefly explains the numerous deficiencies it has found with the Amendment to Application in this section.

1. Failure to Meet the Requirement to Provide Specific Ten-Year Forecasted Information Regarding the Area Served by Proposed Line 3602

The Ruling required Sempra to provide a “Ten-Year forecasted (maximum daily and annual average daily volumes in the area to be served by proposed Line 3602, including information on the quality of gas and broken down by customer type (e.g., core, non-core commercial and industrial, and noncore electric generation).²⁹ However, rather than providing the required volumes, Applicant’s Amendment to Application response is,

The Proposed Project will operate as part of the Applicants’ integrated gas transmission system. *SDG&E does not forecast throughput for individual*

²⁷ Amendment to Application, p. 48.

²⁸ See A.13-12-013, Sempra Opening Brief, pp. 27-28.

²⁹ Ruling, pp. 16-17.

pipelines on its system. SDG&E plans its gas transmission system to meet the Commission-mandated design standards for core service (1-in-35 year peak day) and firm noncore service (1-in-10 year cold day). The most recent demand forecasts are presented below.³⁰ (Emphasis added.)

Given that the Applicants have now failed to provide forecasted volumes for Line 3602 twice, ORA can only assume this is because it would demonstrate that the excess capacity created by this line expansion is unneeded.”³¹

2. Failure to Provide Ten-year historic monthly, daily, and annual maximum volumes through Line 1600

The Assigned Commissioner and ALJ Ruling required Applicants Amended Application to provide, “Ten-year historic monthly volumes through Line 1600”,³² and “Ten-year historic daily and annual maximum volumes through Line 1600.”³³

In response, Applicants have stated, “SDG&E does not measure throughput by individual pipeline on its system.”³⁴

3. Failure to Use the PEA Definition of the No Project Alternative

The Assigned Commissioner and ALJ Ruling required Applicants’ Cost-Effectiveness Analysis to analyze the No Project Alternative, “As defined in PEA, but more concisely, the Applicants would hydrotest³⁵ Line 1600 in sections and only repair or replace pipeline segments as needed.”³⁶

Applicants’ PEA states,

³⁰ Amendment to Application, p. 40.

³¹ Applicants’ testimony in refers to the Proposed Project using the term “redundant”. For example, see Testimony of A. Yari (p. 4); Testimony of D. Bisi (pp. 7-9, 13, 16); Testimony of D. Schneider (p. 2, 18, 20); and Testimony of J. Kikuts (p. 3).

³² Commissioner and ALJ Ruling, p. 16.

³³ Commissioner and ALJ Ruling, p. 16.

³⁴ Amendment to Application, p. 41.

³⁵ ORA will use the terms hydrotesting and pressure testing interchangeably.

³⁶ Commissioner and ALJ Ruling, p. 12.

It is anticipated that the pipeline would be tested in 24 segments; each test segment would take four to six weeks to conduct. Therefore, the total testing would take *18 months to two years* to complete, including time for permitting and procurement. However, if any particular test segment fails the test and repairs need to be made, additional time ranging from a few days to a few months for each repair would be added to the construction schedule.³⁷ (Emphasis added.)

In contrast, Applicants' Cost-Effectiveness Analysis states, The Hydrotest Alternative involves a complex *four year project* to test the northern 45-miles of Line 1600, from Rainbow Metering Station to Kearny Villa Station. . . The Hydrotest Alternative will involve testing 19 different pipeline segments during the shoulder months. [footnote omitted]³⁸ (Emphasis added.)

In the Analysis, Applicants appear to have inflated the testing time of Line 1600 to approximately twice that provided in the PEA. Moreover, in contrast to the 24 segments to be tested in the PEA, the Analysis states that only 19 segments would be tested. Given that the PEA states that each test segment would take four to six weeks to conduct, ORA anticipates it would take less time to test 19 segments than it would to test 24; not more, as the Analysis does. Therefore, ORA is concerned that Applicants' Analysis has significantly under-estimated the cost-effectiveness of hydrotesting. ORA intends to perform discovery pertaining to this issue.

For hydrotesting, other differences between the PEA and Analysis include:

- The PEA states that during testing, supplemental gas would need to be brought in “by Line 3010/1601 or Line 3600/2010 by means of the Otay Mesa receipt point.”;³⁹ whereas the Analysis only identifies that hydrotesting will “require gas to be imported from the gas transmission system receipt point located at Otay Mesa;⁴⁰
- The PEA does not specify testing being done only during shoulder months; but the Analysis does;⁴¹ and

³⁷ PEA, P. 5-36.

³⁸ Analysis, p. 11.

³⁹ PEA, p. 5-37.

⁴⁰ Analysis, p. 11.

