ATTACHMENT B

to the Supplemental Testimony of SDG&E and SoCalGas (February 2017)

Cost-Effectiveness Analysis (Corrected February 2017) Workpaper - Avoided Cost Model (Corrected February 2017) Workpaper - Scenario Analysis (Corrected February 2017)

COST-EFFECTIVENESS ANALYSIS

for the

PIPELINE SAFETY & RELIABILITY PROJECT

San Diego Gas & Electric Company

and

Southern California Gas Company

Application A.15-09-013

Volume III

March 2016, as corrected February 2017

PREPARED BY PWC

WITH INPUT AND DATA FROM APPLICANTS AND CONTENT FROM APPLICANTS' CONSULTANTS

COST-EFFECTIVENESS ANALYSIS FOR THE AMENDED APPLICATION OF SAN DIEGO GAS & ELECTRIC COMPANY (U 902 G) AND SOUTHERN CALIFORNIA GAS COMPANY (U 904 G) FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR THE PIPELINE SAFETY & RELIABILITY PROJECT

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I. EXECUTIVE SUMMARY

On September 30, 2015 San Diego Gas and Electric Company (SDG&E) and Southern California Gas Company (collectively the Applicants) filed Application 15-09-013¹ (Application) with the California Public Utilities Commission (CPUC or Commission) in support of their Pipeline Safety & Reliability Project (PSRP or Proposed Project).

The Proposed Project consists of constructing a new 47 mile long, 36-inch natural gas transmission line, (Line 3602), and de-rating the existing Line 1600.

On January 22, 2016 the Assigned Commissioner and Administrative Law Judge issued a joint ruling² (Ruling) directing the Applicants to file and serve an Amended Application by March 21, 2016 that includes, among other things, a cost analysis that compares the relative costs and benefits of the Proposed Project and various project alternatives (Alternatives).³ Specifically, the Ruling requires that the analysis: 1) quantify seven categories of benefits, and 2) apply quantifiable data to define the relative costs and benefits of the Proposed Project and the Alternatives identified in the Ruling.⁴ The seven categories of benefits that must be quantified are (1) increased safety; (2) increased reliability; (3) increased operational flexibility; (4) increased system capacity; (5) increased ability for gas storage by line packing; (6) reduction in the price of gas for ratepayers; and (7) other benefits identified by the Applicant.⁵

This analysis has been prepared by PricewaterhouseCoopers Advisory Services, LLC (PwC), with input and data from the Applicants, in response to the Ruling (Cost-Effectiveness Analysis). Consistent with the Ruling, the analysis applies quantifiable data to define the relative costs and benefits of the Proposed Project and Alternatives. The costs analysis includes the estimated fixed costs, the on-going operating costs, and the avoided costs (*i.e.*, costs that will not be incurred when the Proposed Project or a particular Alternative is implemented). The benefits analysis evaluates each of the seven types of benefits specifically identified in the Ruling.

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¹ Certificate of Public Convenience and Necessity for the Pipeline Safety and Reliability Project, Application (A.) 15-09-013.

² Joint Assigned Commissioner and Administrative Law Judge's Ruling Requiring an Amended Application and Seeking Protests, Responses and Replies (Ruling).

³ Ruling, pages 11-14.

⁴ Ruling, page 12.

⁵ Ruling, page 12.

Table 1 below highlights the requirements in the Ruling that are addressed by this Cost-Effectiveness Analysis.

Table 1 - Ruling Requirements

Ruling Requirement ⁶	Method for Complying with the Ruling	Reference in Cost-Effectiveness Report
The analysis will quantify specific benefits including: (1) increased safety; (2) increased reliability; (3) increased operational flexibility; (4) increased system capacity; (5) increased ability for gas storage by line packing; (6) reduction in the price of gas for ratepayers; and (7) other benefits identified by the Applicant. All benefits must be quantified.	A benefits scoring model was developed based on quantifiable data for each of the seven benefit types.	 Section V: Benefits Analysis Table 11 - Increased Safety Benefits Score Table 14 - Increased Reliability Benefits Score Table 17 - Increased Operational Flexibility Benefits Score Table 20 - Increased System Capacity Benefits Score Increased Gas Storage through Line Pack – included under Increased System Capacity Table 23 - Reduction in Gas Prices to Ratepayers Benefit Scores Table 24 - Summary of Other Benefits Scores
The analysis will apply quantifiable data to define the relative costs of the proposed project and, at a minimum, the range of alternatives identified in this Ruling. ⁷	First, preliminary cost estimates were developed for the Proposed Project and the Alternatives, then an "avoided cost" was calculated for the Proposed Project and each Alternative so that a "net cost" could be derived for each.	 Section IV: Cost Analysis Table 6 - Estimated Fixed and Operating Costs Section IV, C: Avoided Costs Associated with the Proposed Project and Alternatives Table 8 Avoided Costs
The analysis will apply quantifiable data to define the relative benefits of the proposed project and, at a minimum, the range of alternatives.	A benefit score was developed for the Proposed Project and each Alternative.	Table 2 - Proposed Project and Alternatives Relative Benefit Ranking and Net Costs
Include an estimate of costs, both fixed and operating, as required by Rule 3.1(f).	Preliminary estimates were developed for both the fixed and operating costs for the Proposed Project and the Alternatives using standard estimating methods based on the known project scope.	Section IV: Cost Estimating Table 6 - Estimated Fixed and Operating Costs

⁶ Ruling, page 12.

The range of alternatives refers to the 10 alternative projects labeled A-K in the Ruling, pages 12-13.

The relative costs and benefits of the Proposed Project and Alternatives are summarized in Table 2 below.

Table 2 - Proposed Project and Alternatives Relative Benefit Ranking⁸ and Net Costs⁹

	Project Alternatives	Benefit Rank	Net Cost (\$M)
Α	Proposed Project (36" pipeline Rainbow to Line 2010 Route)	1	\$256.2
В	Hydrotest Alternative ¹⁰	15	\$118.7
C1	Alt Diameter Pipeline, Proposed Route (10")	18	\$302.7
C2	Alt Diameter Pipeline, Proposed Route (12")	18	\$291.6
СЗ	Alt Diameter Pipeline, Proposed Route (16")	11	\$241.4
C4	Alt Diameter Pipeline, Proposed Route (20")	10	\$239.2
C5	Alt Diameter Pipeline, Proposed Route (24")	9	\$229.6
C6	Alt Diameter Pipeline, Proposed Route (30")	8	\$233.5
C7	Alt Diameter Pipeline, Proposed Route (42")	1	\$341.9
D	Replace Line 1600 in Place with a 16" Transmission Pipeline Alternative	12	\$460.1
E/F	Otay Mesa Alternatives ¹¹	13	\$876.8
G	LNG Storage (Peak-Shaver) Alternative	14	\$2,584.7
H1	Alternate Energy Alternative: Grid-Scale Batteries	16	\$8,330.1
H2	Alternate Energy Alternative: Smaller-Scale Batteries	16	\$10,010.1
I	Offshore Route	7	\$1,295.5
J1	Blythe to Santee Alternative 1	3	\$1,219.3
J2	Blythe to Santee Alternative 2	3	\$1,157.3
J3	Cactus City to San Diego Alternative	3	\$981.1
K	Second Pipeline Along Line 3010 Alternative	3	\$427.1

After evaluating the net costs and benefits of the Proposed Project and Alternatives, this Cost-Effectiveness Analysis concludes that the Proposed Project is the most cost-effective, prudent alternative. This conclusion is based on the following:

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⁸ Ranked from 1 through 19 with 1 being the highest rank.

⁹ Net costs are calculated as: Fixed Costs + Operations & Maintenance Costs + Avoided Costs. Net costs are discussed in Section IV, C.

¹⁰ In the Ruling, Alternative B is referred to as the "No Project Alternative" and defined as hydrotesting Line 1600 in sections and repairing or replacing pipeline segments as needed. The Applicants refer to Alternative B herein as the "Hydrotest Alternative."

¹¹ The Ruling identifies two alternative projects utilizing the Otay Mesa receipt point: Non-Physical (Contractual) or Minimal Footprint Solutions (Alternative E); and the Northern Baja Alternative (Alternative F). Both of these rely upon the use of Otay Mesa receipt point (Otay Mesa) capacity in place of the Proposed Project. Accordingly, the Applicants will refer to the two alternatives as a single project titled "Otay Mesa Alternatives." See Prepared Direct Testimony of Gwen Marelli (March 21, 2016).

- The lowest net cost project, the Hydrotest Alternative, was ranked among the lowest in terms of project benefits;
- The Proposed Project and the Alternate Diameter Pipeline (42-inch) are ranked highest in terms of benefits and also among the highest in terms of having the least net costs;
- The difference in net costs between the least-cost, Hydrotest Alternative, and the Proposed Project is approximately \$138 million, which is outweighed by significant, quantifiable benefits that are not offered by the Hydrotest Alternative;
- After the least-cost alternative (Hydrotest Alternative), five projects are clustered in the net cost range of \$225 million to \$260 million and include alternate pipeline diameters of 16-, 20-, 24-, 30- and 36-inches (the Proposed Project);
- In terms of benefits, the Proposed Project scored higher than the four other Alternatives that also ranked in the net cost range of \$225 million to \$260 million (Alternative Diameters Pipelines 16-, 20-, 24- and 30-inch);
- After the cluster that includes the Proposed Project, the next group of projects grouped by least net cost ranges from \$290 million to \$465 million and includes Alternate Diameters of 10-, 12- and 42-inches, the Replace Line 1600 In-Place with a New 16-inch Transmission Pipeline Atlernative, and the Second Pipeline Along Line 3010 Alternative;
- The two highest net cost categories include Alternatives with net costs ranging from \$500 million to \$1 billion (Otay Mesa Alternatives, Cactus City to San Diego) and more than \$1 billion (Blythe to Santee Pipeline Route Alternatives 1 and 2, Off-Shore, Liquefied Natural Gas (LNG) Storage, and Alternate Energy Alternatives);
- Four Alternatives rank second highest in terms of benefits: the Cross-Country Pipeline Route Alternatives (Blythe to Santee Pipeline Routes, Alternatives 1 and 2; Cactus City to San Diego Alternative) and the Second Pipeline Along Line 3010 Alternative;
- The 10- and 12-inch Alternative Diameter Pipelines rank lowest in terms of benefits;
- New, larger diameter pipelines, including the Proposed Project, outperform the "least-cost" (Hydrotest Alternative) in six out of the seven benefits categories (safety, reliability, operational flexibility, system capacity, gas storage through line pack, and other benefits) and receive the same score for the category of reduction in gas price for ratepayers;

- As compared to the 16-, 20-, 24- and 30-inch Alternate Diameter Pipelines, the Proposed Project provides additional reliability, operational flexibility, system capacity, gas storage through line pack, and other benefits;
- The 42-inch Alternate Diameter Pipeline offers the same benefits as the Proposed Project but costs approximately \$86 million more.

For these reasons, the Proposed Project is identified as the overall most cost-effective alternative.

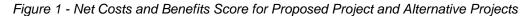
The results of this Cost-Effectiveness Analysis – the net costs and benefits - are shown in Figure 1 below. 12

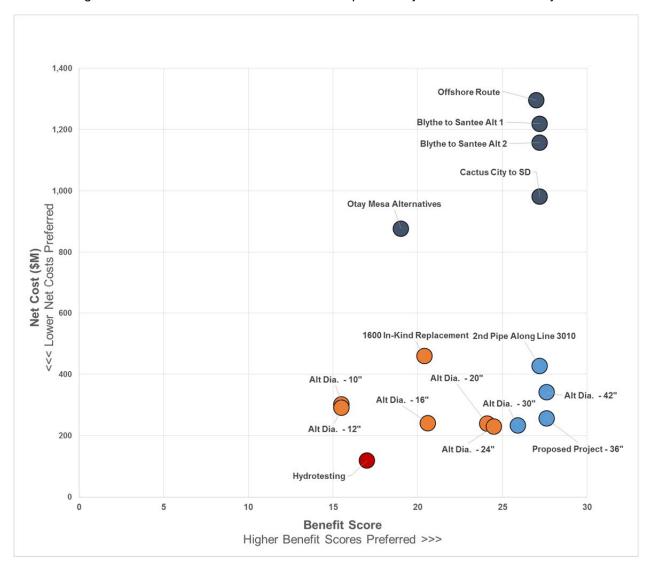
¹² The following Alternatives have been excluded from the chart in order to manage axis scale:

⁻ LNG Storage - Benefit Score 18.6, net cost \$2.6B

⁻ Alt Energy (Grid Scale) - Benefit Score 16.2, net cost \$8.3B

⁻ Alt Energy (Smaller Scale) - Benefit Score 16.2, net cost \$10B





II. INTRODUCTION AND APPROACH

A. Background and Summary

On September 30, 2015 San Diego Gas and Electric Company (SDG&E) and Southern California Gas Company (collectively, the Applicants) submitted an application to the California Public Utilities Commission (CPUC or Commission) for a Certificate of Public Convenience and Necessity (CPCN) for the Pipeline Safety & Reliability Project, Application 15-09-013 (Application). The Proposed Project consists of constructing a new 47 mile long, 36-inch natural gas transmission line (Line 3602), along with the de-rating of existing Line 1600 (Proposed Project).

On January 22, 2016 the Assigned Commissioner and Administrative Law Judge issued the Joint Assigned Commissioner and Administrative Law Judge's Ruling Requiring an Amended Application and Seeking Protests, Responses and Replies. The Ruling directs the Applicants to file and serve an Amended Application by March 21, 2016 that includes, among other things, a cost analysis that compares the relative costs and benefits of the Proposed Project and various Alternatives.¹³ Specifically, the Ruling states:

- [Applicants] shall include a needs analysis in compliance with Rule 3.1(e) and cost analysis comparing the project with any feasible alternative sources of power, in compliance with Section 1003(d) and Rule 3.1(f).¹⁴
- The analysis will quantify specific benefits including: 1) increased safety; 2) increased reliability; 3) increased operational flexibility; 4) increased system capacity; 5) increased ability for gas storage by line packing; 6) reduction in the price of gas for ratepayers; and 7) other benefits identified by Applicant.¹⁵
- The analysis will apply quantifiable data to define the relative costs and benefits of the Proposed Project and, at a minimum, the range of alternatives identified in the Ruling. (For purposes of analysis, the cost analysis shall assume that each of the [identified] alternatives are feasible and include an estimate of costs, both fixed and operating, as required by Rule 3.1(f).)¹⁶

The "range of alternatives" briefly identified in the Ruling¹⁷ is described in Section III of this Cost-Effectiveness Analysis, together with the assumptions made by the Applicants regarding the Alternatives.

¹⁵ Ruling, page 12.

¹³ Ruling, pages 11-14.

¹⁴ Ruling, page 11.

¹⁶ Ruling, page 12.

¹⁷ Ruling, pages 12-13.

This Cost-Effectiveness Analysis has been prepared by PwC, with data and input from the Applicants, to address the requirement that Applicants prepare a cost analysis comparing the Proposed Project with the Alternatives; quantify specific benefit categories; and apply quantifiable data to define the relative costs and benefits of the Proposed Project and Alternatives. Per the Ruling, this Cost-Effectiveness Analysis assumes that each of the Alternatives is feasible. 18

В. **Overview of Methodology**

Consistent with industry practice and Commission and Federal Energy Regulatory Commission (FERC) precedent, ¹⁹ PwC, with input and data from the Applicants, undertook this Cost-Effectiveness Analysis to quantify and compare the relative costs and benefits of the Proposed Project and Alternatives described in the Ruling.

A cost-effectiveness analysis compares the cost of a project to different measures of program benefits. ¹² A cost-effectiveness analysis evaluates not only the monetary benefits of a project but also considers benefits that are difficult or impractical to express in monetary terms. These benefits can be expressed in monetary or non-monetary (yet quantitative) units. Costeffectiveness analyses have been applied to projects with both monetary and non-monetary benefits.

¹⁹ The CPUC has utilized cost-effectiveness analysis for evaluating the costs and benefits of a project or

program. For example, the CPUC requirements for evaluating demand-side management program include: "All demand-side resources (energy efficiency, demand response, and distributed generation)

undergo a cost-effectiveness analysis. While the specific tests and the applications of those tests varies among the resources, the foundation of cost-effectiveness analysis for all demandside resources is based in the Standard Practice Manual. The Standard Practice Manual contains the Commission's method of evaluating energy saving investments using various cost-effectiveness tests. The four tests described in the Standard Practice Manual assess the costs and benefits of demand-side resource programs from different stakeholder perspectives, including participants and non-participants."

(http://www.cpuc.ca.gov/General.aspx?id=5267)

FERC has also approved the use of a cost-effectiveness analysis to evaluate transmission planning projects.

"Here, the cost-effectiveness evaluation applies to projects considered not only to provide economic benefits but also to provide reliability benefits and to meet public policy requirements. While the benefits of projects considered purely for economics (e.g. adjusted production cost savings) may be quantified readily and included in a formula, reliability benefits and benefits derived from meeting public policy requirements may not be so readily quantifiable and detailed, and thus cannot easily be included in a formula." (https://ferc.gov/whats-new/comm-meet/2011/072111/e-3.pdf)

¹⁸ Ruling, page 12.

This Cost-Effectiveness Analysis, undertaken to comply with the Ruling, is based on two forms of benefits analysis: quantitative financial analysis and quantitative non-cost, unit-based analysis (unit benefits). The different types of analysis and the mechanisms used to score and compare the benefits are discussed in the following sections of this Cost-Effectiveness Analysis.

The Ruling requires the Applicants to conduct an analysis that will apply quantifiable data to define the relative costs and benefits of the Proposed Project and a range of Alternatives. To comply with the requirement to apply quantifiable data to define the relative costs of the projects, 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. Additionally, PwC and the Applicants identified certain avoided costs applicable to the Proposed Project and the Alternatives. PwC and the Applicants then quantified the impact of those avoided costs on the Proposed Project and the Alternatives over time to derive the "net cost" associated with the Proposed Project and each Alternative.

To comply with the requirement to apply quantifiable data to define the relative benefits of the projects, PwC and the Applicants first identified quantifiable characteristics and desirable outcomes associated with the seven benefits categories identified in the Ruling. Next, a scoring mechanism was developed and applied as an objective means to evaluate the Proposed Project and the Alternatives against each of the seven benefit types. 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. Care was taken to treat each benefit as unique and not count them more than one time in the scoring model. Once each of the projects was scored, PwC ranked them from highest to lowest based on the overall benefit score.

Table 3 lists the costs and benefits evaluated and scored consistent with the requirements of the Ruling.

Table 3 - Costs and Benefits Evaluated and Scored

	Type of A	ssessment	
Description	Quantitative Monetary	Quantitative Non- Monetary	Metric/Measure
Project Costs - Fixed costs	✓		Dollars
Project Costs - Operating costs	✓		Dollars

²⁰ Ruling, page 12.

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	Type of Assessment		
Description	Quantitative Monetary	Quantitative Non- Monetary	Metric/Measure
Avoided Costs - Replacement of Line 1600	✓		Dollars
Avoided Costs - Reduced operation of Moreno Compressor Station	✓		Dollars
Safety – Increased safety margin to prevent pipeline rupture through the de-rating of Line 1600		✓	Defined benefit score
Safety - Long-term safety benefit of transmission pipeline		✓	Defined benefit score
Safety - Reduction in incidents per HCA mile of pipeline		✓	Defined benefit score
Safety - Increased real-time awareness of excavation damage		✓	Defined benefit score
Safety - Achievement of "as soon as practicable" safety objective		✓	Duration by year
Increased Reliability - Redundancy to natural gas transmission system		✓	Defined benefit score
Increased Reliability - Curtailment impact to core gas customers		✓	Percentile of average severity of curtailment scores
Increased Reliability - Curtailment impact to electric generation (EG) gas customers		✓	Percentile of average severity of curtailment scores
Increased Operational Flexibility - Meeting current and future natural gas peak demand		✓	Defined benefit score
Increased Operational Flexibility - Utility operational control of asset		✓	Defined benefit score
Increased System Capacity - Impact to system capacity		✓	Percentage increase in MMcfd of capacity
Increased gas storage through line pack		✓	Proportional to capacity
Reduction in gas prices to ratepayers		✓	Defined benefit score
Other Benefits - Emissions reductions due to reduced operating hours at compressor stations		✓	Percent reduction in net Moreno operating hours

All of the underlying estimates and technical data used to develop the cost estimates, avoided cost estimates and quantifiable benefits analysis were provided by the Applicants.

III. DESCRIPTION OF THE PROPOSED PROJECT AND THE PROJECT **ALTERNATIVES**

This section briefly summarizes the Proposed Project and the Alternatives identified in the Ruling.

For all of the Alternatives except the Hydrotest Alternative and the Replace Line 1600 in Place with a New 16-inch Transmission Pipeline Alternative, Line 1600 would be de-rated and operated as a distribution asset.

Proposed Project (Pipeline Safety & Reliability Project - PSRP) A.

Line 3602 is the proposed new 36-inch diameter, 47-mile long natural gas transmission pipeline connecting the existing Rainbow Metering Station to Marine Corps Air Station (MCAS) Miramar. Additionally, the Proposed Project includes the de-rating of the existing Line 1600, a 16-inch natural gas transmission pipeline that also runs from Rainbow Station to Miramar.

For additional information regarding the Proposed Project, please reference Applicants' PEA.²¹

В. **Hydrotest Alternative**

In the Ruling, the No Project Alternative includes hydrotesting Line 1600 in sections and only repairing or replacing pipeline segments as needed.²²

The Hydrotest Alternative involves a complex three year project to test the northern 45-miles of Line 1600, from Rainbow Metering Station to Kearny Villa Station. Line 1600 is an approximately 50-mile, 16-inch diameter, high pressure natural gas transmission pipeline that begins at the Rainbow Metering Station and terminates at Mission Station in San Diego.²³ The Hydrotest Alternative will involve testing 19 different pipeline segments during the shoulder months.²⁴ The Applicants would hydrotest Line 1600 in sections and only repair or replace pipeline segments as needed.

Testing will require installing bypasses and arranging for alternative distribution requirements and could include environmental mitigation and community impacts. It will also require gas to be imported from the gas transmission system receipt point located at Otay Mesa.

²¹ A.15-09-013, Volume II, Proponent's Environmental Assessment (PEA), Chapter 3.0, Project Description and Chapter 5.2.3, pages 5-16.

²² Ruling, page 12.

²³ Line 1600 Hydrotest Study and Cost Estimate. See Prepared Direct Testimony of Neil Navin (March 21, 2016), Attachment A, Appendix 12.

24 The shoulder months are from April 1 through June 15, and October 1 through December 15.

For additional information regarding this Alternative, please refer to the Line 1600 Hydrotest Study and Cost Estimate.²⁵

C. Alternative Diameter Pipeline, Various Sizes, Proposed Route

This Alternative requires the Applicants to evaluate the installation of different sized pipelines of alternate diameters. This analysis assumed the same proposed route as the 47-mile Proposed Project from Rainbow Metering Station to MCAS Miramar. The seven alternate diameters addressed in this Cost-Effectiveness Analysis are:

No.:	Alternate Diameter ²⁷	Pipeline Specification
C1	Alt. Dia. 10"	Pipe, 10", X-52, 0.365" WT, FBE
C2	Alt. Dia. 12"	Pipe, 12", X-52, 0.375" WT, FBE
C3	Alt. Dia. 16"	Pipe, 16", X-52, 0.375" WT, FBE
C4	Alt. Dia. 20"	Pipe, 20", X-52, 0.375" WT, FBE
C5	Alt. Dia. 24"	Pipe, 24", X-65, 0.375" WT, FBE
C6	Alt. Dia. 30"	Pipe, 30", X-65, 0.50" WT, FBE
C7	Alt. Dia. 42"	Pipe, 42", X-60, 0.750" WT, FBE

Table 4 - Pipeline Material Thickness by Alternative Proposed Diameter of Line²⁶

Alternative C was included in the Ruling²⁸ but was not included in the PEA.

D. Replace Line 1600 in Place with a New 16-inch Transmission Pipeline

This Alternative requires the removal of the existing Line 1600 and replacing it with a new 16-inch diameter pipeline within existing easements.

Nineteen pipeline segments covering approximately 45 miles would be removed and replaced. Removal and replacement would be conducted in phases.

For additional information regarding Alternative D, please refer to the PEA.²⁹

²⁹ PEA, Chapter 5.2.2, Page 5-9.

²⁵ See Prepared Direct Testimony of Neil Navin (March 21, 2016), Attachment B.

²⁶ Provided by the Applicants.

²⁷ The Ruling calls for "an evaluation of pipeline sizes that range in diameter from 10 inches to 40 inches." On February 9, 2016, the Applicants confirmed with Energy Division staff that standard-sized pipeline diameters within this range should be evaluated and that a 42-inch diameter alternative can be included because 40 inches is not a standard size diameter.

²⁸ Ruling, page 13.

E. Otay Mesa Alternatives

The Ruling identifies two alternative projects utilizing the Otay Mesa receipt point: Non-Physical (Contractual) or Minimal Footprint Solutions (Alternative E); and the Northern Baja Alternative (Alternative F).³⁰ Both of these rely upon the use of Otay Mesa receipt point (Otay Mesa) capacity in place of the Proposed Project. Accordingly, the Applicants will refer to the two alternatives as a single project titled "Otay Mesa Alternatives."

In order to deliver 400 million cubic feet per day (MMcfd) on a firm basis, the Otay Mesa Alternatives requires the physical construction of new pipeline facilities³¹ via an expansion on the North Baja pipeline systems. These Alternatives would also require the Applicants to secure a multi-year capacity contract for the transportation of gas supplies.³²

Several variations for Alternative E were described in the Ruling³³ that would also rely upon the use of Otay Mesa capacity; therefore, the Applicants assumed the same costs based on the Otay Mesa Alternatives assumptions above for purposes of this Cost-Effectiveness Analysis, even though these variations would potentially have incremental costs.

Alternative E was not included in the PEA, but was included in the Ruling.³⁴

F. See Alternative E: Otay Mesa Alternatives

Alternative F is discussed in conjunction with Alternative E above. Alternative F was included in the PEA and in the Ruling.³⁵

G. LNG Storage (Peak Shaver) Alternative

This LNG Alternative entails the construction of four independent LNG storage and regasification facilities, each located adjacent to an existing electric generating plant. 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."

³⁰ Ruling, page 13.

³¹ The Applicants were ordered in the Ruling to consider other specific options in Alternative E. These options included: 1) use of the Southern System Minimum Flow Requirement; 2) operational flow orders (OFO); 3) system balancing; and 4) tariff discounts.

³² See Prepared Direct Testimony of Gwen Marelli (March 21, 2016).

³³ See Amended Application.

³⁴ Ruling, page 13.

³⁵ Ruling, page 13.

LNG storage would serve three existing gas-fired generation sites in the SDG&E system, which is comprised of combustion turbines, steam turbines at Encina Power Plant (located in Carlsbad), the combined cycle plants at Palomar Energy Center (located in Escondido) and the Otay Mesa Energy Center (located in Otay Mesa), with LNG storage to serve one (1) planned (future) generation site in Pio Pico.

Each LNG facility would require rail or truck deliveries of LNG to support peak capacity shaving requirements or ability for each electric generating plant to operate for at least 5 days from LNG storage.

Alternative G was not included in the PEA but was included in the Ruling.³⁶

H. Alternate Energy Alternatives

1. Alternative H1: Grid-Scale Battery / Energy Storage

The Applicants assume that Alternative H1 – Grid Scale Battery/Energy Storage - envisions the installation of a system of grid-scale batteries and associated equipment that would be sufficient to supply customers with energy equivalent to the Proposed Project.

The Applicants' evaluation of Alternative H1 is based on a scenario under which: the gas supply is lost to all local electric generation during a peak load period; gas supply is unavailable for a four-hour period; and that no customer outages would occur. The Applicants are unaware of a battery storage project of this magnitude being undertaken and, as a result, battery production on this scale would be very difficult, very expensive, very large (requiring approximately 100 acres of land) and would take a very long time to produce.

A system of grid-scale batteries might provide four hours of electric supply under the circumstances that electric generation was unavailable due to the loss of the natural gas supply; however, grid-scale batteries would not provide any energy replacement for the residential and business needs that are currently supplied by natural gas. For example, during the four hour period, customers might still receive electricity service from the grid-scale batteries, but would not have any natural gas service to operate their gas water heaters, gas heating units, gas appliances or any other gas supplied equipment.

In order for the four hours of grid-scale storage to be ready and available if a system wide natural gas outage occurred, the system of batteries would need to be fully charged at all times. It is likely that grid-scale batteries would be charged and discharged on a regular basis and operated by the California Independent System Operator (CAISO) as an ongoing resource it could count

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³⁶ Ruling, page 13.

on for grid reliability purposes. Therefore, depending on the timing of a natural gas outage, there is no certainty that the system of batteries would be fully charged when needed.³⁷

2. Alternative H2: Smaller-Scale Battery Storage

The Applicants assume that a smaller-scale, alternative energy battery storage involves the installation of smaller-scale batteries and associated equipment to supplement the gas supply system at times when additional capacity is needed (e.g. unplanned outages, maintenance, peak demand). Similar to the grid-scale battery storage project, the Applicants assume that smaller-scale battery storage would supply four hours of electric supply, including approximately 11,200 MWh of energy storage capacity.

Similar to the issue with the grid-scale battery storage, smaller-scale battery storage would not provide any energy replacement for the residential and business needs that are currently supplied by natural gas. Customers might still receive electricity service from the batteries, but would not have any natural gas service. Likewise, the same issues exist in that the system of batteries would need to be fully charged at all times, but would be charged and discharged on a regular basis and operated by the CAISO as an ongoing resource it could count on for grid reliability purposes. Therefore, depending on the timing of a natural gas outage, there is no certainty that the system of batteries would be fully charged when needed.³⁸

The Applicants could not identify any other reliable alternate energy options that do not require the installation of a new gas transmission pipeline.³⁹

Alternative H was included in the Ruling⁴⁰ but was not included within the PEA.

Henceforth, Alternatives H1 and H2 will be referred to as "Alternative Energy."

I. Offshore Route Alternative

The Offshore Route Alternative assumes construction of a 36-inch diameter underwater pipeline off of the shore of Southern California, transitioning from offshore to onshore at Line 3010/3011 intersection (receiving point for supply gas to other pipelines in San Diego region). Figure 2 below shows a potential route for this Alternative.

For additional information regarding Alternative I, please refer to the PEA. 41

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³⁷ See Prepared Direct Testimony of S. Ali Yari (March 21, 2016).

³⁸ See Prepared Direct Testimony of S. Ali Yari (March 21, 2016).

³⁹ See Prepared Direct Testimony of S. Ali Yari (March 21, 2016).

⁴⁰ Ruling, page 13.

⁴¹ PEA, Chapter 5.2.2, Page 5-6.

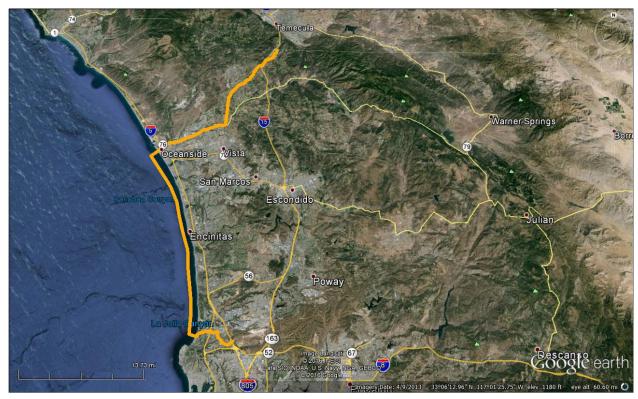


Figure 2 - Offshore Route Alternative (Conceptual - illustrative purposes only)

J. Cross-County Pipeline Route Alternatives

The Cross-County Pipeline Route Alternatives comprise three distinguishable routes from Riverside and Imperial counties to the San Diego area. The alternative routes are shown in Figure 3 and discussed below.

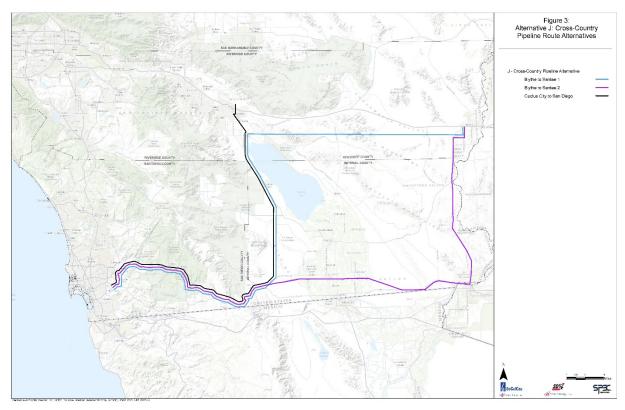


Figure 3 - Cross County Pipeline Route Alternatives (Conceptual - illustrative purposes only)

1. Blythe to Santee Alternative 1

This 222 mile cross-county pipeline initiates in the City of Blythe and traverses directly west, veering south near the northwestern corner of the Salton Sea in Riverside County. The route would then shift southwardly through Imperial County until just north of Ocotillo, at which point the route would run in a general westerly direction until its terminus within the community of Spring Valley. Approximately 202 miles of pipeline would be sited cross-county on undeveloped land, including land that is managed by eight different state and federal agencies. 42

2. Blythe to Santee Alternative 2

This 223 mile cross-county pipeline initiates in the City of Blythe and travels south until nearly reaching the City of Yuma, Arizona. At the City of Yuma, the route would veer west, following I-8 until its terminus within the community of Spring Valley. This Alternative would run through Riverside, Imperial, and San Diego counties. Approximately 199 miles of pipeline would be sited cross-county on undeveloped land, including land that is managed by eight different state and federal agencies.⁴³

⁴³ PEA, Chapter 5.0, page 5-30.

⁴² PEA, Chapter 5.0, page 5-28.