⁴¹ Analysis, p. 11; The Analysis does not clarify whether doing work only during the shoulder months explains the increase in time from two to four years. In any case, the Analysis did not follow the Ruling

- The PEA provides test segment lengths to be between 2,000 feet and 4.6 miles, and the average segment being approximately 1.5 miles;⁴² whereas the Analysis refers to the Direct Testimony of Neil Navin,⁴³ which provides a range in lengths of between 2,000 feet and 7.5 miles in length, with the average being approximately two miles.⁴⁴

4. Failure to Use the PEA Definition of Replacement of Line 1600 in Place with a 16-inch Pipeline

The Assigned Commissioner and ALJ Ruling required Applicants’ Cost-Effectiveness Analysis to analyze the Replacement of Line 1600 in Place with a 16-inch Pipeline Alternative, “As defined in the PEA (i.e. replace Line 1600 in full without hydrotesting), but complete the replacement in sections to minimize customer impact.”⁴⁵

For this alternative, whereas the PEA calls for replacement of 24 segments, totaling 46.2 miles;⁴⁶ the Analysis identifies replacing 19 segments covering approximately 45 miles.⁴⁷

5. Failure to Identify the Storage Capacity or Physical Footprint of the LNG Storage (Peak-Shaver) Alternative

The Assigned Commissioner and ALJ’s Ruling requires the Analysis to identify this alternative in a way that is “Similar to the PEA’s ‘United States – LNG Alternative’ but at a smaller scale with LNG storage sited at or near natural gas peaker generation sites.”⁴⁸

The PEA stated, “The LNG facility would require a storage capacity in excess of one billion standard cubic feet in order to meet the Proposed Project objectives, and

instructions to identify the hydrotest alternative as defined in the PEA.

⁴² PEA, p. 5-35.

⁴³ Analysis, p. 12, fn 25.

⁴⁴ Prepared Direct Testimony of Neil Navin on Behalf of San Diego Gas & Electric Company and Southern California Gas Company, Attachment B, p. 2.

⁴⁵ Commissioner and ALJ Ruling, p. 13.

⁴⁶ PEA, p. 5-9.

⁴⁷ Analysis, p. 12.

⁴⁸ Commissioner and ALJ Ruling, p. 13.

would result in a permanent footprint that would likely exceed 40 acres.”⁴⁹ The Analysis says that “This alternative is similar to the PEA’s ‘United States – LNG Alternative,’ but at a smaller scale with LNG storage sited at or near natural gas peaker generation sites.”⁵⁰ However, the Analysis does not identify the storage capacity or permanent footprint to support this statement.⁵¹

6. Failure to Single Out and Analyze the Northern Baja Alternative as Defined in the PEA, and Instead Erroneously Grouping it with Other “Otay Mesa Alternatives”

The Commissioner and ALJ Ruling requires that the Analysis apply quantifiable data to define the relative costs and benefits of the proposed project and, at a minimum, for the range of alternatives identified in this Ruling.⁵² The Commissioner and ALJ Ruling specifically and explicitly requires that the Analysis use such quantifiable data for the Northern Baja Alternative, “As defined in PEA.”⁵³

However, instead of singling out the North Baja Alternative, and analyzing the cost-effectiveness of just the North Baja Alternative, the Analysis combines it with other Non-Physical or Minimal Footprint alternatives, and appears to group both of these distinct alternatives as a single project that it calls “Otay Mesa Alternatives”, and then analyzes these alternatives as a group.⁵⁴ ORA will refer to this as the “Otay Mesa Alternatives Grouping Error”.

ORA recommends that the Assigned Commissioner and ALJ require that Applicants correct the Otay Mesa Alternatives Grouping Error, and go back and do a cost-effectiveness analysis of the North Baja Alternative by itself, as defined in the PEA

⁴⁹ PEA, p. 5-13.

⁵⁰ Analysis, p. 13.

⁵¹ See Analysis, Section on LNG Storage (Peak Shaver) Alternative, pp. 13-14.

⁵² Commissioner and ALJ Ruling, p. 12.

⁵³ Commissioner and ALJ Ruling, p. 13.

⁵⁴ Analysis, p. 13.

for several reasons. First, it is what the Assigned Commissioner and ALJ Ruling required.

Second, because of the Otay Mesa Alternatives Grouping Error, the current Analysis makes certain assumptions about the Otay Mesa Alternatives, and it is not clear these assumptions are valid to make because they are not the ones for the North Baja Alternative as defined in the PEA. For example, the Analysis assumes, without any apparent explanation, that the Otay Mesa Alternatives, grouped together, should require delivery of 400 million cubic feet per day on a firm basis.⁵⁵ Similarly, Ms. Marelli's testimony states that "It is unknown at this time whether approximately 400 million metric cubic feet per day ("MMcfd") of firm capacity on the North Baja path could be secured on all three (North Baja) pipelines on a long term basis."⁵⁶ In contrast to the Analysis and Ms. Marelli's testimony, the PEA assumes that the Northern Baja Alternative, by itself, includes an available daily capacity of 185 MMcfd,⁵⁷ which, according to the PEA, "is approximately the same net quantity of additional capacity that the Proposed Project would provide."⁵⁸ ORA recommends that the Analysis be re-done with a focus on the Northern Baja Alternative with a 185 MMcfd available daily capacity.

Third, because of the Otay Mesa Alternatives Group Error, the current Analysis assumes the need to build infrastructure; whereas the PEA does not. Specifically, the Analysis states that, "the Otay Mesa Alternatives requires the physical construction of new pipeline facilities via an expansion on the North Baja pipeline systems."⁵⁹ Similar to the Analysis, Ms. Marelli's testimony states, "Assuming the 400 MMcfd of firm capacity could not be secured without pipeline expansions, the Utilities identified both a low end

⁵⁵ Analysis, p. 13.