3. Cactus City to San Diego

This 160 mile cross-county pipeline initiates in Cactus City and travel south until just north of Ocotillo, at which point the route would shift west and travel generally in a western direction until its terminus within the community of Spring Valley. Approximately 120 miles of pipeline would be sited cross-county on undeveloped land that is managed by eight different state and federal agencies.⁴⁴

Alternatives J1-J3 were included in the Ruling as "Cross-County Pipeline Route Alternatives." For additional information regarding Alternatives J1-J3, please refer to the PEA. 46

K. Second Pipeline along Line 3010 Alternative

The Second Pipeline along Line 3010 Alternative would consist of constructing a new 36-inch pipeline approximately 45 miles in length, running adjacent to the existing 30-inch Line 3010. The second pipeline would originate at the existing Rainbow Metering Station and terminate at Line 3010's interconnect with Line 2010.

For additional information regarding Alternative K, please refer to the PEA.⁴⁷

⁴⁴ PEA, Chapter 5.0, page 5-32.

⁴⁵ Ruling, page 13.

⁴⁶ PEA, Chapter 5.2.3, Pages 5-28, 5-30, 5-32.

⁴⁷ PEA, Chapter 5.2.3, Page 5-33.

IV. COSTS ANALYSIS

A. Methodology

The Ruling⁴⁸ directs Applicants to file an Amended Application that includes a cost analysis comparing the Proposed Project with any feasible alternative sources of power, in compliance with Section 1003(d) and Rule 3.1(f). Section 1003(d) requires "Every electrical and every gas corporation submitting an application to the commission for a certificate authorizing the new construction of any electrical plant, line, or extension or gas plant, line or extension... shall include all of the following information... (d) a cost analysis comparing the project with any feasible alternative sources of power." Rule 3.1(f) requires "a statement detailing the estimated cost of proposed construction or extension and the estimated annual costs, both fixed and operating associate therewith. In the case of a utility which has not yet commenced service or which has been rendering service for less than 12 months, the applicant shall file as part of the application supporting statements or exhibits showing that the proposed construction is in the public interest, and whether it is economically feasible."

In most cases, implementing the Proposed Project or one of the Alternatives will avoid certain costs that would arise if another alternative were implemented. To illustrate, constructing a new pipeline to replace the transmission function of Line 1600 would reduce or avoid certain costs associated with operating the Moreno Valley Compressor Station. The methodology used to account for these "avoided costs" (or savings), and develop a "net cost" for the Proposed Project and each of the Alternatives is expressed in simple terms as follows:

$$Fixed\ Costs + O\&M\ Costs + Avoided\ Costs = Net\ Costs$$

For the purposes of this Cost-Effectiveness Analysis, the Applicants' do not distinguish between capital and expense costs.

The Applicants developed the fixed cost estimate for the Proposed Project and Alternatives using common, industry standard estimating practices, aligned with Association for the Advancement of Cost Engineering Recommended Practices. ⁴⁹ The estimates are based on a combination of market research, historical data, parametric modeling, semi-detailed unit costs and order-of-magnitude estimating based on experience and engineering judgment. The level of scope definition and estimating accuracy has been defined by references to the Association for the Advancement of Cost Engineering (AACE) RP 56R-08 Classification system, described below.

For the Proposed Project and all the Alternatives except the Hydrotest Alternative (Alternative B) and Replace Line 1600 in Place with a New 16-inch Transmission Pipeline Alternative

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⁴⁸ Ruling, pages 11-12.

⁴⁹ AACE® International Recommended Practice No. 56R-08.

(Alternative D), Line 1600 would be de-rated and operate as a distribution asset. The costs for de-rating Line 1600 are included in the fixed cost estimate for all the Alternatives except Alternatives B and D. The costs for de-rating Line 1600 were developed based on a combination of historical data, semi-detailed unit costs, and engineering experience and judgment. Under the Hydrotest Alternative, it is anticipated that Line 1600 will be replaced within approximately 20 years.

Applicants also estimated the on-going, annual operating costs for the Proposed Project and the Alternatives. The operating costs for the pipeline alternatives also include amounts for complying with Transmission Integrity Management Program (TIMP) requirements. The operating cost estimates were developed using a combination of historical operations and maintenance costs and other estimates based on Applicants' engineering judgment. This analysis assumes that operating costs for the Otay Mesa Alternatives are included in Applicants' contract pricing.

B. Estimated Costs of the Proposed Project and Alternatives

Cost Estimate Classification

In support of the Application filing in September 2015, Applicants developed a cost estimate for the Proposed Project based on a defined route, semi-detailed design and engineering, and a robust environmental assessment. By contrast, the maturity of the estimates for each Alternative is lower, due to the lack of detailed definition for key project cost drivers – such as scope definition, level of completed design and engineering, material and labor requirements, permitting needs, environmental requirements, and schedule/sequence assumptions.

For those Alternatives that were not carried forward by Applicants in the PEA⁵⁰ – the Off-Shore Route Alternative, Existing Alignment Alternatives (Replace Line 1600 In-Place with a New 16-inch Transmission Pipeline Alternative, New 16" or 36" Pipe Parallel to Line 1600), LNG Alternatives, Infrastructure Corridor Alternative, and the Northern Baja Alternative – detailed cost estimates were not prepared. Only high-level cost estimates are available for those Alternatives, which were previously determined by the Applicants to be imprudent as compared to the Proposed Project.

The Applicants' estimating team evaluated each of the project estimates against the AACE International⁵¹ Recommended Practices, specifically, the cost estimate classification system, to classify the level of maturity of each estimate. The AACE classification is based on the

⁵⁰ PEA, Chapter 5.0, pages 5-6 through 5-15.

⁵¹ AACE International developed a guideline for cost estimate classification in the late 1960s to early 1970s. Those guidelines and standards are generally accepted in the engineering and construction communities as a means for evaluating the maturity of a project cost estimate.

relationship between scope definition and estimate accuracy. The estimate accuracy range is based on known scope, but excludes unforeseen risks that could alter that scope.⁵²

The AACE matrix maturity levels are defined on a scale from 1 through 5 based on Primary Characteristics and Secondary Characteristics, as shown below:

Table 5 - Cost Estimate Classification Matrix for Building and General Construction Industries

	Primary Characteristic	Secondary Characteristic		
ESTIMATE CLASS	MATURITY LEVEL OF PROJECT DEFINITION DELIVERABLES Expressed as % of complete definition	END USAGE Typical purpose of estimate	METHODOLOGY Typical estimating method	EXPECTED ACCURACY RANGE Typical variation in low and high ranges ⁵³
Class 5	0% to 2%	Functional area, or concept screening	SF or m ² factoring, parametric models, judgment, or analogy	L: -20% to -30% H: +30% to +50%
Class 4	1% to 15%	Schematic design or concept study	Parametric models, assembly driven models	L: -10% to -20% H: +20% to +30%
Class 3	10% to 40%	Design development, budget authorization, feasibility	Semi-detailed unit costs with assembly level line items	L: -5% to -15% H: +10% to +20%
Class 2	30% to 75%	Control or bid/tender, semi-detailed	Detailed unit costs with forced detailed take-off	L: -5% to -10% H: +5% to +15%
Class 1	65% to 100%	Check estimate or pre bid/tender, change order	Detailed unit costs with detailed take-off	L: -3% to -5% H: +3% to +10%

The cost estimates prepared by the Applicants were developed based on the known and anticipated project scope at the time of the filing (September 2015), along with additional estimating information that was collected or developed for the Proposed Project and certain alternative projects that were subsequently identified in the Ruling. Table 6 below shows the estimated fixed cost and annual operating costs for the Proposed Projects and each of the Alternatives.

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⁵² AACE Recommended Practice, No. 56R-08, Cost Estimate Classification System – As Applied for the Building and General Construction Industries, TCM Framework: 7.3 – Cost Estimating and Budgeting, Rev. December 5, 2012. 7 AACE International Recommended Practice, No. 34-R-05, TCM Framework: 7.3 - Cost Estimating and Budgeting, 2007, p. 4.

⁵³ The state of construction complexity and availability of applicable reference cost data affect the range markedly. The +/- value represents typical percentage variation of actual cost form the cost estimate after application of contingency (typically at a 50% level of confidence) for given scope.

The estimated costs for the Proposed Project and the Alternatives include contingency. Per the AACE, contingency is defined as "a cost element of the estimate used to cover the uncertainty and variability associated with a cost estimate, and unforeseeable elements of cost within the defined project scope." Including a contingency allows for uncertain cost elements to be included in the project budget, even though the exact contingency-related expenditures and unforeseen events are currently unknown.

Table 6 - Estimated Fixed and Operating Costs⁵⁵

Alt. No.	Project Name	(Millions of 2015 Dollars)		
Ait. No.	Floject Name	Fixed Cost	Annual Operating Cost ⁵⁶	
А	Proposed Project (Rainbow to Line 2010 Route)	\$441.9	\$0.3	
В	Hydrotest Alternative	\$112.9	\$0.5	
C1	Alt Diameter Pipeline, Proposed Route (10")	\$297.6	\$0.3 ⁵⁷	
C2	Alt Diameter Pipeline, Proposed Route (12")	\$320.1	\$0.3 ⁵⁸	
C3	Alt Diameter Pipeline, Proposed Route (16")	\$337.1	\$0.3	
C4	Alt Diameter Pipeline, Proposed Route (20")	\$352.9	\$0.3	
C5	Alt Diameter Pipeline, Proposed Route (24")	\$361.2	\$0.3	
C6	Alt Diameter Pipeline, Proposed Route (30")	\$392.2	\$0.3	
C7	Alt Diameter Pipeline, Proposed Route (42")	\$527.5	\$0.3	
D	Replace Line 1600 in-Place with a New 16-inch Transmission Pipeline Alternative	\$556.1	\$0.4	
E/F	Otay Mesa Alternatives	\$977.1	\$45 ⁵⁹	
G	LNG Storage (Peak-Shaver) Alternative AKA (United States – LNG Alternative)	\$2,669.7	\$1.2	
H1	Alternate Energy (Battery) Alternative – Grid Scale	\$8,415.1	\$1.2	
H2	Alternate Energy (Battery) Alternative – Smaller Scale	\$10,095.1	\$1.2	
Ī	Offshore Route Alternative	\$1,449.9	\$0.5	

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⁵⁴ AACE International Recommended Practice No. 34R-05, TCM Framework: 7.3 – Cost Estimating and Budgeting, 2007, p. 4.

⁵⁵ Prepared Direct Testimony of Neil Navin (March 21, 2016), page 31, workpaper Estimated Fixed and Operating Costs for Proposed Project and Alternatives

⁵⁶ Annual Operating Costs includes the costs for complying with TIMP. The Applicants incur TIMP costs once every seven years. TIMP costs were divided by 7 to determine the "annual" TIMP costs. That portion -1/7 – were added to the annual O&M costs to determine total operating costs.

³⁷ The 10-inch and 12-inch alternate diameter pipelines do not meet regulatory requirements for natural gas demand on a 1-in-10 year winter day. It is assumed that these alternatives will require the import of gas via the Otay Mesa receipt point. These additional import costs have been accounted for by including them as O&M costs in order to calculate net costs. This analysis can be seen in Section V, Avoided Cost.

⁵⁸ *Id*.

⁵⁹ Estimated costs to transport natural gas. *See* Prepared Direct Testimony of Gwen Marelli (March 21, 2016), page 7.

Alt. No.	Project Name	(Millions of 2015 Dollars)	
		Fixed Cost	Annual Operating Cost ⁵⁶
J1	Blythe to Santee Alternative 1	\$1,377.5	\$1.4
J2	Blythe to Santee Alternative 2	\$1,315.5	\$1.4
J3	Cactus City to San Diego Alternative	\$1,143.4	\$1.0
K	Second Pipeline Along Line 3010 Alternative	\$595.2	\$0.3

Cost Estimate Assumptions

Described below are the respective assumptions and inclusion/exclusion considered for the Proposed Project and Alternatives.

Alternative A: Proposed Project (Rainbow to Line 2010 Route)

Applicants developed direct cost estimates for the Proposed Project based on the known and anticipated project scope at the time of the Application's filing (September 2015). The cost estimates have been updated to include the de-rating of Line 1600 to distribution pressure. The direct cost estimates include costs for material and equipment procurement, construction, engineering and design, environmental permitting and mitigation, other project execution-related activities, and company labor. The cost estimate is within a Class 3 range of accuracy as defined by AACE.⁶⁰

Alternative B: Hydrotest

Cost estimates were developed for this project based on historic information and experience with similar types of projects. The level of contingency was decided using expert judgment, based on the accuracy of the estimate which reflects a Level 4 class estimated as defined by AACE classification system.

Alternative C1: Alternative Diameter Pipeline, Proposed Route (10")

High-level cost estimates have been developed for this Alternative. Costs for this Alternative were developed from the Proposed Projectestimate as a baseline. This project involves the same proposed route and similar components as the Proposed Project though in differentsizes. Other costs for activities such as engineering, survey, and right-of-way acquisition, should be comparable, on a unit cost basis, to the estimates developed for the Proposed Project. A 10-inch alternate diameter pipeline does not meet regulatory requirements for natural gas demand on a 1-in-10 year winter day. It is therefore assumed that this Alternative will require the import of gas via the Otay Mesa receipt point.

⁶⁰ See Prepared Direct Testimony of Neil Navin (March 21, 2016), page 16

Alternative C2: Alternative Diameter Pipeline, Proposed Route (12")

High-level cost estimates have been developed for this Alternative. Costs for this Alternative were developed from the Proposed Project estimate as a baseline. This project involves the same proposed route and similar components as the Proposed Project though in differentsizes. The pipeline material specifications for each alternative would be similar to the Proposed Project. Other costs for activities such as engineering, survey, and right-of-way acquisition, should be comparable, on a unit cost basis, to the estimates developed for the Proposed Project. A 12-inch alternate diameter pipeline does not meet regulatory requirements for natural gas demand on a 1-in-10 year winter day. It is therefore assumed that this Alternative will require the import of gas via the Otay Mesa receipt point.

Alternative C3: Alternative Diameter Pipeline, Proposed Route (16")

High-level cost estimates have been developed for this Alternative. Costs for this Alternative were developed from the Proposed Project estimate as a baseline. This project involves the same proposed route and similar components as the Proposed Project though in different sizes. The costs for activities such as engineering, survey, and right-of-way acquisition, should be comparable, on a unit cost basis, to the estimates developed for the Proposed Project.

Alternative C4: Alternative Diameter Pipeline, Proposed Route (20")

High-level cost estimates have been developed for this Alternative. Costs for this Alternative were developed from the Proposed Project estimate as a baseline. This project involves the same proposed route and similar components as the Proposed Project though in different sizes. Other costs for activities such as engineering, survey, and right-of-way acquisition, should be comparable, on a unit cost basis, to the estimates developed for the Proposed Project.

Alternative C5: Alternative Diameter Pipeline, Proposed Route (24")

High-level cost estimates have been developed for this Alternative. Costs for this Alternative were developed from the Proposed Project estimate as a baseline. This project involves the same proposed route and similar components as the Proposed Project though in different sizes. Other costs for activities such as engineering, survey, and right-of-way acquisition, should be comparable, on a unit cost basis, to the estimates developed for the Proposed Project.

Alternative C6: Alternative Diameter Pipeline, Proposed Route (30")

High-level cost estimates have been developed for this Alternative. Costs for this Alternative were developed from the Proposed Project estimate as a baseline. This project involves the same proposed route and similar components as the Proposed Project though in different sizes. Other costs for activities such as engineering, survey, and right-of-way acquisition, should be comparable, on a unit cost basis, to the estimates developed for the Proposed Project.

Alternative C7: Alternative Diameter Pipeline, Proposed Route (42")

High-level cost estimates have been developed for this Alternative. Costs for this Alternative were developed from the Proposed Project estimate as a baseline. This project involves the same proposed route and similar components as the Proposed Project though in different sizes. Other costs for activities such as engineering, survey, and right-of-way acquisition, should be comparable, on a unit cost basis, to the estimates developed for the Proposed Project.

Alternative D: Replace Line 1600 in Place with a New 16" Transmission Pipeline Alternative (In-Kind Replacement)

High-level cost estimates have been developed for this Alternative. Costs for this Alternative were developed using the Alternative B and Alternative C3 estimates as a baseline. Other costs for activities such as engineering and survey should be comparable, on a unit cost basis, to the estimates developed for the Proposed Project. Right-of-way acquisition costs for this Alternative are significantly greater than those for the Proposed Project.⁶¹

Alternative E/F: Otay Mesa Alternatives

In evaluating the Otay Mesa Alternatives, the Applicants identified both a low end cost and a high end cost for building out capacity to provide service under these Alternatives. The low end cost is based on existing rates for the pipelines and rates for facilities in service since 2002. The high end cost is based on recently published pipeline costs for projects proposed or awarded for construction in Arizona and Northern Mexico. The high end cost assumes the North Baja Pipeline System and Gasoducto Rosarito System are looped from Ehrenberg to TGN.

Alternative G: LNG Storage (Peak-Shaver) Alternative AKA (United States – LNG Alternative)

The estimate for this Alternative was based on evaluating the costs for a similar LNG storage facility project, and developing factored estimates for the supply and construction of four LNG storage facilities based on each facility's operational requirements. These estimates were developed for each LNG storage facility by comparing them to available, actual costs for an existing LNG storage facility. Liquefaction costs were excluded – LNG plant costs have been factored based on re-gasification and storage only.

62 See Prepared Direct Testimony of Gwen Marelli (March 21, 2016), page 7.

⁶¹ A feasibility study was conducted to evaluate the feasibility of acquiring the necessary Right of Ways.