⁵⁶ Prepared Direct Testimony of Gwen Marelli on Behalf of San Diego Gas & Electric Company and Southern California Gas Company, March 21, 2016, p. 5.

⁵⁷ PEA, p. 5-15.

⁵⁸ PEA, p. 5-15.

⁵⁹ Analysis, p. 13.

cost and a high end cost for building out capacity to provide service under the Otay Mesa Alternatives.”⁶⁰ These assumptions contradict the PEA’s depiction of the Northern Baja Alternative, which states, “Should capacity become available to the Applicant, the Northern Baja Alternative may be able to utilize existing infrastructure without requiring the construction of additional facilities and pipeline. . . .”⁶¹

Fourth, because of the Otay Mesa Alternatives Grouping Error, the Analysis appears to overstate costs that would be assigned only the Northern Baja Alternative. For example, page 22, Table 6, of the Analysis groups the Northern Baja Alternative into the Otay Mesa Alternatives and assigns them a fixed cost of \$977.1 million, and an annual operating cost of \$45 million.⁶² The Analysis also perpetuates the Otay Mesa Alternatives Grouping Error in stating that the avoided cost for the Otay Mesa Alternatives would be \$100.3 million,⁶³ and that the Net cost for the Otay Mesa Alternatives would be \$876.8 million.⁶⁴ The Analysis does not make clear what fixed cost, annual operating cost, and avoided costs the Northern Baja Alternative would receive. ORA can only assume the resulting net cost provided in Table 8 would be significantly less for the North Baja Alternative.

Fifth, because of the Otay Mesa Alternatives Grouping Error, it is unclear whether the Analysis is accurately scoring what the benefits of the Northern Baja Alternative would be. Moreover, it is unclear whether the overall relative ranking of the Otay Mesa Alternatives accurately reflects what the overall relative ranking would be for the Northern Baja Alternative. One example of the failure to single out the benefits of the Northern Baja Alternative can be seen on page 35, Table 10, in the heading Otay Mesa

⁶⁰ Prepared Direct Testimony of Gwen Marelli on Behalf of San Diego Gas & Electric Company and Southern California Gas Company, March 21, 2016, p. 7.

⁶¹ PEA, p. 5-15.

⁶² Analysis, p. 22, Table 6, and p. 32, Table 8.

⁶³ Analysis, p. 32, Table 8.

⁶⁴ Analysis, p. 32, Table 8, and p. 33, Table 9.

Alternatives. Other examples of this failure can be seen throughout the rest of the Analysis.⁶⁵

B. Substantive Concerns with Applicants' Amendment to Application

1. Invalid Bases for Project Need and Certain Project Objectives

a) Applicants' Own Forecast Numbers Do Not Support Need for the Proposed Project

Although Applicants fail to follow instructions in the Assigned Commissioner and ALJ ruling because they do not provide the ten-year forecasted volumes in the area to be served by proposed Line 3602, Applicants do provide their own forecasts, but apparently at the system level.⁶⁶ However, when compared to Applicants' demand forecast numbers for 2015/2016, Applicants' forecast numbers for 1-in-10 year cold day demand show natural gas *decreases* for each of the coming ten years.⁶⁷

Moreover, when compared with Applicants' 2015-2016 demand forecasts, the only year Applicants show an increase in forecasts for 1-in-10 year cold day demand is 2035/2036.⁶⁸ However, that comparison shows an increase of merely 10 MMCFD,⁶⁹ which is less than 2% greater than 2015-2016 demand forecast numbers.⁷⁰

⁶⁵ See for example, Analysis, p. 38, Table 11 entitled "Increased Safety Benefits Score"; p. 40, Table 13 entitled "Safety Benefits of Other Alternatives"; p. 45 Table 14 entitled "Increased Reliability Benefits Score"; p. 47 Table 16 entitled "Reliability Benefits of Other Alternatives"; p. 49 Table 17 entitled "Increased Operational Flexibility Benefits Score"; pp. 50-51 Table 19 entitled "Operational Flexibility Benefits of Other Alternatives; p. 52 Table 20 entitled "Increased System Capacity Benefits Score"; p. 53 Table 22 entitled "System Capacity Benefits of Other Alternatives; p. 54 Table 23 entitled "Reduction in Gas Prices to Ratepayer Benefit Scores; p. 55 Table 24 entitled Summary of Other Benefits Scores; p. 57 Table 26 entitled "Other Benefits of Other Alternatives"; p. 64 Table 31 entitled "Parameter Sets for Scenario Analysis; pp. 67-68 Table 34, entitled "Natural gas customer demand and supply combinations under each seasonal demand conditions; p. 70 Figure 5 entitled "Scenario Analysis Summary Results"; p. 71 Table 37 entitled "Ranking of Project Alternatives by Average Curtailment; p. 72, Table 38 entitled "Best and Worst Performing Alternatives"; p. 72 Table 39 entitled "Relative Benefits of Proposed Project and Alternatives from Greatest to Least Benefits"; and p. 74 Table 40 entitled "Proposed Project and Alternatives Relative Benefit Ranking and Net Costs". The text and analysis throughout the document should be revised to reflect the singling out of the Northern Baja Alternative as well.