Alternative H: Alternate Energy (Battery) and Alternative (Alternative H1 - Grid Scale and Alternative H2 - Smaller Scale)

Costs for both the grid scale and smaller scale alternatives were developed based on a rough order of magnitude estimate. The estimate considered energy storage capacity, amount of land required, number of sites and project complexity.

The Grid Scale Alternative assumes installation of lithium-ion batteries at \$500/kWh (kilowatt hours). For approximately 2,802 MW (megawatts) of power and four hours of energy, approximately 11,200 MWh (megawatt hours) of capacity is required. Between 100 and 125 acres of land is needed for this installation.

The Smaller Scale Alternative assumes approximately 11,200 MWh of energy storage capacity for four hours of electric supply, projected at an installed cost of \$600/kWh. The difference in cost per kWh accounts for the number of sites required to host the smaller scale battery locations.

Alternative I: Off-Shore Alternative

A high level cost estimate for this Alternative was prepared based on considering broad project assumptions. There is a lack of scope definition. The estimate is based on a productivity efficiency factor for marine project conditions. Permitting costs and costs arising as a result of environmental considerations were assumed to be very high.

Alternative J1: Blythe to Santee Alternative 1

High-level cost estimates have been developed for this Alternative. This project involves similar components as the Proposed Project though in significantly different quantities. Costs for this Alternative were scaled from the Proposed Project on a cost per mile basis and adjusted for population density and terrain type. The pipeline material specifications for each alternative would be similar to the Proposed Project. Class estimate for this Alternative is very high level based on the lack of scope definition and that broad assumptions are considered.

Alternative J2: Blythe to Santee Alternative 2

High-level cost estimates have been developed for this Alternative. This project involves similar components as the Proposed Project though in significantly different quantities. Costs for this Alternative were scaled from the Proposed Project on a cost per mile basis and adjusted for population density and terrain type. The pipeline material specifications for each alternative would be similar to the Proposed Project. Class estimate for this Alternative is very high level based on the lack of scope definition and that broad assumptions are considered.

Alternative J3: Cactus City to San Diego Alternative

High-level cost estimates have been developed for this Alternative. This project involves similar components as the Proposed Project though in significantly different quantities. Costs for this Alternative were scaled from the Proposed Project on a cost per mile basis and adjusted for population density and terrain type. The pipeline material specifications for each alternative would be similar to the Proposed Project. Class estimate for this Alternative is very high level based on the lack of scope definition and that broad assumptions are considered.

Alternative K: Second Pipeline along Line 3010 Alternative

High-level cost estimates have been developed for this Alternative. This project involves similar components as the Proposed Project though in different quantities. The pipeline material specifications for each alternative would be similar to the Proposed Project. Other costs for activities such as engineering and surveying, should be comparable, on a unit cost basis, to the estimates developed for the Proposed Project. Right of way acquisition costs for this Alternative are significantly greater than those for the Proposed Project.⁶³

C. Avoided Costs Associated with the Proposed Project and Alternatives

The Applicants analyzed the total avoided costs that would accrue over an assumed 100 year useful life⁶⁴ for the Proposed Project and Alternatives involving construction of a new pipeline (all Alternatives except the Hydrotest Alternative). This analysis allowed for the evaluation of:

- The anticipated avoided costs over set periods of time;
- Both one-time and recurring avoided costs; and
- The net cost that incorporates both the total cost for installing the project and the avoided costs.

The Applicants' methodology⁶⁵ for calculating the avoided costs is as follows:

• Determine the various cost elements that make up the two types of avoided costs (described in the following section);

• Tabulate the avoided costs on a time line for the Proposed Project and for those Alternatives to which they apply;

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A feasibility study was conducted to evaluate the feasibility of acquiring the necessary Right of Ways.
 The Role of Pipeline Age in Pipeline Safety, Kiefner and Rosenfield states that "...a well-maintained and periodically assessed pipeline can safely transport natural gas indefinitely." A 100 year lifetime period has been assumed for calculation purposes.

⁶⁵ The Applicants use a conservative methodology for conducting the avoided cost analysis. The Applicants' method is based on conservative assumptions and is commonly used in evaluating the costs of projects over time. Other methods could be used to analyze avoided costs over time.

- Escalate the avoided costs over time by applying an inflation rate of 2.9%;⁶⁶
- Discount the avoided costs back to 2015 at 7.79%, 67 resulting in avoided costs presented in 2015 values; and

Calculate the net cost by adding the estimated fixed cost plus the present value of operating expenses and avoided costs over 100 years shown in

• Table 8.

It is assumed that avoided costs will begin to accrue from the year that the Proposed Project and Alternatives become operational.⁶⁸

Two avoided costs are associated with not having to hydrotest Line 1600, and are accounted for in this analysis, as follows:

Avoided Cost 1: Future Replacement of Line 1600

Even if Line 1600 is hydrotested, it is prudent to assume that it will need to be replaced eventually. Thus, this set of avoided costs include the cost associated with replacing Line 1600 at some point in the future. The Applicants have established a 20-year interval as a reasonable expectation for the expiration of the benefits from pressure testing. This interval is based upon engineering judgment, and Line 1600 would likely either need to be replaced or re-evaluated depending upon a number of factors that would ultimately include coating degradation, cathodic protection performance, time-dependent threat growth, leakage maintenance program demands, and time-independent threat rates.⁶⁹

The avoided costs analysis assumes Line 1600 operating as a transmission asset will be replaced in 20 years. These avoided costs are realized by the Proposed Project and the Alternatives that contemplate derating Line 1600.

⁶⁶ Inflation rate based on IHS Fourth Quarter 2015 Construction Cost Index Forecasts for Gas Utility Construction: Pacific Region for Transmission Plant averaged from 2017 through 2025.

⁶⁷ SDG&E discount rate. See Prepared Direct Testimony of Michael Woodruff (March 21, 2016).

⁶⁸ See Prepared Direct Testimony of Neil Navin (March 21, 2016), page 31: Workpaper – Estimated Fixed and Operating Costs for Proposed Project and Alternatives.

⁶⁹ See Prepared Direct Testimony of Travis Sera (March 21, 2016), page 24.

Avoided Cost 2: Moreno Compressor Station Operations

For the Proposed Project, or certain Alternatives (C4, C5, C6, C7, I, J1, J2, J3, K)⁷⁰ there can be a potential impact on the costs associated with the annual operations and maintenance of the Moreno Compressor Station^{71,72} as well as the amounts expended for emissions.

The following sections describe these avoided cost elements in more detail.

1. Future Replacement of Line 1600

Overview of Current Costs

Line 1600, if hydrotested and maintained at transmission level service (the Hydrotest Alternative), will be abandoned and/or replaced earlier than the Proposed Project or any of the Alternatives that would allow Line 1600 to be de-rated because Line 1600 will have a shorter usable asset lifespan. The estimated cost of installing a new 16-inch diameter pipeline along the same route as the Proposed Project, which is the most efficient replacement option from a cost perspective, is \$337.1M. The estimated remaining life of Line 1600 is assumed to be 20 years or less.

Source of Avoided Cost

The Proposed Project and Alternatives except the Hydrotest Alternative will have a useful life in excess of Line 1600 if it is maintained as a transmission asset. This analysis assumes that the Proposed Project and the Alternatives will have a service life of 100 years. Over the life of the Proposed Project and the Alternatives, the costs related to the eventual replacement of Line 1600 will be avoided.

Assumptions

For the purpose of this avoided costs analysis, it is assumed that Line 1600 will be replaced with a 16–inch diameter transmission pipeline along the same route as the Proposed Project. It is assumed that the physical replacement work will take two years.

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⁷⁰ The cross county lines (J1, J2 and J3) are not directly connected to the Moreno Compressor Station, but are assumed to provide similar benefits with regards to avoided costs as the Proposed Project, due to the additional capacity inherent to a 36" pipeline. Due to the length of these lines, it is possible that additional compression may be needed to balance the gas flow in the system. However, at this stage in the design, it is not known whether this additional compression will be required.

⁷¹ See Prepared Direct Testimony of Neil Navin (March 21, 2016), Attachment A – PSRP Report at Attachment XII - Moreno Compressor Station PSRP Report.

⁷² For the Proposed Project, it is assumed that the Moreno Compressor Station would only require reduced operations to function minimally as a safeguard during extreme or unplanned capacity interruption scenarios. *See* Prepared Direct Testimony of Neil Navin (March 21, 2016), Attachment A – PSRP Report at Attachment XII - Moreno Compressor Station PSRP Report.

The costs for replacing Line 1600 in the future make up the avoided costs for future Line 1600 Replacement in the cost avoidance analysis.

2. Moreno Compressor Station Operations

Overview of Current Costs⁷³

The Proposed Project and certain Alternatives would reduce the need for compression at Moreno Compressor Station. Although compression at Moreno would likely still be needed at certain times, many of the operating costs could potentially be avoided or reduced. The associated avoided costs include the following:

Emission Fees and Permitting: Based on average annual costs for emissions, emissions subjected to fee, and applied fee rates. Average cost from 2011 to 2014 is \$44,748.

Operations and Maintenance: Based on average annual costs for labor and non-labor costs. Average annual costs for 2010 to 2015 is \$2,613,907.

Fuel: Based on the average cost of fuel used, with the average price per dekatherm for the California border in 2021 assumed to be \$3.23.⁷⁴ Average annual costs based on usage for 2011 to 2013 is \$1,400,000.

NOx Sales and Purchases: Each year, the Applicants are allocated a fixed number of credits for NOx RECLAIM emissions.⁷⁵ When emissions are exceeded, additional credits have to be purchased. Similarly, unused credits can be sold at spot market prices. Average annual emissions at Moreno Compressor Station from 2012 to 2015 were 139,338 lbs. The average cost for emission credits is approximately \$14 per lb.

GHG Costs: Applicants pay for greenhouse gas (GHG) emissions arising from Moreno Compressor Station operations. ⁷⁶ The average annual GHG emissions from 2012 to 2014 were 25,159 metric tons. Projected annual GHG costs are \$1,320,830 per annum based on a levelized price per ton of \$52 per metric ton.

⁷⁵ See Assembly Bill (AB) 32 (California Global Warming Solutions Act of 2006) - http://www.arb.ca.gov/cc/ab32/ab32.htm

⁷³ Based on the figures provided within the Prepared Direct Testimony of Neil Navin (March 21, 2016), Attachment A – PSRP Report at Attachment XII - Moreno Compressor Station PSRP Report.

⁷⁴ Based on CMEGroup Globex Futures.

 $^{^{76}}$ Pursuant to <u>AB 32</u> and the Governor's <u>Executive Order S-01-07</u>.

Source of Avoided Cost

The estimated annual cost savings resulting from assuming reduced operations at Moreno Compressor Station for the Proposed Project and certain Alternatives is approximately \$5.87 million, calculated as:⁷⁷

Table 7 - Savings associated with the installation of a 36" or larger pipeline

Cost Element	Annual Savings
O&M Non-Labor	(\$295,077)
Fuel	(\$1,363,626)
NOx Purchases	(\$1,162,000)
NOx Sales	(\$691,125)
GHG Cap & Trade Cost	(\$1,254,789)
Capital Spending	(\$1,100,000)
Annual Sum	(\$5,866,617)

<u>Assumptions</u>

Avoided costs relating to the Moreno Compressor Station will be incurred for the Proposed Project and Alternatives C4, C5, C6, C7, I, J1, J2, J3 and K, as follows:

• Alternative C7 (42" pipeline) and Alternatives I (Off-shore), J1, J2, and J3 (Cross-County Alternatives)⁷⁸ and K (Second Pipeline along Line 3010) will provide the same reduction in operational requirements to the Moreno Compressor Station as the Proposed Project.

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⁷⁷ The Moreno Compressor Station PSRP Report (Prepared Direct Testimony of Neil Navin (March 21, 2016), Attachment A – PSRP Report at Attachment XII) makes the following assumptions with regards to cost saving should the Proposed Project be implemented:

The Moreno Compressor Station operations will be reduced by 95% to function minimally as a safe guard during extreme or unplanned capacity interruption scenarios for a 36" line.

⁻ Fuel, NOx credit purchases and sales, and GHG costs are reduced in direct proportion (*i.e.*, 1:1) as the reduction in operation;

⁻ Emission fees and permitting costs will remain unchanged due to the need of maintaining permitting for the compressor the station;

⁻ Labor costs will remain unchanged, and Non-labor costs will be reduced by \$300,000 (or 20% of annual cost average); and

^{- \$1.1}M in capital spending will be avoided (based on historical capital spending).

⁷⁸ The cross county lines (J1, J2 and J3) are not directly connected to the Moreno Compressor Station, but are assumed to provide similar benefits with regards to avoided costs as the Proposed Project, due to the additional capacity inherent to a 36" pipeline. Due to the length of these lines, it is possible that additional compression may be needed to balance the gas flow in the system. However, at this stage in the design, it is not known whether this additional compression will be required.

• Alternatives C4, C5 and C6 (20", 24" and 30" pipelines, respectively) will provide some reduction in operational requirements to the Moreno Compressor Station, assumed to be in direct proportion to the reduction in pipeline diameter.⁷⁹

The analysis assumes that the remaining Alternatives will not have any effect on the current state operational output of the Moreno Compressor Station and, therefore, do not accrue avoided costs.

D. Net Costs of the Proposed Project and Alternatives

The table below shows the avoided costs associated the Proposed Project and the Alternatives:

Table 8 - Avoided Costs (Millions of 2015 Dollars)

Alt No.	Project Name	Fixed Cost	Total O&M Cost ⁸⁰	Avoided Cost	Net Cost
Α	Proposed Project (36" pipeline Rainbow to Line 2010 Route)	\$441.9	\$4.6	(\$190.3)	\$256.2
В	Hydrotest Alternative	\$112.9	\$5.8	\$0.0	\$118.7
C1	Alt Diameter Pipeline, Proposed Route (10")	\$297.6	\$105.3	(\$100.3)	\$302.7
C2	Alt Diameter Pipeline, Proposed Route (12")	\$320.1	\$71.8	(\$100.3)	\$291.6
C3	Alt Diameter Pipeline, Proposed Route (16")	\$337.1	\$4.6	(\$100.3)	\$241.4
C4	Alt Diameter Pipeline, Proposed Route (20")	\$352.9	\$4.6	(\$118.3)	\$239.2
C5	Alt Diameter Pipeline, Proposed Route (24")	\$361.2	\$4.6	(\$136.3)	\$229.6
C6	Alt Diameter Pipeline, Proposed Route (30")	\$392.2	\$4.6	(\$163.3)	\$233.5
C7	Alt Diameter Pipeline, Proposed Route (42")	\$527.5	\$4.6	(\$190.3)	\$341.9
D	Replace Line 1600 in Place with a New 16" Transmission Pipeline	\$556.1	\$4.4	(\$100.3)	\$460.1
E/F	Otay Mesa Alternatives	\$977.1	\$0.0	(\$100.3)	\$876.8
G	LNG Storage (Peak-Shaver) Alternative	\$2,669.7	\$15.3	(\$100.3)	\$2,584.7
H1	Alternate Energy Alternative: Grid-Scale Batteries	\$8,415.1	\$15.3	(\$100.3)	\$8,330.1
H2	Alternate Energy Alternative: Smaller-Scale Batteries	\$10,095.1	\$15.3	(\$100.3)	\$10,010.1
I	Offshore Route	\$1,449.9	\$5.1	(\$159.5)	\$1,295.5
J1	Blythe to Santee Alternative 1	\$1,377.5	\$16.7	(\$175.0)	\$1,219.3
J2	Blythe to Santee Alternative 2	\$1,315.5	\$16.8	(\$175.0)	\$1,157.3
J3	Cactus City to San Diego Alternative	\$1,143.4	\$12.7	(\$175.0)	\$981.1
K	Second Pipeline Along Line 3010 Alternative	\$595.2	\$3.5	(\$171.6)	\$427.1

⁸⁰ Present value of O&M and TIMP costs over 100 years. Also includes present value of gas transportation costs via Otay Mesa for Alternatives C1 and C2.

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⁷⁹ The Moreno Compressor Station PSRP Report (Prepared Direct Testimony of Neil Navin (March 21, 2016), Attachment A – PSRP Report at Attachment XII) shows a straight line reduction in operations in proportion to pipeline diameter between 36" and 16" diameters.

80 Present value of O&M and TIMP costs over 100 years. Also includes present value of gas

The results of the costs analysis show that the "least-cost" alternative is the Hydrotest Alternative, which has an estimated net cost of \$118.7 million. Table 9 shows the Proposed Project and remaining Alternatives grouped together by range of net costs. After the Hydrotest Alternative, the next group of least-cost alternatives are clustered together in the \$225 million to \$260 million range. This second least-cost category includes alternate diameter sizes ranging from 16- to 36-inches (*i.e.*, the Proposed Project). The third least-cost category has a larger range, from \$290 million to \$465 million, and includes Alternative Diameters of 10-, 12- and 42-inches, the Replace Line 1600 In-Place with a New 16-Inch Transmission Pipeline Alternative, and the Second Pipeline Along Line 3010 Alternative.