⁶⁶ Amendment to Application, p. 40.

⁶⁷ Amendment to Application, p. 40.

⁶⁸ Amendment to Application, p. 40, Table entitled SDG&E Long-Term Demand Forecast. To get the

Although it was not required by the Assigned Commissioner and ALJ Ruling, Applicants provided their own forecasts for a 1-in-35 year cold day demand.⁷¹ Even these forecasts only show natural gas demand increases of only 38 MMcfd over the next 20 years,⁷² which is less than a 10 percent increase over that time.⁷³

The fact that the numbers the Applicants' provided show a decrease in 1-in-10 Year cold day demand over the next 10 years only lends additional credence to ORA's assumption that forecasted volumes for Line 3602 would show that the excess capacity created by this line expansion is unneeded.⁷⁴

Given these system demand forecasts provided by SoCalGas/SDG&E do not suggest a need for the proposed project, ORA references Applicants' Reply Brief in the North-South Project as a possible explanation of the potential use of the excess capacity that Line 3602 would provide.⁷⁵

percentage increase, ORA used the following formula. $10/607 = 1.6\%$ increase over 20 years. 10 MMCFD represents the difference between 607 MMCFD total demand forecasted in 2015/2016 and 617 MMCFD demand forecasted in 2035/2036. 607 MMCFD represents Sempra's demand forecasted in 2015/2016.

⁶⁹ Amendment to Application, p. 40, Table entitled SDG&E Long-Term Demand Forecast. For 1-in-10 Year Cold Day Demand, Applicants forecast total core demand at 607 in 2015/2016, and 617 MMCFD in 2035/2036. ($617 - 607 = 10$ MMCFD.)

⁷⁰ Amendment to Application, p. 40, Table entitled SDG&E Long-Term Demand Forecast. To get the percentage increase, ORA used the following formula. $10/607 = 1.6\%$ increase over 20 years. 10 MMCFD represents the difference between 607 MMCFD total demand forecasted in 2015/2016 and 617 MMCFD demand forecasted in 2035/2036. 607 MMCFD represents Sempra's demand forecasted in 2015/2016.

⁷¹ Amendment to Application, p. 40.

⁷² Amendment to Application, p. 40, Table entitled SDG&E Long-Term Demand Forecast. For 1-in-35 Year Cold Day Demand, Applicants forecast core demand at 366 MMCFD in 2015/2016, and 404 MMCFD in 2035/3036. ($404 - 366 = 38$ MMCFD.)

⁷³ Amendment to Application, p. 40, Table entitled SDG&E Long-Term Demand Forecast. To get the percentage increase, ORA used the following formula. $38/366 = 9.4\%$ increase over 20 years. 38 MMCFD represents the difference between 366 MMCFD demand forecasted in 2015/2016 and 404 MMCFD demand forecasted in 2035/2036). 366 MMCFD represents Sempra's demand forecasted for 2015/2016.

⁷⁴ See *infra*, Section II.A.1.

⁷⁵ A.13-12-013, SoCalGas/SDG&E Reply Brief, pp. 32-33.

SoCalGas and SDG&E have no illusions that Sempra will view our transmission systems as a viable path for the large-scale shipment of domestic supplies to ECA for shipment overseas. But if Sempra does ever wish to ship gas on the SoCalGas and SDG&E system, such shipments should be encouraged, not discouraged. As Mr. Bisi noted in his rebuttal testimony, “[i]f Line 3602 is constructed, and SDG&E reinstalls the necessary equipment to serve Mexican customers at Otay Mesa, it would benefit SoCalGas and SDG&E ratepayers to fully utilize assets and increase throughput on the system. [FN omitted]”⁷⁶

b) Applicants Articulate a Project Objective Proposing a Capacity for Line 3602 Without an Apparent Basis

Although Applicants have failed to provide the required ten-year forecasted volumes in the area to be served by proposed Line 3602,⁷⁷ Applicants have failed to provide any ten-year historic volumes through Line 1600,⁷⁸ and Applicants’ forecasted numbers do not support need for the proposed project,⁷⁹ Applicants still explicitly provide a project objective states in part:

Simultaneously increase the transmission capacity of the Gas System in San Diego County by approximately 200 million cubic feet per day (MMcfd) as a result of the PSEP replacement line being 36 inches in diameter so that the Applicants can reliably manage the fluctuating peak demand of core and noncore customers. . . .⁸⁰

Relatedly, Applicants assume that the proposed project would include an available daily capacity of approximately 185 MMcfd.⁸¹ Given Applicants’ failure to provide the required forecast volumes for Line 3602 and historic volumes for Line 1600, Applicants’ assertions regarding the capacity of Line 3602 seem to lack a basis. ORA intends to pursue discovery on this matter.

⁷⁶ ECA stands for Energia Costa Azul, a Liquefied Natural Gas facility undertaking of IENova, a Mexican affiliate of Sempra Utilities.

⁷⁷ See Section II.A.1 for discussion.

⁷⁸ See Section II.A.2 for discussion.

⁷⁹ See Section II.B.1 for discussion.

⁸⁰ See PEA, p. 5-6, Section 5.2.1, project objective number three.

⁸¹ See PEA, p. 5-15, North Baja Alternative Subsection.

c) Even if Applicants' Numbers Supported a Project Need, the Northern Baja Alternative May Already Provide a Contingency to Meet that Asserted Need

The PEA identifies the Northern Baja alternative, but then eliminates it from consideration.⁸² In support of elimination, the PEA reasons in part,

Because the Northern Baja Alternative would rely on the Baja Norte/Gasoducto Rosarito/TGN pipelines that are outside of the Applicant's system, and because most of these lines are fully subscribed and the available capacity on the North Baja pipeline does not necessarily ensure that a contract would be granted to the Applicant or its customers, the capacity needed to meet the Proposed Project objectives without the construction of an expansion to another pipeline is unknown.⁸³

Notwithstanding the Applicant's assertion in the PEA, the capacity available from the Baja Norte/Gasoducto Rosarito/TGN pipelines is presently publically available information. As of the date of this protest, ORA could access public websites providing available capacity for each of these lines.⁸⁴ Moreover, as of April 13th, 2016, Gasoducto Rosarito was shown by Sempra Utilities' Mexican affiliate, IEnova, to have 332,274 MMbtu per day (327.4 MMcfd) of projected available capacity;⁸⁵ and TGN was shown to have 463,719 MMbtu per day (456.9 MMcfd) of projected available capacity;⁸⁶ and Baja Norte was shown as having 185,200 million BTU's (192.5 MMcfd) of unsubscribed capacity flow past Ehrenberg, and 117,000 million BTU's (115.3 MMcfd) of unsubscribed capacity flow past Ogilby.⁸⁷

⁸² PEA, p. 5-15.

⁸³ PEA, p. 5-15.

⁸⁴ The Gasoducto Rosarito website is <http://www.gasoductorosarito.com/english/information.aspx>; the TGN website is: <http://www.tgndebajacalifornia.com/english/information.aspx>; and the Baja Norte website is: http://www.tcplus.com/North%20Baja/UnsubscribedCapacity#sort=LocationName&sort_direction=ascending. As of the date of this protest, each of these websites updated capacity information for their respective pipelines on a daily basis.

⁸⁵ See Attachment A.

⁸⁶ See Attachment B.

⁸⁷ See Attachment C. ORA intends to pursue discovery as to whether there are other factors that would

d) Is Line 3602 a Proposal to Put in Capacity that Would Meet Demand in Mexico at the Expense of Applicants' Ratepayers?

In light of the apparently unsubstantiated need for the Proposed Project, ORA intends to question whether Applicants' Proposed Project would meet Mexican demand? As discussed during hearings of the North-South Project, the equipment to serve Mexican customers at Otay Mesa would take approximately one year to put into place at a cost of \$2-3 million.⁸⁸

Also, Applicants' failure to follow the Assigned Commissioner and ALJ Ruling instructions to provide specific forecasted information regarding the service area served by proposed Line 3602, and also to provide specific historic maximum volumes through Line 1600⁸⁹ prompts ORA to emphasize the concern voiced in our Initial Protest, which stated,

SCG and SDG&E's failure to include estimated volumes is a red flag that there may not in fact be sufficient volumes to justify construction of the pipeline, and that other motives, such as expanding rate base for its own sake, or providing surplus capacity to link with Otay Mesa for future export to Sempra's affiliated LNG export facility in Costa Azul, Mexico, are the primary drivers of this project.⁹⁰

e) Ramifications of Subscribed Capacity in North Baja Alternative Already Owned by Sempra Affiliates

The PEA concludes that the Northern Baja Alternative is likely infeasible, stating,

Should capacity become available to the Applicant, the Northern Baja Alternative may be able to utilize existing infrastructure without requiring the construction of additional facilities and pipeline, and consequently without the associated environmental and social impacts and site suitability issue. While the Northern Baja Alternative could allow for the

make up for the reduced 115.3 MMcf/d of unsubscribed capacity flow past Ogilby.

⁸⁸ Volume 5, RT 668 - 677

⁸⁹ Applicants' failure to follow these requirements is discussed in more detail in Sections II.A.1 and II.A.2 of this protest.

⁹⁰ A.15-09-013, Protest of the Office of Ratepayer Advocates, filed 10/30/15, p. 9.

implementation of PSEP, it would be based on speculation of available capacity and infrastructure, and would not present a long-term solution to increasing system capacity unless capacity on all three pipeline systems could be contracted on a long-term basis by SDG&E or its customers.²¹

ORA is concerned that this quote from the PEA could incorrectly lead the reader to infer that Sempra's Mexican affiliate, IEnova, does not own subscribed capacity on the Gasoducto Rosarito or TGN pipelines, two of the three pipelines that make up the Northern Baja Alternative.