The remaining two categories of Alternatives far exceed the net costs of the Proposed Project. These last two "greatest cost" categories include Alternatives whose net costs range from \$500 million to \$1 billion (Otay Mesa Alternatives and Cactus City to San Diego Alternative) and over \$1 billion (Blythe to Santee Pipeline Routes, Alternatives 1 and 2, Off-Shore, LNG Storage, and Alternative Energy Alternatives).

Table 9 - Relative Costs of Proposed Project and Alternatives from Least to Greatest Net Cost

Net Cost Range	Alt No.	Project Name	Net Cost
\$100 M to \$200 M	В	Hydrotest	\$118.7 M
	C5	Alt Diameter Pipeline 24"	\$229.6 M
	C6	Alt Diameter Pipeline 30"	\$233.5 M
\$225 M to	C4	Alt Diameter Pipeline 20"	\$239.2 M
\$260 M	C3	Alt Diameter Pipeline 16"	\$241.4M
	Α	Proposed Project (36" Diameter)	\$256.2 M
	C2	Alt Diameter Pipeline 12"	\$291.6 M
	C1	Alt Diameter Pipeline 10"	\$302.7 M
\$290 M to	C7	Alt Diameter Pipeline 42"	\$341.9 M
\$465 M	K	Second Pipeline Along Line 3010 Alternative	\$427.1 M
	D	Replace Line 1600 In Place with a New 16-inch Transmission Pipeline	\$460.1M
\$500 M	E/F	Otay Mesa Alternatives	\$876.8 M
to \$1Billion	J3	Cactus City to San Diego Alternative	\$981.1 M
	J2	Blythe to Santee Alternative 2	\$1,157.3 M
	J1	Blythe to Santee Alternative 1	\$1,219.3 M
Over \$1	- 1	Offshore Route Alternative	\$1,295.5 M
Billion	G	LNG Storage Alternative	\$2,584.7 M
	H2	Alternate Energy Alternative: Smaller Scale Batteries	\$10,010.1 M
	H1	Alternative Energy Alternative: Grid Scale Battery	\$8,330.1 M

V. BENEFITS ANALYSIS⁸¹

This Cost-Effectiveness Analysis included an evaluation of the different types of benefits across the seven benefit types set forth in the Ruling. The benefits were quantified and scored using a benefits evaluation model that was developed by PwC, with input and data from the Applicants. This evaluation complies with the requirement in the Ruling to apply quantifiable data to define the relative benefits of the Proposed Project and the Alternatives. In addition to the quantifiable benefits, the Applicants identified a few project benefits that could not be readily quantified.

Approach and Methodology

To comply with the requirement to apply quantifiable data to define the relative benefits of the projects, PwC and the Applicants developed a model (referred to herein as the "benefits evaluation model") to quantitatively evaluate and score the relative benefits of the Proposed Project and each of the Alternatives. PwC and the Applicants first considered desirable outcomes (*e.g.*, enhanced safety) and quantifiable characteristics (*e.g.*, percent reduction in incidents per High Consequence Area (HCA) mile) associated with the seven benefits categories identified in the Ruling. The model was then created to evaluate 16 specific benefits, each of which falls within one of the seven categories identified in the Ruling. Care was taken to treat each benefit as unique and not counted more than one time in the scoring model.

After the benefits were defined, PwC and the Applicants developed quantifiable scoring criteria so that benefits could be objectively evaluated and scored. The types of quantifiable metrics used in the scoring criteria include the percentage or measurable increase/reduction in a known quantity or unit of measure/metric that is used to define a benefit. For instance, a quantitative threshold expressed in terms of MMcfd is used to quantify the increases expected in system capacity for the Proposed Project and each of the Alternatives. Similarly, the number of incidents per HCA mile is one metric relied on to quantify and score safety performance.

The complete list of benefits included in the scoring model and the metric or measure used to quantify and score each one, is listed in Table 10 of this Cost-Effectiveness Analysis.

The scoring criteria are generally applied on a 1 to 5 scale. In the scoring benefits model, 1 is the lowest (worst) score and 5 is the highest (best) score. The scores were averaged within each of the seven benefit categories and then those seven average scores were summed to determine the final benefit score for the Proposed Project and the Alternatives.

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⁸¹ The avoided costs associated with the Proposed Project and each Alternative may also be viewed as a benefit. In order to avoid double-counting, however, avoided costs are not discussed in this section. ⁸² Ruling, page 12.

For certain benefits, there is no obvious measure or metric against which the benefit is generally compared. For those benefits, the scoring scale was defined to allow for an objective evaluation of the Proposed Project and the Alternatives against the scale and a quantitative measure of the benefit defined. For instance, measuring long-term safety benefits of a transmission pipeline is an important benefit and must be included in the overall analysis. Because there is no standard measure or metric for evaluating this benefit, the Applicants defined this benefit on an objective scale, defined by technical insight. This benefit type can then be scored and that score included in the overall quantitative benefits evaluation.

Once the scoring was complete for the Proposed Project and the Alternatives across each benefit category, the total benefit score was determined and a relative quantifiable benefit ranking was prepared.

2nd Pipeline Along Line 3010 In-Place 16" Alt Diameter Pipelines - 10" Pipelines - 12" 20" 24" Pipelines - 42" Energy - Smaller Scale Diameter Pipelines -Alt Diameter Pipelines -Pipelines -Otay Mesa Alternatives Energy - Grid Scale **Pipelines** Proposed Project - 36' Blythe to Santee Alt 2 Blythe to Santee Alt 1 Replace Line 1600 City to SD **Benefits Criteria** Offshore Route LNG Storage Diameter Diameter Diameter Diameter Hydrotest Cactus ₹ ₹ Ħ ₹ 1. Safety 2. Reliability 3. Operational Flexibility 4. System Capacity 5. Gas Storage thru Line Pack 6. Reduction in Gas Price for Ratepayers 7. Other Benefits **Total of Average** 27.6 17.0 27.0 27.2 27.2 20.6 16.2 27.2 **Scores Overall Relative** Rank

Table 10 - Benefits Evaluation Scoring Summary

(1 is the lowest (worst) score and 5 is the highest (best) score; Overall Relative Rank – 1 is the highest and 18 is the lowest)

A. Increased Safety

Increased safety benefits were scored against the criteria in the benefits evaluation model. For the purposes of this evaluation it is assumed that the Proposed Project and all of the Alternatives will comply with State laws to pressure test or replace Line 1600.

1. Evaluating Benefits using the Benefits Evaluation Model

The increased safety benefits and the respective scoring criteria are described below.

- 1.1 Increased safety margin to prevent pipeline rupture through the de-rating of Line 1600:⁸³
 - Evaluating the increased safety margins in terms of the percentage of specified minimum yield strength (SMYS) on Line 1600.
 - 1 N/A
 - 2. Line 1600 operating at 800 psi (49% of SMYS) Transmission Function
 - 3. Line 1600 operating at 640 psi (39% of SMYS) Transmission Function
 - 4. Line 1600 operating at 320 psi (<20% of SMYS) Distribution Function
 - 5. Removal of Line 1600
- 1.2 Long-term Safety Benefit of Transmission Pipeline Project: Ability to sustain safety over the life of the transmission pipeline due to aspects such as:
 - o Presence of known significant anomalies,
 - o Presence of known anomalies, and
 - o Future resiliency or strength of design:
 - Thickness of material
 - Corrosion protection
 - Protective coating
 - Installation techniques that prevent damage to the pipe

The scale for scoring the projects against this benefit is:

- 1. Anomalies persist in transmission pipeline
- 2. N/A
- 3. No transmission pipeline is part of the project
- 5. Meets or exceeds modern design standards
- 1.3 Reduction in incidents per HCA mile of pipeline:84 Using the Department of Transportation's (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) data, age, type of pipeline material, wall thickness, and other parameters, a percentage reduction or increase in the number of incidents per HCA mile was able to be quantified.

The scale for scoring the projects against this benefit is:

- 1. > 25% increase in potential incidents/ HCA mile
- 2. 0-25% increase in potential incidents/HCA mile
- 3. No change in potential incidents/HCA mile likelihood
- 4. 0-25% reduction in incidents/ HCA mile
- 5. > 25% reduction in incidents/ HCA mile

 ⁸³ See Prepared Direct Testimony of Travis Sera (March 21, 2016).
 ⁸⁴ See Section V.H, Pipeline Failure Analysis

• <u>1.4 Increased real-time awareness of excavation damage</u>: Ability to detect excavation damage in real-time to prevent or mitigate larger incidents from occurring.

The scale for scoring the projects against this benefit is:

- 1. Reduced capabilities for real-time awareness of excavation damage
- 2. N/A
- 3. No change in capabilities for real-time awareness of excavation damage
- 4. N/A
- 5. Increased capabilities for real-time awareness of excavation damage
- <u>1.5 Achievement of "as soon as practicable" safety objective</u>: Based on estimated completion or in-service year.

The scale for scoring the projects against this benefit is:

- 1. Beyond 2026
- 2. Complete by 2026
- 3. Complete by 2024
- 4. Complete by 2022
- 5. Complete by 2020

⁸⁵ In Decision (D.) 11-06-017, Ordering Paragraph 5, the Commission directed pipeline operators to develop a plan to test or replace all transmission pipelines that do not have documentation of a pressure test "as soon as practicable."

The results of the safety benefits scoring are shown in Table 11 below.

Table 11 - Increased Safety Benefits Score

Safety Benefits	Proposed Project - 36"	Hydrotest	Alt Diameter - 10"	Alt Diameter - 12"	Alt Diameter - 16"	Alt Diameter – 20"	Alt Diameter - 24"	Alt Diameter - 30"	Alt Diameter - 42"	Replace Line 1600 In-Place	Otay Mesa Alternatives	LNG Storage	Alt Energy – Grid Scale	Alt Energy – Smaller Scale	Offshore Route	Blythe to Santee Alt 1	Blythe to Santee Alt 2	Cactus City to SD	2nd Pipeline Along Line 3010
1.1 Increased safety margin to prevent pipeline rupture through the de-rating of Line 1600 ⁸⁶	4	3	4	4	4	4	4	4	4	5	4	4	4	4	4	4	4	4	4
1.2 Long-term Safety Benefit of Transmission Pipeline	5	1	5	5	5	5	5	5	5	5	3	3	3	3	5	5	5	5	5
1.3 Reduction in incidents per HCA mile of pipeline	5	3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
1.4 Increased real-time awareness of excavation damage	5	3	5	5	5	5	5	5	5	5	3	3	3	3	5	5	5	5	5
1.5 Achievement of "as soon as practicable" safety objective	4	4	4	4	4	4	4	4	4	2	3	2	2	2	1	2	2	2	2
Average Score	5	3	5	5	5	5	5	5	5	4	4	3	3	3	4	4	4	4	4

(1 is the lowest (worst) score and 5 is the highest (best) score)

 86 Line 1600 will be de-rated for all Alternatives except the Hydrotest Alternative and the Line 1600 Replace in Place with a New 16-inch Pipeline.

Results of the increased safety benefits evaluation are discussed below.

Proposed Project a)

The Proposed Project eliminates the need to operate Line 1600 at a higher pressure and instead allows for its de-rating at a lower and safer pressure that will improve overall system safety margins.

The Proposed Project will feature a new 36" pipeline (in addition to the de-rated Line 1600) that meets or exceeds design standards and ensures the longer term safety benefit of the transmission system.

The Proposed Project will also reduce the number of incidents per HCA mile in the system. 87,88

Ability to achieve "as soon as practicable" safety objective based on completion or in-service year.

b) Hydrotest

If Line 1600 remains a transmission asset, the risks of long seam weld hook crack failures, exposure to time dependent threats (such as corrosion), and other material and design related factors that can interact with non-state-of-the-art vulnerabilities to create increased risk remain as well, and therefore do not support the long term safety benefit of transmission pipeline.

Additionally, there are no significant changes in incidents per HCA mile if Line 1600 is hydrotested and remains in transmission level service.

No improvements in real-time awareness of excavation damages.

Ability to achieve "as soon as practicable" safety objective based on completion or in-service year.

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⁸⁷ See Section V.H, Pipeline Failure Analysis.⁸⁸ See Section V.H, Pipeline Failure Analysis.

c) Alternative Diameter Pipelines

Table 12 - Safety Benefits of Alternative Diameter Pipelines

Project	Safety Benefits
Alternative Diameter Pipelines 10" through 42" (with a de-rated Line 1600 at distribution pressure)	De-rating of Line 1600 to distribution service will improve overall system safety margin.
	The new transmission pipeline meets or exceeds modern design standards for longer term safety benefit of transmission pipeline safety.
	Fewer incidents per HCA mile due to the use of state-of-the-art materials and fabrication techniques.
	Increased capability for real-time awareness of excavation damages.
	Ability to achieve "as soon as practicable" safety objective based on completion or in-service year.

d) Other Alternative Projects

Table 13 - Safety Benefits of Other Alternatives

Project	Safety Benefits
Replace Line 1600 In-Place with a New 16-inch Transmission Pipeline (with removal of Line 1600)	The removal and replacement of Line 1600 will improve overall system safety margin.
	The new transmission pipeline meets or exceeds modern design standards for longer-term safety benefit of transmission pipeline safety.
	Fewer incidents per HCA mile due to the use of state-of-the-art materials and fabrication techniques.
	Increased capability for real-time awareness of excavation damages.
	Unable to achieve "as soon as practicable" safety objective based on completion or in-service year.
De-rated Line 1600 is assumed for each of the below options (but no transmission pipeline is part of the project):	De-rating of Line 1600 to distribution service will improve overall system safety margin.
 Otay Mesa Alternatives LNG Storage Alternate Energy – Grid Scale 	There is no new transmission pipeline to meet or exceed modern design standards for longer-term safety benefit of transmission pipeline safety.
Alternate Energy – Smaller Scale	Fewer incidents per HCA mile due a de-rated distribution Line 1600.
	No improvements in real-time awareness of excavation damages.
	Low ability to achieve "as soon as practicable" safety objective based on completion or in-service year for the Otay Mesa, the

Project	Safety Benefits
	LNG and Alternate Energy Alternatives.
Alternative Pipelines – 36" (with a de-rated Line 1600) Blythe to Santee Alt 1 Blythe to Santee Alt 2 Cactus City to SD 2nd Pipeline Along Line 3010 Offshore Route	De-rating of Line 1600 to distribution service will improve overall system safety margin. The new transmission pipeline meets or exceeds modern design standards for longer term safety benefit of transmission pipeline safety. Fewer incidents per HCA mile due to the use of state-of-the-art materials and fabrication techniques. Increased capability for real-time awareness of excavation damages (for the Offshore Alternative this applies to segments that are on land). Low ability to achieve "as soon as practicable" safety objective based on completion or in-service year varies with these projects, with the Offshore Pipeline scoring the worst at 1, and the Cross County lines and the 2 nd Pipeline Along 3010 scoring 2s.

B. Increased Reliability

System reliability refers to the ability to maintain safe, consistent, and continuous service to customers. System reliability is insured by maintaining safe operating pressures, which in turn result from having sufficient supply to meet demand and sufficient pipeline and storage capacity.

Using modern design standards and state-of-the-art materials and technology can increase the reliability of the physical gas transmission asset. Additionally, extra capacity as a result of a larger pipe diameter and the ability to operate safely at a higher pressure, can help improve the inherent reliability of a system during events when (a) projected daily demand exceeds forecast levels or (b) intra-day demands fluctuate in a manner that exceeds current operating parameters.

The Proposed Project and Alternatives were evaluated and scored in terms of their impact on increasing the current reliability/redundancy of the Applicants' gas transmission system. The three main distinctions in assessing the impacts to reliability/redundancy are as follows:

- No change to system reliability/redundancy;
- Increased system reliability/redundancy, and
- Decreased system reliability/redundancy.

1. Evaluating Benefits using the Benefits Evaluation Model

Please note, system capacity-related reliability benefits are implicit in the evaluation of increased reliability. These benefits are included in the "Increased System Capacity" section below in order to avoid double-counting the benefits.

Increased reliability benefits have been assessed by evaluating and scoring the reliability aspects of the Proposed Project and Alternatives using the benefits evaluation model described above.

The increased reliability benefits of the respective scoring criteria are described below.

• 2.1 Redundancy to natural gas transmission system:

Ability for a project to provide redundancy to the natural gas system should an unplanned event occur and place any of the two primary gas transmission assets (Line 3010 and Moreno Compression Station) out of service. The scale for scoring the projects against this benefit is:

- 1. Reduced Level of System Redundancy
- 2. Existing Level of System Redundancy
- 3. Increased System Redundancy
- 4. Complete Redundancy for Line 3010
- 5. Complete Redundancy for Line 3010 or Moreno Compressor Station
- 2.2 Curtailment impact to core gas customers: An outage scenario analysis ⁸⁹ has been performed to model the impact of the Alternatives on overall system reliability. The analysis evaluates curtailments to gas customers in the case of an outage or reduction in pressure of Line 3010 under current conditions, given the hypothetical availability of the Proposed Project or Alternates. A range of scenarios were modeled across variabilities in gas supply from Otay Mesa and seasonal variations in gas demand. SDG&E Gas Rule 14⁹⁰ was used to segregate impact to the key customer classes in order of their curtailment priority. The scenario analysis methodology and approach is discussed in detail in Section H, Supporting Analysis.

The scale for scoring the Alternatives against this benefit is based on a normalization of the average curtailment measured across all scenarios modeled for each Project Alternative. The average percentage of gas curtailment identified under each Project Alternative was normalized from 0% to 100%, and the following scores (1 through 5) were applied accordingly.

1. Normalized curtailment impacts are above 81% of the maximum in all Project Alternatives⁹¹

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⁸⁹ See Section H for a detailed description of the scenario analysis performed.

⁹⁰ See Prepared Direct Testimony of Gwen Marelli (March 21, 2016), page 2.

⁹¹ Scores are based on a normalization of the average curtailment impacts under each Project Alternate, compared to the maximum impact for all Project Alternates. The maximum curtailment impact to the

- 2. Normalized curtailment impacts are between 61% and 80% of the maximum in all **Project Alternatives**
- 3. Normalized curtailment impacts are between 41% and 60% of the maximum in all Project Alternatives
- 4. Normalized curtailment impacts are between 21% and 40% of the maximum in all **Project Alternatives**
- 5. Normalized curtailment impacts are between 0% and 20% of the maximum in all Project Alternatives
- 2.3 Curtailment impact to electric generation (EG) gas customers: An outage scenario analysis 92 has been performed to model the impact of the Alternatives on overall system reliability. The analysis evaluates curtailments to customers in the case of an outage or reduction in pressure of Line 3010 under current conditions, given the hypothetical availability of the Proposed Project or Alternatives. A range of scenarios were modeled across variabilities in gas supply from Otay Mesa and seasonal variations in gas demand. SDG&E Gas Rule 14⁹³ was used to segregate impact to the key customer classes in order of their curtailment priority. The scenario analysis methodology and approach is discussed in detail in Section H, Supporting Analysis.

The scale for scoring the Alternatives against this benefit is based on a normalization of the average curtailment measured across all scenarios modeled for each Project Alternative. The average percentage of gas curtailment identified under each Project Alternative was normalized from 0% to 100%, and the following scores (1 through 5) were applied accordingly.

- 1. Normalized curtailment impacts are above 81% of the maximum in all Project Alternatives⁹⁴
- 2. Normalized curtailment impacts are between 61% and 80% of the maximum in all Project Alternatives
- 3. Normalized curtailment impacts are between 41% and 60% of the maximum in all Project Alternatives
- 4. Normalized curtailment impacts are between 21% and 40% of the maximum in all **Project Alternatives**
- 5. Normalized curtailment impacts are between 0% and 20% of the maximum in all Project Alternatives

core gas customer class, as an average across the 48 unique scenarios modeled per Project Alternate, was a 20.8% curtailment of gas services.

⁹² See Section H for a detailed description of the scenario analysis performed.

⁹³ See Prepared Direct Testimony (March 21, 2016) of Gwen Marelli, page 2.

⁹⁴ Scores are based on a normalization of the average curtailment impacts under each Project Alternate, compared to the maximum impact for all Project Alternates. The maximum curtailment impact to the electric generation (EG) gas customer class, as an average across the 48 unique scenarios modeled per Project Alternative, was a 46.6% curtailment of gas services.

• 2.4 Curtailment impact to non-core, non-EG gas customers: An outage scenario analysis has been performed to model the impact of the Alternatives on overall system reliability. The analysis evaluates gas curtailments to customers in the case of an outage or reduction in pressure of Line 3010 under current conditions, given the hypothetical availability of the Proposed Project or Alternatives. A range of scenarios were modeled across variabilities in gas supply from Otay Mesa and seasonal variations in gas demand. SDG&E Gas Rule 1496 was used to segregate impact to the key customer classes in order of their curtailment priority. The scenario analysis methodology and approach is discussed in detail in Section H, Supporting Analysis.

The scale for scoring the Alternatives against this benefit is based on a normalization of the average curtailment measured across all scenarios modeled for each Project Alternative. The average percentage of gas curtailment identified under each Project Alternative was normalized from 0 to 100%, and the following scores (1 through 5) were applied accordingly.

- 1. Normalized curtailment impacts are above 81% of the maximum in all Project Alternatives⁹⁷
- 2. Normalized curtailment impacts are between 61% and 80% of the maximum in all Project Alternatives
- 3. Normalized curtailment impacts are between 41% and 60% of the maximum in all Project Alternatives
- 4. Normalized curtailment impacts are between 21% and 40% of the maximum in all Project Alternatives
- 5. Normalized curtailment impacts are between 0% and 20% of the maximum in all Project Alternatives
- 2.5 Curtailment impact to electric customers: An outage scenario analysis ⁹⁸ has been performed to model the impact of the Alternatives on overall system reliability. The analysis evaluates electric curtailments to customers in the case of an outage or reduction in pressure of Line 3010 under current conditions, given the hypothetical availability of the Proposed Project or Alternatives. A range of scenarios were modeled across variabilities in gas supply from Otay Mesa and seasonal variations in gas and electric demand. SDG&E Gas Rule 14⁹⁹ was used to segregate impact to the key customer classes in order of their curtailment priority. The scenario analysis methodology and approach is discussed in detail in Section H, Supporting Analyses.

96 See Prepared Direct Testimony of Gwen Marelli, (March 21, 2016), page 2.

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⁹⁵ See Section H for a detailed description of the scenario analysis performed.

⁹⁷ Scores are based on a normalization of the average curtailment impacts under each Project Alternate, compared to the maximum impact for all Project Alternates. The maximum curtailment impact to the non-core, non-EG gas customer class, as an average across the 48 unique scenarios modeled per Project Alternative, was a 63.2% curtailment of gas services.

⁹⁸ See Section H for a detailed description of the scenario analysis performed.

⁹⁹ See Prepared Direct Testimony of Gwen Marelli, (March 21, 2016), page 2.

The scale for scoring the Alternatives against this benefit is based on a normalization of the average curtailment measured across all scenarios modeled for each Project Alternative. The average percentage of curtailment required under each Project Alternative was normalized from 0 to 100%, and the following scores (1 through 5) were applied accordingly.

- 1. Normalized curtailment impacts are above 81% of the maximum in all Project Alternatives¹⁰⁰
- 2. Normalized curtailment impacts are between 61% and 80% of the maximum in all Project Alternatives
- 3. Normalized curtailment impacts are between 41% and 60% of the maximum in all Project Alternatives
- 4. Normalized curtailment impacts are between 21% and 40% of the maximum in all Project Alternatives
- 5. Normalized curtailment impacts are between 0% and 20% of the maximum in all Project Alternatives

The results of the increased reliability benefits scoring are shown in Table below.

Table 14 - Increased Reliability Benefits Score

Reliability Benefits	Proposed Project - 36"	Hydrotest	Alt Diameter - 10"	Alt Diameter - 12"	Alt Diameter - 16"	Alt Diameter - 20"	Alt Diameter - 24"	Alt Diameter - 30"	Alt Diameter - 42"	Replace Line 1600 In-Place	Otay Mesa Alternatives	LNG Storage	Alt Energy – Grid Scale	Alt Energy – Smaller Scale	Offshore Route	Blythe to Santee Alt 1	Blythe to Santee Alt 2	Cactus City to SD	3010
2.1 Redundancy to natural gas transmission system	5	2	1	1	2	3	3	4	5	2	3	3	1	1	5	5	5	5	5
2.2 Curtailment impact to core gas customers	5	1	3	3	5	5	5	5	5	5	1	1	1	1	5	5	5	5	5
2.3 Curtailment impact to electric generation (EG) gas customers	5	1	1	1	3	4	5	5	5	3	1	1	1	1	5	5	5	5	5

¹⁰⁰ Scores are based on a normalization of the average curtailment impacts under each Project Alternative, compared to the maximum impact for all Project Alternatives. The maximum curtailment impact to the electric customer class, as an average across the 48 unique scenarios modeled per Project Alternative, was a 4.2% curtailment of electric services.

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Reliability Benefits	Proposed Project - 36"	Hydrotest	Alt Diameter - 10"	Alt Diameter - 12"	Alt Diameter - 16"	Alt Diameter - 20"	Alt Diameter - 24"	Alt Diameter - 30"	Alt Diameter - 42"	Replace Line 1600 In-Place	Otay Mesa Alternatives	LNG Storage	Alt Energy – Grid Scale	Alt Energy – Smaller Scale	Offshore Route	Blythe to Santee Alt 1	Blythe to Santee Alt 2	Cactus City to SD	3010
2.4 Curtailment impact to non-core, non-EG gas customers	5	1	1	1	2	3	4	5	5	2	1	1	1	1	5	5	5	5	5
2.5 Curtailment impact to electric customers	5	1	1	1	3	5	5	5	5	3	1	5	5	5	5	5	5	5	5
Average Score	5	1	1	1	3	4	4	5	5	3	1	2	2	2	5	5	5	5	5

(1 is the lowest (worst) score and 5 is the highest (best) score)

Results of the increased reliability benefits evaluation are discussed below.

a) Proposed Project

The Proposed Project will provide significant benefits in system reliability and resiliency.

The Proposed Project will provide complete redundancy to Line 3010 or Moreno Compressor Station in the event of a loss of either facility.

Based on a detailed outage and curtailment scenario analysis, the Proposed Project is expected to be amongst the projects that are estimated to result in the least amount of potential curtailment of customers across curtailment priorities defined by SDG&E Gas Rule 14. 101

b) Hydrotest

Hydrotesting Line 1600 does not provide any significant additional benefits to system reliability to what is currently available to the gas system.

Based on a detailed outage and curtailment scenario analysis, the Proposed Project is expected to be amongst the projects that are estimated to result in the greatest amount of potential curtailment of customers across curtailment priorities defined by SDG&E Gas Rule 14.

¹⁰¹ See Prepared Direct Testimony of Gwen Marelli (March 21, 2016), page 2.

c) Alternative Diameter Pipelines

Table 15 - Reliability Benefits of Alternative Diameter Pipelines and the Replace Line 1600 In-Place with a New 16-inch Transmission Pipeline

Project	Reliability/Redundancy Benefits						
Alternative diameter 10" through 12" (with a de-rated	Reduced level of system redundancy.						
Line 1600 at distribution pressure)	See scoring Table for average curtailment percentages as defined by SDG&E's customer groups by order of service interruption priority.						
Alternative diameter 16" (with a de-rated Line 1600 at	Existing level of system redundancy.						
distribution pressure) and the Replace Line 1600 In-Place with a New 16-inch Transmission Pipeline Alternative (no Line 1600)	See scoring Table for average curtailment percentages as defined by SDG&E's customer groups by order of service interruption priority.						
Alternative diameter pipelines 20" and 24" (with a de-rated	Increased System Redundancy.						
Line 1600 at distribution pressure)	See scoring Table for average curtailment percentages as defined by SDG&E's customer groups by order of service interruption priority.						
Alternative diameter pipeline 30" (with a de-rated Line 1600	Complete Redundancy for Line 3010.						
at distribution pressure)	See scoring Table for average curtailment percentages as defined by SDG&E's customer groups by order of service interruption priority.						
Alternative diameter pipeline 42" (with a de-rated Line 1600	Complete Redundancy for Line 3010 or Moreno Compressor Station.						
at distribution pressure)	See scoring Table for average curtailment percentages as defined by SDG&E's customer groups by order of service interruption priority.						

d) Other Alternatives

Table 16 - Reliability Benefits of Other Alternatives

Project	Reliability/Resiliency Benefits						
Otay Mesa Alternatives (with a de-rated Line 1600 at distribution pressure)	Increased System Redundancy. See scoring Table for average curtailment percentages as defined by SDG&E's customer groups by order of service interruption priority.						
Alternative pipelines: Blythe-Santee Alt 1 Blythe-Santee Alt 2 Cactus City to SD 2nd Pipeline Along Line 3010 Offshore Route (with a de-rated Line 1600 at distribution pressure)	Complete Redundancy for Line 3010 or Moreno Compressor Station. See scoring Table for average curtailment percentages as defined by SDG&E's customer groups by order of service interruption priority.						
LNG Storage Alternate Energy – Grid	Increased System Redundancy for the LNG Storage option with Reduced System Redundancy for the Alternate Energy Alternatives.						

Project	Reliability/Resiliency Benefits
Scale • Alternate Energy – Smaller Scale (Includes a de-rated Line 1600 at distribution pressure for all three above)	See scoring Table for average curtailment percentages as defined by SDG&E's customer groups by order of service interruption priority.

C. Increased Operational Flexibility

Increased operational flexibility is defined as the ability of the system to respond to operational (supply or demand) uncertainty in a manner that sustains normal operations with minimal impact to customers. Incremental pipeline capacity can provide flexibility to operate the Applicants' system by expanding the options available to handle stress conditions on a daily and hourly basis that put system integrity and customer service at risk.

Operational flexibility¹⁰² can be improved through the following means:

- 1. Increased capacity to handle intra-day or peak demand fluctuations; and
- 2. The ability to control day-to-day operations of the system without reliance on external systems or entities (complete asset control)

2. Evaluating Benefits using the Benefits Evaluation Model

Increased operational flexibility benefits have been assessed by evaluating and scoring the operational flexibility aspects of the Proposed Project and Alternatives using the benefits evaluation model described above.

The increased operational flexibility benefits of the respective scoring criteria are described below.

• 3.1 Meeting current and future natural gas peak demand: Ability to meet increasingly volatile daily and hourly peak demand due to: increased reliance on gas-fired EG to supplement closure of the San Onofre Nuclear Generating Station (SONGS) and dependence on intermittent renewable power; need to meet future peak demand due to increases in the use of renewable energy sources (up to 50% renewable generation by 2030); forecasted growth in the population of the San Diego greater metropolitan area (up by 1 million people by 2035).

The scale for scoring the projects against this benefit is:

- 1. No ability to meet current peak or future peak demand.
- 2. Decrease in the ability to meet current peak or future peak demand.
- 3. No increase in the ability to meet current peak or future peak demand.
- 4. Improved ability to meet current peak demand, but unlikely to meet future forecast peak demand.

¹⁰² See Prepared Direct Testimony of Davis Bisi (March 21, 2016).

- 5. Ability to meet and/or exceed the demands of current and all predicted future peak demand through 2035.
- <u>3.2 Utility Operational Control of Asset:</u> Ability to control the physical asset by SDG&E.

The scale for scoring the projects against this benefit is binary:

- 1. Utility does not have operational control over asset
- 2. N/A
- 3. N/A
- 4. N/A
- 5. Utility has operational control over asset

The results of the increased operational flexibility scoring are shown in

Table 17 below.

Table 17 - Increased Operational Flexibility Benefits Score

Operational Flexibility Benefits	Proposed Project - 36"	Hydrotest	Alt Diameter - 10"	Alt Diameter - 12"	Alt Diameter - 16"	Alt Diameter - 20"	Alt Diameter - 24"	Alt Diameter - 30"	Alt Diameter - 42"	Replace Line 1600 In-Place	Otay Mesa Alternatives	, , , , , , , , , , , , , , , , , , , ,	Alt Energy – Grid Scale	Alt Energy – Smaller Scale	Offshore Route	Blythe to Santee Alt 1	Blythe to Santee Alt 2	Cactus City to SD	2nd Pipeline Along Line 3010
3.1 Meeting current and future natural gas peak demand	5	3	2	2	3	4	4	4	5	3	5	3	3	3	5	5	5	5	5
3.2 Utility Operational Control of Asset	5	5	5	5	5	5	5	5	5	5	1	5	5	5	5	5	5	5	5
Average Score	5	4	4	4	4	5	5	5	5	4	3	4	4	4	5	5	5	5	5

(1 is the lowest (worst) score and 5 is the highest (best) score)

Results of the increased operational flexibility benefits evaluation are discussed below.

a) Proposed Project

The Proposed Project will replace an existing 16-inch diameter pipeline with a 36-inch diameter pipeline, which will increase the transmission capacity of the gas system in San Diego County by approximately 200 MMcfd. This increase in capacity will enhance the Applicants' ability to reliably manage the fluctuating peak demand of core and noncore customers, including electric generation (EG) and clean transportation. The new line would provide incremental system capacity and increase operational flexibility by expanding the options available to handle stress conditions on a daily and hourly basis that put customer service at risk.

The Proposed Project is able to meet and/or exceed the demands of current and all predicted future peak demand through 2035.

Under the Proposed Project, the Applicants retain operational control of the asset.

b) Hydrotest

There will be no increase in system capacity after the hydrotesting on Line 1600 is complete, and a potential short-term decrease in system capacity during the hydrotesting of Line 1600. In order to backfill the loss of supply from Line 1600 (~100 MMcfd), natural gas would have to be imported from Otay Mesa.

The lack of any increase in system capacity results in no change to the current operational flexibility and therefore no increase in the ability to meet current peak or future peak demand. Under this option the Applicants retain operational control of the asset.

c) Alternative Diameter Pipelines

Table 18 - Operational Flexibility Benefits of Alternative Diameter Pipelines

Project	Operational Flexibility Benefits
Alternative diameter 10" through 12"" (with a de-rated	Decrease in the ability to meet current peak or future peak demand.
Line 1600 at distribution pressure)	Under this option the Applicants retain operational control of the asset.
Alternative diameter 16" (with a de-rated Line 1600	No increase in the ability to meet current peak or future peak demand.
at distribution pressure)	Under this option the Applicants retain operational control of the asset.
Alternative diameter 20" through 30" (with a de-rated Line 1600 at distribution	Improved ability to meet current peak demand, but unlikely to meet future forecast peak demand through 2035.
pressure)	Under this option the Applicants retain operational control of the asset.
Alternative diameter 42" (with a de-rated Line 1600 at distribution pressure)	Ability to meet and/or exceed the demands of current and all predicted future peak demand through 2035.
	Under this option the Applicants retain operational control of the asset.

d) Other Alternative Projects

Table 19 - Operational Flexibility Benefits of Other Alternatives

Project	Operational Flexibility Benefits
Replace Line 1600 In-Place with a New 16-inch	No increase in the ability to meet current peak or future peak demand.
Transmission Pipeline Replacement (no Line	Under this option the Applicants retain operational control of the asset.