In fact, IENova, a Sempra Energy company, that develops, builds and operates energy infrastructure in Mexico,²² owns 400,000 MMbtu/day (394 MMcfd) of subscribed capacity on Gasoducto Rosarito as of April 13, 2016, and this subscribed capacity does not expire until 2022.²³ Moreover, TGN is an enterprise of IEnova,²⁴ and as of April 13, 2016, IEnova owns 540 MMbtu/day (532 MMcfd) of subscribed capacity on TGN that does not expire until 2022.²⁵

While there are affiliate rules that apply to the Applicants and other affiliates of Sempra Utilities that may limit communications between Applicants and other Sempra affiliates, ORA is concerned about the accuracy of the quote in this section since the Sempra Utilities did not explore publicly available data. ORA is also concerned about the relationships between the various Sempra affiliates, including SoCalGas and SDG&E.

2. What is the Basis for Certain of Applicants' Underlying Data?

ORA also intends to question the cost-effectiveness analysis conducted by Pricewaterhouse Coopers ("PwC") and the underlying data and input provided by the

²¹ PEA, p. 5-15.

²² <http://www.semprainternational.com/operations-mexico.html>

²³ See attachment D, which was available as of April 13, 2016 at the following website: <http://www.gasoductorosarito.com/english/information.aspx>.

²⁴ <http://www.tgndebajacalifornia.com/english/information.aspx>.

²⁵ See attachment E, which was available as of April 13, 2016 at the following website: <http://www.tgndebajacalifornia.com/english/information.aspx>.

Applicants.⁹⁶ At this point in time, ORA is able to identify certain portions of the Analysis that require clarification or discovery.

The Analysis states that “PwC reviewed the Applicants’ estimates of both the fixed cost for constructing the Proposed Project and the Alternatives and the on-going estimated costs for operating and maintaining them.”⁹⁷ ORA intends to explore the bases for these cost estimates. Examples of some of the questions ORA has include, did each of Applicants’ cost estimates receive the same percentage contingency, or have a reasonable basis for not doing so? Are the costs of hydrotesting Line 1600 reasonably comparable to other hydrotest costs Sempra has recently provided the Commission as a result of its Pipeline Safety Enhancement Program? What is the basis for the difference in costs across each of the replacement alternatives?

If Sempra intends to request that the cost effectiveness analysis be entered into the record or if the Commission intends to make it part of the record, then ORA would request the opportunity to cross-examine the author or authors of the report. ORA intends to request the names of those who prepared the report through discovery.

Relatedly, the Analysis states,

“The Applicants identified and defined a number of individual benefits within each of the seven benefit categories and applied non-monetary, quantifiable measures (e.g., percent reduction in pipeline failures, percent increase in capacity) as the basis for scoring the Proposed Project and the Alternatives against each benefit.”⁹⁸

ORA may explore the bases for quantifying some or all of the benefits in the Analysis.

ORA also may explore some of the underlying data articulated in Applicants’ PEA. For example, Applicants suggest in several places that they wish to increase

⁹⁶ Amended Application, Volume I, p. 7.

⁹⁷ Analysis, p. 9.

⁹⁸ Analysis, p. 9.

transmission capacity by 200 million cubic feet per day.⁹⁹ At this time, ORA is unclear as to the basis for this number, particularly in light of Applicants' failure to provide forecast information for the area to be served by proposed Line 3602,¹⁰⁰ and in light of the fact even if Line 1600 were replaced, that would only mean replacement of approximately a transmission line which Applicants acknowledge has a maximum capacity of 100 to 150 MMcfd.¹⁰¹

3. Notwithstanding Applicants' Cost-Effectiveness Analysis Findings, Are Other Alternatives that the Commission Has Required to Review More Cost Effective than the Proposed Project?

ORA will examine the various alternatives required under the Assigned Commissioner and ALJ Ruling, including alternative pipe sizes than the Applicants' proposed 36" pipe.¹⁰²

As discussed in Section II.B.1, the Proposed Project lacks valid support for need, and also for certain project objectives discussed in the PEA. Moreover, Applicants have admitted that they already conducted in-line inspections (ILIs) on the pipeline they propose to replace, and if they can conduct ILIs, applicants thus are able to pressure test Line 1600. SCG has not demonstrated why Line 1600 should deviate from the PSEP Decision Tree¹⁰³ and why the pipeline cannot be taken out of service with "manageable" customer impacts.

Nonetheless, if the Commission deems the Amendment to Application as adequate, then ORA intends to explore, from a cost-effectiveness point of view, whether hydrotesting Line 3602 or replacing it with a like kind or similarly sized pipe is more cost

⁹⁹ PEA, p. 5-6. Also, see PEA, p. 5-15, where Applicant states that 185 MMcfd is the approximate net quantity of additional capacity that the Proposed Project would provide.

¹⁰⁰ See Discussion in Section II.A.1.

¹⁰¹ PEA, p. 2-7. Applicants state that this range assumes all compression assets are available and alternative sources cannot be relied upon.

¹⁰² ALJ Ruling, pp. 12-14.

¹⁰³ See Attachment B; D.14-06-007, Attachment 1 in the SCG PSEP proceeding also provides a schematic of The Decision Tree.

effective.¹⁰⁴ The cost-effectiveness analysis states that the hydrotest alternative has a fixed cost of \$112.9 million, and an annual operating cost of \$0.5 million; while alternative C3 has a fixed cost of \$337.1 million with an annual operating cost of \$0.3 million.¹⁰⁵ Relatedly, ORA intends to request that Applicants study the cost-effectiveness of the Northern Baja Alternative, as defined in the PEA, and compare it with the other alternatives discussed in the cost-effectiveness analysis.