Project	Operational Flexibility Benefits
1600)	
Otay Mesa Alternatives (with a de-rated Line 1600 at distribution pressure)	Ability to meet and/or exceed the demands of current and all predicted future peak demand through 2035. Under this option the Applicants do not retain operational control of the asset as the lines are owned and operated by third-party entities.
Alternative pipelines: Blythe to Santee Alt 1 Blythe to Santee Alt 2 Cactus City to SD 2nd Pipeline Along Line 3010 Offshore Route (with a de-rated Line 1600 at distribution pressure for all cases above)	Ability to meet and/or exceed the demands of current and all predicted future peak demand through 2035. Under this option the Applicants retain operational control of the asset.
LNG Storage Alternative Energy (with a de-rated Line 1600 at distribution pressure for both cases above)	No increase in the ability to meet current peak or future peak demand. Under this option the Applicants retain operational control of the asset.

D. Increased System Capacity

The Proposed Project and Alternatives were evaluated in terms of increased system capacity. The three elements of operational flexibility are:

- No change to system capacity
- Increased system capacity
- Decreased system capacity

1. Evaluating Benefits using the Benefits Evaluation Model

Increased system capacity benefits have been assessed by evaluating and scoring the capacity aspects of the Proposed Project and Alternatives using the benefits evaluation model described above.

The increased system capacity benefits of the respective scoring criteria are described below.

• 4.1 Impact to system capacity: 103 Ability of the project option to increase current system capacity. This impact is based on the diameter of the pipe and other critical design features. Increased system capacity can also help improve the system's ability to meet additional load demands if the need arises. During intra-day, peak or extreme weather demand fluctuations, extra capacity can help bridge the gap between design and higher load scenarios.

The scale for scoring the projects against this benefit is:

- 1. Reduces system capacity by more than 20%
- 2. Reduces system capacity by up to 20%
- 3. No change to system capacity
- 4. Increases system capacity by up to 20%
- 5. Increases system capacity by more than 20%

The results of the increased capacity scoring are shown in Table 20 below.

2nd Pipeline Along Line 3010 Replace Line 1600 In-Place Alt Energy - Smaller Scale Energy – Grid Scale **Otay Mesa Alternatives** Proposed Project - 36" Blythe to Santee Alt 2 Blythe to Santee Alt 1 Cactus City to SD It Diameter - 12 Alt Diameter - 16' Alt Diameter - 24 Alt Diameter - 30' Alt Diameter - 42' Offshore Route LNG Storage **System Capacity** Benefits 4.1 Impact to 5 3 5 5 3 5 3 5 5 system capacity

Table 20 - Increased System Capacity Benefits Score

(1 is the lowest (worst) score and 5 is the highest (best) score)

Results of the increased capacity benefits evaluation are discussed below.

a) Proposed Project

The Proposed Project will increase overall gas system capacity. This increase in capacity will improve the ability to manage intra-day and peak load. To this end, the installation of a new 36" pipeline 104 is projected to add an additional 200 MMcfd (30%) of system capacity.

¹⁰³ See Prepared Direct Testimony of David Bisi (March 21, 2016).

¹⁰⁴ In this scenario, Line 1600 will be consequentially de-rated to distribution operating pressures and no longer be considered a transmission asset.

¹⁰⁵ Current system capacity = 630 MMcfd in the winter operating season.

b) Hydrotest

A hydrotested Line 1600 will not add any incremental capacity to the system and will therefore not provide any of the benefits applicable to the Proposed Project above or the Alternatives.

c) Alternate Diameter Pipelines

Table 21 - System Capacity Benefits of Alternative Diameter Pipelines

Project	System Capacity Benefits
Alternate diameter 10" through 12" (with a de-rated Line 1600 at distribution pressure)	Reduces system capacity by up to 20%.
Alternate diameter 16" (with a derated Line 1600 at distribution pressure)	No change to system capacity.
Alternate diameter 20" and 24" (with a de-rated Line 1600 at distribution pressure)	Increases system capacity by up to 20%.
Alternate diameter 30" through 42"	Increases system capacity by more than 20%.

d) Other Alternatives

Table 22 - System Capacity Benefits of Other Alternatives

Project	System Capacity Benefits
Replace Line1600 In-Place with a New 16-inch Transmission Pipeline Alternative (with no Line 1600)	No change to system capacity.
Otay Mesa Alternatives (with a derated Line 1600 at distribution pressure)	Increases system capacity by more than 20%.
Alternative pipelines: Blythe to Santee Alt 1 Blythe to Santee Alt 2 Cactus City to SD 2nd Pipeline Along Line 3010 Offshore Route (with a de-rated Line 1600 at distribution pressure for cases above)	Increases system capacity by more than 20%.
LNG Storage Alternate Energy – Grid Scale Alternate Energy – Smaller Scale (with a de-rated Line 1600 at distribution pressure for cases above)	No change to system capacity.

E. Increased Gas Storage through Line Pack

All additional pipelines on the SDG&E system incrementally increase the system line pack to greater or lesser extents. Line pack simply provides an operational buffer to changes in customer demand, and any incremental benefit that line pack provides is implicitly captured by the potential increases in system capacity provided in Section D above.

F. Reductions in Gas Price for Ratepayers

Reduction in gas prices to ratepayers is not expected for any of the project options and under two projects there is a potential for increases to ratepayer gas prices as discussed below.

• <u>6.1 Reduction in gas prices to ratepayers</u>: Reduction in gas prices to ratepayers is not expected for any of the options being discussed presently and for two of the Alternatives (Otay Mesa and LNG Storage) there is a potential for an increase in gas prices to ratepayers owing to transportation costs to fill LNG tanks and the incremental transportation costs for supply from Otay Mesa.

This benefit was scored as follows: 106

- 1. Increase in gas prices to ratepayers expected
- 2 N/A
- 3. No change in gas prices to ratepayers expected
- 4. N/A
- 5. Potential reduction in gas prices to ratepayers

Gas Prices to Ratebayes Alt Diameter - 10"

Alt Diameter - 10"

Alt Diameter - 20"

Alt Diameter - 20"

Alt Diameter - 20"

Alt Diameter - 20"

Alt Diameter - 30"

Alt Diameter - 30"

Alt Diameter - 30"

Alt Diameter - 42"

Alt Diameter - 41"

Alt Diameter - 24"

Alt Diameter - 42"

Alt Diameter - 42"

Alt Diameter - 41"

Alt Diameter - 42"

Alt Energy - Grid Scale

Alt Energy - Grid Scal

Table 23 - Reduction in Gas Prices to Ratepayers Benefit Scores

⁽¹ is the lowest (worst) score and 5 is the highest (best) score)

¹⁰⁶ See Prepared Direct Testimony of Gwen Marelli (March 21, 2016) for further details.

G. Other Benefits

Other benefits assessed in this study include environmental and other external or societal impacts as a result of any of the project options. The primary topics evaluate emissions reductions, air quality improvements, and the environmental and jurisdictional zoning impacts of route or site selection. Of these, net emissions reductions as a benefit is scored below.

1. Evaluating Benefits using the Benefits Evaluation Model

Other benefits have been assessed by evaluating and scoring the different aspects of benefits generated by the Proposed Project and Alternatives using the benefits evaluation model described above

The other benefits and their respective scoring criteria are described below.

• 7.1 Emissions reductions due to reduced operating hours at Moreno Compressor Station: 107

The ability to manage excess capacity or load demand with minimal compression can lead to significant reductions in emissions at Moreno Compressor Station and a consequential reduction in combustion emissions of GHGs such as carbon dioxide, as well as a reduction in emissions of other pollutants such as nitrous oxides.

The scale for scoring the projects against this benefit is:

- 1. Potential increase in net emissions at Moreno Compressor Station
- 2. N/A

3. 0% reduction in net emissions at Moreno Compressor Station

- 4. 0% to 75% reduction in net emissions at Moreno Compressor Station
- 5. 75% or greater reduction in net emissions at Moreno Compressor Station

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¹⁰⁷ Based on the figures provided within the Moreno Compressor Station – PSRP Report. *See* Prepared Direct Testimony of Neil Navin (March 21, 2016), Attachment A – PSRP Report at Attachment XII.

2. Results of Analyses

Table 24 - Summary of Other Benefits Scores

Other benefits	Proposed Project - 36"	Hydrotest	Alt Diameter - 10"	Alt Diameter - 12"	Alt Diameter - 16"	Alt Diameter - 20"	Alt Diameter - 24"	Alt Diameter - 30"	Alt Diameter - 42"	Replace Line 1600 In-Place	Otay Mesa Alternatives	LNG Storage	Alt Energy – Grid Scale	Alt Energy – Smaller Scale	Offshore Route	Blythe to Santee Alt 1	Blythe to Santee Alt 2	Cactus City to SD	2nd Pipeline Along Line 3010
7.1 Emissions reductions due to reduced operating hours at compressor stations	5	3	1	1	3	4	4	4	5	3	5	5	1	1	5	5	5	5	5

(1 is the lowest (worst) score and 5 is the highest (best) score)

Results of the other benefits evaluation are discussed below.

a) Proposed Project

The Proposed Project will reduce net emissions at the Moreno Compressor Station by 75% or greater. ¹⁰⁸ The reduced operating hours at Moreno Compressor Station will result in a net reduction in emissions of GHGs such as carbon dioxide and methane, as well as a reduction in emissions of other pollutants such as nitrous oxides.

b) Hydrotest

A hydrotested Line 1600 is not expected to change the current level of emissions at Moreno Compressor Station as a result of no incremental redundancy or capacity offered by this option.

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¹⁰⁸ It is assumed that the Moreno Compressor Station would only require reduced operations to function minimally as a safeguard during extreme or unplanned capacity interruption scenarios. The Moreno Compressor Station PSRP Report uses a high case of reduced operations by 95%. *See* Prepared Direct Testimony of Neil Navin (March 21, 2016), Attachment A – PSRP Report at Attachment XII.

c) Alternative Diameter Pipelines

Table 25 - Other Benefits of Alternative Diameter Pipelines

Project	Net Emissions at Moreno Compressor Station
Alternative diameter 10" through 12" (with a de-rated Line 1600 at distribution pressure)	Potential increase in net emissions at Moreno Compressor Station.
Alternative diameter 16" (with a derated Line 1600 at distribution pressure)	0% reduction in net emissions at Moreno Compressor Station.
Alternative diameter 20" through 30" (with a de-rated Line 1600 at distribution pressure)	0% to 75% reduction in net emissions at Moreno Compressor Station.
Alternative diameter 42" (with a derated Line 1600 at distribution pressure)	75% or greater reduction in net emissions at Moreno Compressor Station.

d) Other Alternatives

Table 26 - Other Benefits of Other Alternatives

Project	Net Emissions at Moreno Compressor Station
Replace Line 1600 In-Place with a New 16-ince Transmission Pipeline Alternative (no Line 1600)	0% reduction in net emissions at Moreno Compressor Station.
Otay Mesa Alternatives (with a derated Line 1600 at distribution pressure)	75% or greater reduction in net emissions at Moreno Compressor Station.
Alternative pipelines ¹⁰⁹ : Blythe to Santee Alt 1 Blythe to Santee Alt 2 Cactus City to SD 2nd Pipeline Along Line 3010 Offshore Route (with a de-rated Line 1600 at distribution pressure for cases above)	75% or greater reduction in net emissions at Moreno Compressor Station.
LNG Storage Alternate Energy (with a de-rated Line 1600 at distribution pressure for cases above)	75% or greater reduction in net emissions at Moreno Compressor Station for the LNG Storage Alternative. Potential increase in net emissions at Moreno Compressor Station for the Alternate Energy solutions owing to the de-rating of Line 1600 and no addition of new transmission pipeline under this Alternative.

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¹⁰⁹ The Cross County lines (J1, J2 and J3) are not directly connected to the Moreno Compressor Station, but are assumed to provide similar benefits with regards to avoided costs as the Proposed Project, due to the additional capacity inherent to a 36" pipeline. Due to the length of these lines, it is possible that additional compression may be needed to balance the gas flow in the system. However, at this stage in the design, it is not known whether this additional compression will be required.

H. Supporting Analysis

This section describes the approach and methodology used to estimate the impact of the various project options on overall system reliability introduced in Section VI.B above.

1. Pipeline Failure Analysis

Davies Consulting, LLC, with input and data from the Applicants, analyzed the potential failure rates for the existing Line 1600, the Proposed Project, and two proposed Alternatives: the 30" diameter pipeline (Alternative C5) and the 42" diameter pipeline (Alternative C6).

The Applicants' method for comparing alternatives is by calculating the likelihood of an incident in an HCA mile as represented by the risk score in the equation below:

 $Risk = Likelihood of Incident \times HCA Miles$

Where in accordance with Title 49 of the Code of Federal Regulations (49 CFR) Part 191.3, an "incident" is currently defined as any of the following events:

- 1. An event that involves a release of gas from a pipeline and
 - a) A death, or personal injury necessitating in-patient hospitalization; or
 - b) Estimated property damage, including cost of gas lost, of the operator or others, or both, of \$50,000 or more.
- 2. An event that is significant, in the judgment of the operator, even though it did not meet the criteria of paragraph.

a) Likelihood of Pipeline Incidents

To calculate the likelihood of pipeline incidents, the Applicants used historical pipeline incident and mileage data from PHMSA. The Applicants downloaded PHMSA's Gas Transmission and Gathering Incident Data from 1970-1984, 1984-2001, 2002-2009, and 2010-present (filtering 2010 to present to only show incidents up to 2014, as all 2015 incidents may not yet be included). For each data set, the Applicants filtered the data to exclude gathering pipelines, offshore incidents, and incidents attributable to a compressor or compressor station, all of which were not relevant to this analysis.

To analyze the risk of an incident on a pipeline like Line 1600, the Applicants filtered the data to remove any pipelines constructed after 1960 or having a diameter other than 16 inches. The year

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¹¹⁰ http://www.phmsa.dot.gov/pipeline/library/data-stats/raw-data

Prior to 1984, the incident data did not include a flag by which to identify offshore versus onshore incidents so the filtering of offshore incidents was only applicable to 1984 and beyond.

1960 was chosen based on "Integrity Characteristics of Vintage Pipelines," which identifies 1960 as approximately the cutoff date for "historic" versus "modern" pipeline manufacturing. More specifically, the report indicates that between 1950 and 1970, modern manufacturing techniques for pipelines were introduced, and "historic" practices were phased out. The report indicates that the use of flash welding, which was used in constructing Line 1600, peaked in 1950 and was phased out by 1970. To calculate the number of incidents on historic pipelines similar to Line 1600, the Applicants used all of the remaining unfiltered records for each dataset. The total remaining incidents, for the period 1970 to 2014, on onshore transmission pipelines constructed prior to 1960, is 125.

The PHMSA annual mileage report provides the total miles of pipeline by decade of installation and, separately, by diameter. The incident rate for pre-1960 16-inch pipelines was determined using the PHMSA reported information. Eight percent of all installed pipe has a diameter of 16 inches. The Applicants multiplied the total number of pre-1960 vintage pipeline miles by 8% to determine the number of mile-years needed to calculate the incident rate. The incident rate was then calculated to be **35.4E-05**, or about **0.354** per thousand mile-years.

To determine the incident rate on a new/modern pipeline, similar to the Proposed Project, the Applicants relied on a similar methodology to that described above. The team selected an incident and installation mileage date range of 2000 to 2014. Applying this filter to 36-inch pipe resulted in the identification of one incident. In order to increase the sample size to provide a more meaningful result, the Applicants expanded the diameter filter to include pipelines between 30-inches and 42-inches. The PHMSA incident data, reported 6 incidents that occurred on pipelines with diameters between 30-inch to 42-inch installed between 2000 and 2014. It should be noted, however, that one of these incidents was attributable to stripped threads, and the Proposed Project will not be subject to such failures by design. Thus, the comparable number of incidents of pipelines similar to the Proposed Project would be 5.

To determine the mile-years needed in the calculation of incident rate, the team collected the miles of 30-inch to 42-inch pipeline constructed between 2000 and 2009 and the miles constructed between 2010 and 2014. The share of 30-inch to 42-inch pipeline in the system is approximately 25%. Thus, the incident rate for onshore transmission 30-inch to 42-inch pipelines installed between 2000 and 2014 is **6.4 E-05**, or **0.064 per thousand mile-years**.

Between the historic period in which Line 1600 was installed and the current modern period in which the proposed pipeline (Line 3602) will be installed, many improvements have been made in terms of testing, maintenance, and operations. These improvements, in addition to the new material and design, may have further reduced the likelihood of an incident on newly installed pipelines. Thus, to be conservative, it may be better to compare the incident rate over the same time period of 2000 to 2014.