4. Discrepancy in Applicants' Analysis of Transmission Integrity Management Program Requirements Between Line 1600 and the Proposed Project

The Amendment to Application does not discuss the requirements of 49 Code of Federal Regulations Subpart O "Gas Transmission Pipeline Integrity Management (TIMP) in the body of the Amendment to the Application, instead relegating it to one line at p. A-12. This is in contrast to the testimony of Mr. Sera, which discusses TIMP issues as if they were unique to Line 1600 (at p. 12.), and in contrast to the Cost Effectiveness Analyses which has functionally the same operational costs under TIMP for all pipeline-based alternatives (p. 22, Table 6.)

5. Applicants' Claims about Deliveries at the Otay Mesa Receipt Point Run Counter to Applicants' Claims in the North-South Project Application (A.13-12-013).

In their Amendment to Application, Applicants state that their witness, . . .describes how Alternatives E and F (outlined in the Ruling at 13), which rely on using the Otay Mesa receipt point and requires customers to procure and transport gas supply to the SDG&E system, do not provide the same resiliency or access to competitively-priced supply as the Proposed Project, which will result in increased costs.¹⁰⁶

¹⁰⁴ ORA maintains its position that Applicants' Amendment to Application fails to adequately follow certain instructions of the Assigned Commissioner and ALJ's Ruling. However, if the Commission deems the Amendment to Application sufficient and complete, ORA would explore cost-effectiveness of these alternatives. This includes exploring assumptions and evaluations in the Analysis provided by Applicants, and also those provided in testimony.

¹⁰⁵ See Analysis, p. 22, Table 6, alternatives B and C3. ORA references these two alternatives for illustrative purposes.

¹⁰⁶ Amendment to Application, Volume 1, p. 48.

However, in the brief on the North-South Project, Applicants characterize the Otay Mesa receipt point differently.

While existing System Operator tools have helped SoCalGas manage the Southern System minimum flow requirements, these are only short-term approaches and do not provide Southern System customers with the same level of reliability afforded to our other customers. Continued use of these tools will maintain Southern System customer exposure to flowing supply failures on El Paso’s Southern System [footnote omitted, emphasis added].¹⁰⁷

For example, *deliveries from Blythe to the Otay Mesa receipt point can be [a] helpful tool to manage Southern System flow requirements on a short-term basis*, under appropriate circumstances. But such deliveries still come from one single pipeline source—El Paso. When the El Paso pipeline next experiences a force majeure event, gas would not be available for delivery to the Otay Mesa receipt point.

C. Schedule

ORA proposes the following schedule, which includes timing for Applicants to correct the deficiencies in the Amendment to Application, including those identified in Section II.A.

ORA Proposed Schedule		
<u>Activity</u>	<u>Date</u> ¹⁰⁸	<u>Updated Date</u>
Prehearing Conference	December 2015	
<u>Purpose, Need, Cost, and Design</u>		
Applicant Opening Testimony	2/5/2016	3/26/2016 ¹⁰⁹
Intervenor Testimony	8/12/2016	6 months after Commission holds Pre-hearing conference. ¹¹⁰

¹⁰⁷ A.13-12-013, Applicants’ Opening Brief, pp. 27-28.

¹⁰⁸ These dates are provided in ORA’s Initial Protest.

¹⁰⁹ As identified herein, ORA has recommended the Commission find Applicants’ Amendment to Application deficient.

¹¹⁰ Once Application is deemed complete and protests to the Application have been filed, ORA would then recommend having a Pre-hearing conference to address scope and schedule.

Rebuttal Testimony	9/9/2016	1 month after intervenor testimony.
Hearings	10/3 to 10/14 2016	2 weeks of hearings beginning one month after rebuttal testimony.
Opening Brief	11/18/2016	5 weeks after completion of hearings.
Reply Brief	12/9/2016	3 weeks after filing of opening briefs.
<u>CEQA</u>		
CEQA Scoping	January 2016	
Draft EIR Issued	11/4/2016	
Applicant Prepared Testimony on CEQA	12/2/2016	1 month after draft EIR.
Intervenor Testimony on CEQA	2/17/2017	3 months after applicant testimony.
Rebuttal Testimony	3/17/2017	1 month after intervenor testimony.
Evidentiary Hearings on CEQA	Late April to Early May 2017.	1.5 months after rebuttal testimony.
Opening Brief	4 weeks after Hearings Conclude.	4 weeks after Hearings Conclude.
Reply Brief	2 weeks after Opening Briefs.	2 weeks after Opening Briefs.

III. CONCLUSION

ORA submits this protest. Because Sempra's Amendment to Application did not comply with the Assigned Commissioner and ALJ Ruling in a number of ways as detailed above, ORA recommends the Assigned Commissioner and ALJ issue a ruling finding that Applicants' Amendment to Application is deficient.

However, if the Assigned Commissioner and ALJ find the Application is complete, ORA also recommends that the Assigned Commissioner and ALJ allow adequate time for discovery and analysis to determine whether the Application is in fact

reasonable. ORA has not yet completed discovery related to this Application, and reserves the right to assert any issues discovered after this protest has been filed.

Respectfully submitted,

/s/ DARRYL GRUEN

Darryl Gruen

Attorney for the Office of Ratepayer Advocates

California Public Utilities Commission

505 Van Ness Avenue

San Francisco, CA 94102

Phone: (415) 703-1973

E-mail: djg@cpuc.ca.gov

April 21, 2016

ATTACHMENT A

AVAILABLE CAPACITY ON GASODUCTO ROSARITO

as of

April 13, 2016

Gasoducto Rosarito - Projected Available Capacity for April 13 th, 2016

Path	MMbtu/d
Interconnection with North Baja Pipeline to the Interconnection with Transportadora de Gas Natural de Baja California	332,274

Disclaimer:

(1) Based on operational conditions of the GB system, assuming a minimum pressure of 710 psig.

(2) Based on Timely Nominations Cycle. Nominations due at 9:30 am PT and timely confirmation by 2:30 pm PT.

See Section 11.2 of GB's General Conditions For Natural Gas Transportation Service for a description of the nomination c

ATTACHMENT B

**Available Capacity on TGN
as of
April 13, 2016**

TGN - Projected Available Capacity for April 13 th, 2016

Path	MMbtu/d
Interconnection with North Baja Pipeline to the Interconnection with Transportadora de Gas Natural de Baja California	463,719

Disclaimer:

- (1) Based on operational conditions of the GB system, assuming a minimum pressure of 710 psig.
 - (2) Based on Timely Nominations Cycle. Nominations due at 9:30 am PT and timely confirmation by 2:30 pm PT.
- See Section 11.2 of GB's General Conditions For Natural Gas Transportation Service for a description of the nomination c

ATTACHMENT C

**Available Capacity on Baja Norte
Flow Past Ehrenberg and Ogilby
as of
April 13, 2016**

NORTH BAJA >

[TC PLUS Login](#) | [TC ICE Measurement](#)

[Home](#) > **Unsubscribed Capacity**

[Download](#) >

Unsubscribed Capacity

TSP Name: North Baja Pipeline, LLC **TSP:** 030353283
Posting Date/Time: 04/13/2016 12:00:02 PM **Measurement Basis Description:** Million BTU's
 CCT

Location Name	Location ID	Location Purpose Description	Loc/QTI	Unsubscribed Capacity	Effective Gas Day	End Effective Gas Day
FLOW PAST EHRENBURG	1393336	Pipeline Segment defined by 1 location	SGQ	185,200	12/11/2015	12/31/2099
FLOW PAST OGILBY	1393329	Pipeline Segment defined by 1 location	SGQ	117,000	12/08/2015	01/01/2099
YUMA BORDER	953795	Receipt Location	RPQ	0	03/11/2016	04/01/2020

- The capacity listed above is an estimate of capacity available for the time period referenced above. These capacities may be updated throughout the day. However, due to the dynamic nature of the pipeline operations, these capacities are subject to change without notice. Accordingly, there are no guarantees expressed or implied that these capacities will be available for service. This capacity report includes receipt, delivery and flow-through points on North Baja Pipeline, LLC system with estimated available capacity. All quantities are expressed in Dth. Please contact your marketing representative in order to acquire a specific package of capacity on the pipeline. All requests for service are subject to the General Terms and Conditions of North Baja Pipeline, LLC Tariff.
- At various times, North Baja Pipeline, LLC may have capacity available for interruptible Park and/or Loan services at various points on its system and the operational flexibility to provide this service without detriment to firm customers or other interruptible services. Please contact your Marketing Account Manager for potential Park and Loan inquiries.

ATTACHMENT D
GASODUCTO ROSARITO
Subscribed Capacity

Gasoducto Rosarito - Suscribed Capacity
MMbtu/d
Apr-16

Customer	Suscribed Capacity	Expires
Mainline		
Sempra Energy LNG Marketing Mexico	400,000	2022
Energia Azteca X	135,000	2027
Termoelectrica de Mexicali	105,000	2022
Energia de Baja California	37,000	2027
North Baja Pipeline	11,000	2025
North Baja Pipeline	18,500	2031
Igasamex	6,658	2018
JMRal(cap release)	1,542	2017
Gas Natural del Noroeste	2,200	2026
Toyota Motor Manufacturing de Baja California	800	2016
Shell México Gas Natural	227,410	2028
Gazprom Trading Mexico	141,590	2028
LNG Spur		
Sempra Energy LNG Marketing Mexico	1,307,000	2028
Shell México Gas Natural	1,164,331	2028
Gazprom Trading Mexico	142,669	2028
Yuma Lateral		
North Baja Pipeline LLC	62,750	2025
North Baja Pipeline LLC	18,500	2031

ATTACHMENT E
TRANSPORTADORA DE GAS NATURAL
Subscribed Capacity

Transportadora de Gas Natural - Suscribed Capacity
MMbtu/d
Apr-16

Customer	Suscribed Capacity	Expires
TGN		
Ienova LNG	540,000	2022
Igasamex	4,561	2018
Shell México Gas Natural	400,000	2028
JMRal (cap release)	1,539	2017