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¹¹² Clark, E. B., B. N. Leis, and R. J. Eiber. "Integrity Characteristics of Vintage Pipelines." 2010. P7. The PHMSA definition of incident was used for the Applicants' analysis.

Once again, when identifying onshore transmission line incidents during the period between 2000 and 2014, there was insufficient data to use pipelines exactly 16 inches in diameter. Thus, the Applicants expanded the consideration to include pipelines with diameters between 12 and 20 inches. The share of pipelines between 12 and 20 inches is approximately 28%. Thus, the incident rate for onshore transmission 12-inch to 20-inch pipelines installed between 2000 and 2014 is **9.15E-05**, or **0.0915 per thousand mile-years**.

As illustrated in Table 27, pipelines similar to Line 1600 have higher incident rates as compared to lines similar to the Proposed Project (Line 3602).

Line	Incident Period	Incident Rate per Thousand Mile Years
Line similar to 1600	1970 – 2014	0.354
Line similar to 1600	2000 – 2014	0.0915
Line similar to 3602 ¹¹⁴	2000 - 2014	0.064

Table 27 - Incident Rates

b) Consideration of Cause-Specific Incidents

In addition to a decrease in the probability of an incident based on year of installation, the Proposed Project will also have a reduced likelihood of an incident compared to Line 1600 because it will be less susceptible to corrosion, will be installed with features that reduce the likelihood of third-party damage (*e.g.*, mesh and intrusion detection monitoring), and thicker pipe wall necessarily implies much greater puncture resistance. The European Gas Pipeline Incident Data Group (EGIG)¹¹⁶ has collected data on 1,060 incidents on over 100,000 kilometers of natural gas pipeline. This data shows that "[f]or pipelines having a wall thickness of 15 millimeters or thicker, there have been no corrosion or third-party damage incidents reported." Because the Proposed Project will have a minimum thickness of 0.625 inches (15.875 millimeter), the EGIG data suggests that the likelihood of corrosion and third party damage is negligible. The corresponding to the proposed Project will have a minimum thickness of 0.625 inches (15.875 millimeter), the EGIG data suggests that the likelihood of corrosion and third party damage is negligible.

¹¹⁴ The Proposed Project, because of its modern construction and safety practices, is likely to have a lower incident rate.

¹¹⁵ For a detailed list of additional safety-enhancing features of the Proposed Project, *see* Prepared Direct Testimony of Deanna Haines (March 21, 2016).

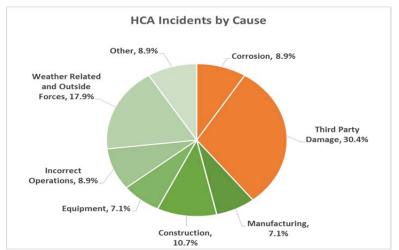
¹¹⁶ Horalek V., Bolt R, EGIG Pipeline Incident Database: Safety Performances Determines the Acceptability of Cross Country Gas Transmission Systems

¹¹⁷ Horalek V., Bolt R, EGIG Pipeline Incident Database: Safety Performances Determines the Acceptability of Cross Country Gas Transmission Systems

¹¹⁸ See Prepared Direct Testimony of Neil Navin (March 21, 2016), for the physical specifications of the Proposed Project.

As shown in

Figure 4 below, nationwide 39% (and in California, 43%) of all incidents are a result of corrosion or third party damage. According to EGIG data, no incidents caused by corrosion or third parties have been reported on a pipeline with a wall thickness greater than 15 millimeters. Assuming that this data is accurate for future incidents in California, the incident rate for



pipelines with a wall thickness greater than 15 millimeters should be 43% lower.

Figure 4 - HCA Incidents by Cause

A 43% reduction, however, is larger than the difference in incident rates calculated for Lines 1600 and the Proposed Project from the PHMSA database. The calculated incident rates of 9.15E-05 for thinner pipelines like Line 1600 and 6.4 E-05 for thicker pipelines like the Proposed Project results in a decrease of 29%. The Applicants' analysis uses the more conservative 29% decrease rate.

c) Additional Considerations

There are several other factors that support the finding that the Proposed Project will have a reduced likelihood of incident than a pipeline like Line 1600. They are presented here for consideration, but are not used in the risk score calculation as they are not quantifiable due to data limitations.

Modern steels have greatly improved fracture toughness which also diminishes the likelihood of puncture and the tendency for burst. ¹²⁰ In other words, modern pipes are much more likely to leak than to rupture.

¹¹⁹ Information compiled at the federal level by PHMSA and published at location http://primis.phmsa.dot.gov/gasimp/performancemeasures.htm

¹²⁰ See B.N. Leis, O.C. Chang, T.A. Bubenik. "Leak versus Rupture Considerations for Steel Low-Stress Pipelines, GRI Report-00/0232." 2001. P11. See B.N. Leis and X.K. Zhu. "Leak vs. Rupture Boundary for Pipes with a Focus on Low Toughness and/or Ductility, PRCI Report PR-003-063526." 2012. A-3, A-8.

Modern manufacturing techniques may also further reduce the likelihood of an incident. The EGIG report finds that "the observed failure frequencies for pipelines constructed before 1964 are significantly higher than pipelines constructed after 1964." According to Figure 4, better manufacturing of the new pipe would potentially eliminate the likelihood by an additional 7.1% of incidents, as the incidents attributable to non-state-of-the-art manufacturing and construction would be eliminated.

In addition, A.O. Smith, the company that manufactured the pipe for Line 1600, was the manufacturer for pipe involved in 415 incidents due to manufacturing, according to the PHMSA incident records. Most of the causes of these incidents are attributed to either corrosion or to manufacturing defects.

d) **HCA Miles of Proposed Alternatives**

The impact of an incident depends on whether the incident occurs in a high consequence area (HCA). Comparing potential impacts of an incident on each of the Alternatives requires a calculation of number of HCA miles affected by the incident. The HCA for a pipeline is a function of the proximity of structures to the pipeline, the size of the pipeline, and the pressure at which the pipeline is operating. For Line 1600, which operates at a transmission pressure of 640 psi, the HCA is 32.7 miles. Operating at distribution pressure of 320 psi, the HCA for Line 1600 is 2.3 miles. 122 The Proposed Project, operating at 800 psi, has an HCA of 32.1 miles. 123

Pipeline Option HCA Miles Line 1600 Transmission Pressure 32.7 Line 1600 De-rated at 320 psi. 2.3 Proposed Line 3602 32.1

Table 28 - HCA Miles

Risk Score of Proposed Alternatives e)

The risk score of the Alternatives is calculated as the product of the likelihood of an incident (incident rate) on the pipeline and the HCA mileage of the pipeline. Table presents the risk scores for each component of the Alternatives analyzed.

¹²¹ Horalek V., Bolt R, EGIG Pipeline Incident Database: Safety Performances Determines the Acceptability of Cross Country Gas Transmission Systems, p.8.

Line 1600, once de-rated, will be a distribution line and will therefore not be subject to Subpart O and TIMP regulations. Using HCA comparison for a de-rated Line 1600 is shown for comparability purposes

¹²³ Calculated pursuant to 49 CFR 192.903.

Table 29 - Risk Scores

Pipeline Option	Likelihood of Incident	HCA Miles	Risk Score
Line 1600 Transmission Pressure	0.0915	32.7	2.99
Line 1600 De-rated	0.0915	2.3	0.21
Proposed Project 3602	0.064	32.1	2.05

Note that even without accounting for the potential incident rate reduction of derating Line 1600, the risk score of the de-rated line is only 7% of the line at transmission pressure.

Combining the risk scores of the Proposed Project and the de-rated Line 1600 results in:

Risk Score of Proposed Alternative =
$$\sqrt{0.21^2 + 2.05^2} = 2.06$$

The risk score for the Hydrotest Alternative is:

Risk Score of (Hydrotest) Alternative
$$= 2.99$$

The Proposed Project – a new 36-inch pipeline plus a de-rated Line 1600 operating at distribution-level operating pressure – has a total risk score of 2.06. Line 1600, operating at transmission-level operating pressure, has a risk score of 2.99. Therefore, the Proposed Project has a reduced incident rate of 31% in HCA miles, while increasing the capacity of the transmission pipeline serving SDG&E's service territory.

2. Scenario Analysis

a) Analysis Overview

One of the primary drivers for the Proposed Project is to alleviate the current reliance on Line 3010 for transmission duties on the SDG&E gas system. To more clearly delineate the implications of this current reliance and the value of the proposed system redundancy, an analysis has been performed on scenarios where Line 3010 is operational in combination with the Proposed Project and each of the Alternatives. The objectives of the analysis are to assess the gas and electric curtailment impacts associated with an outage or reduction in pressure of Line 3010 if each of the Alternatives is also in place.

The analysis identifies impacts under various demand conditions and for a variety of available supply combinations. The basis of the analysis is explained in more detail below, and the results are discussed at the close of this section.

It is important to note, the Applicants' gas transmission system is designed to meet a 1 in 10 design criterion. The Ruling, however, requires the Applicants to "apply quantifiable data to define the relative [reliability benefits]" of the Proposed Project. For purposes of identifying and quantifying the potential reliability benefits of the Proposed Project, PwC, with input from Applicants, generated a series of plausible scenarios in addition to the 1-in-10 design criterion. The assumptions used to generate these scenarios reflect engineering judgment and historical experience operating the gas transmission system. These scenarios were generated for the limited purpose of complying with the Ruling within a short timeframe and do not constitute the basis of new design criteria.

b) Assumptions, Parameters, and Variables

The scenario analysis is performed for a variety of cases, but the following assumptions apply universally.

Table 30 - Base Assumptions for Scenario Analysis

Base Assumptions
The impact is based on a 1-day outage or reduction in pressure of Line 3010, which can be extrapolated as needed
Moreno Compressor Station is functioning
An impact to Line 3010 has occurred in the northern section of the pipeline

The scenario analysis is performed across 3 main parameter sets as indicated in the table below.

Table 31 - Parameter Sets for Scenario Analysis

Project Alternatives Parameter Set	Line 3010 Parameter Set	Otay Mesa Supply Parameter Set
Line 1600 (Pre/Post Hydrotesting)	Line 3010 Complete Outage	Otay Mesa Full Supply
Line 1600 (During Hydrotesting)	Line 3010 at 80%	Otay Mesa Medium Supply
Line 3602 (Proposed Project)		Otay Mesa Low Supply
Alternate Diameter Pipeline 10"		Otay Mesa No Supply
Alternate Diameter Pipeline 12"		
Alternate Diameter Pipeline 16"		
Alternate Diameter Pipeline 20"		
Alternate Diameter Pipeline 24"		
Alternate Diameter Pipeline 30"		
Alternate Diameter Pipeline 42"		
Replace L1600 In-Place Alternative		
Otay Mesa Alternatives		
LNG Storage Alternative		
Alt Energy Alternative (Grid-Scale)		
Alt Energy Alternative (Smaller-Scale)		
Offshore Route		
Blythe to Santee Alternative 1		
Blythe to Santee Alternative 2		
Cactus City to San Diego Alternative		
Second Pipeline Along L3010		
Alternative		

Each scenario has variables applied related to the time of year under which the scenario occurs and the supply available from Otay Mesa.

Table 32 - Seasonal Demand Variables for Scenario Analysis

Seasonal Demand Variables			
	Natural Gas Demand	Electric Demand	
Example Summer Day With Low Electrical Generation	Example Summer day for Core, Electric Generation and Non-Core, Non-EG customers with low Natural Gas demand for Electrical Generation.	Example Summer day with low electric demand.	
Example Summer Day With High Electrical Generation	Example Summer day for Core, Electric Generation and Non-Core, Non-EG customers with high Natural Gas demand for Electrical Generation.	Example Summer day with high electric demand.	
Example Winter Day	Example Winter day for Core, Electric Generation and Non-Core, Non-EG customers.	Example Winter day for electric demand.	
Winter 1 in 10 Year Day	Example Winter 1 in 10 Year day for Core, Electric Generation and Non-Core, Non-EG customers.	Example Winter 1 in 10 Year day for electric demand.	
Example Spring Day	Example Spring day for Core, Electric Generation and Non-Core, Non-EG customers.	Example Spring day for electric demand.	
Example Fall Day	Example Fall day for Core, Electric Generation and Non-Core, Non-EG customers.	Example Fall day for electric demand.	

The base assumptions and variables result in 48 unique scenarios for each of the 20 identified situations: Line 1600 Pre or Post Hydrotesting, Line 1600 During Hydrotesting, the Proposed Project (Line 3602), and the 17 Project Alternatives. This results in a total of 960 unique scenarios for analysis.

Illustrated in Table 33 below is an example of the unique 48 scenarios for one Alternative (Alternate Diameter Pipeline 12"), which is replicated against each of the Alternatives.

Table 33 - Example of 48 Scenarios Analyzed for Alternate Diameter Pipeline 12"

			1.	Examp	le Sum	mer Lo	w-EG [Day		2. Example Summer High-EG Day						3. Example Winter Day									
Scenario ID		4.1.1.1	4.2.1.1	4.1.2.1	4.2.2.1	4.1.3.1	4.2.3.1	4.1.4.1	4.2.4.1	4.1.1.2	4.2.1.2	4.1.2.2	4.2.2.2	4.1.3.2	4.2.3.2	4.1.4.2	4.2.4.2	4.1.1.3	4.2.1.3	4.1.2.3	4.2.2.3	4.1.3.3	4.2.3.3	4.1.4.3	4.2.4.3
Project Alternate	Alt. 12"	✓	✓	✓	✓	1	✓	✓	1	✓	✓	✓	✓	✓	✓	✓	1	✓	✓	✓	✓	✓	✓	✓	1
Line 2010	80%	✓		✓		✓		✓		✓		✓		1		✓		✓		✓		✓		✓	
Line 3010	0%		✓		✓		1		1		✓		✓		1		1		✓		✓		✓		✓
	High	✓	1							✓	✓							✓	✓						
Otay Mesa	Medium			✓	✓							✓	✓							✓	✓				
Supply	Low					1	1							1	1							✓	✓		
	None							✓	1							✓	✓							✓	1

				4. Wir	ter 1-iı	า-10 Ye	ar Day				•	5. E	xample	Spring	Day					6.	Examp	le Fall I	Day		
Scenario ID		4.1.1.4	4.2.1.4	4.1.2.4	4.2.2.4	4.1.3.4	4.2.3.4	4.1.4.4	4.2.4.4	4.1.1.5	4.2.1.5	4.1.2.5	4.2.2.5	4.1.3.5	4.2.3.5	4.1.4.5	4.2.4.5	4.1.1.6	4.2.1.6	4.1.2.6	4.2.2.6	4.1.3.6	4.2.3.6	4.1.4.6	4.2.4.6
Project Alternate	Alt. 12"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	1
Line 3010	80%	✓		1		✓		✓		✓		✓		✓		✓		✓		✓		1		✓	
Line 3010	0%		✓		✓		✓		✓		✓		✓		✓		1		✓		✓		✓		✓
	High	✓	✓							✓	✓							✓	✓						
Otay Mesa	Medium			1	✓							✓	✓							✓	✓				
Supply	Low					1	✓							✓	✓							✓	✓		
	None							✓	✓							✓	✓							✓	✓

Summary Methodology c)

A first step in the analysis involved a comparison of SDG&E's natural gas supply and customer demand under each of the six seasonal demand conditions. The table below presents SDG&E's customer natural gas demand data, as well as the various natural gas supply combinations analyzed in the study. 124

Table 34 - Natural gas customer demand and supply combinations under each seasonal demand conditions 125

	1. Example Summer Low-EG Day MMcfd	2. Example Summer High-EG Day MMcfd	3. Example Winter Day MMcfd	4. Winter 1- in-10 Year Day MMcfd	5. Example Spring Day MMcfd	6. Example Fall Day MMcfd
Project Alterantives Capacity [MMcfd]						
Core Demand	100	100	310	350	170	180
Electric Generation (EG) Demand	100	300	165	165	220	270
Non-Core, Non-EG Demand	75	75	62	62	75	75
Total Demand	275	475	537	577	465	525

Natural Gas Supply Combinations [MMcfd]								
Project Alternatives Capacity								
Line 1600 (Pre/Post Hydrotesting)	150	150	150	150	150	150		
Line 1600 (During Hydrotesting)	0	0	0	0	0	0		
Line 3602 (Proposed Project)	680	680	680	680	680	680		
Alternate Diameter Pipeline 10"	50	50	50	50	50	50		
Alternate Diameter Pipeline 12"	70	70	70	70	70	70		
Alternate Diameter Pipeline 16" 126	160	160	160	160	160	160		
Alternate Diameter Pipeline 20"	250	250	250	250	250	250		

¹²⁴ Natural gas supply from Otay Mesa Receipt Point was determined through an analysis of 2014-2015 flow data from the Gasoducto Rosarito pipeline that feeds into it.

The gas transmission system is designed to meet a 1 in 10 design criterion. The Ruling, however, requires the Applicants to "apply quantifiable data to define the relative [reliability benefits]" of the Proposed Project. For purposes of identifying and quantifying the potential reliability benefits of the Proposed Project, PwC, with input from the Applicants, generated a series of plausible scenarios in addition to the 1 in 10 design criterion. The assumptions used to generate these scenarios reflect engineering judgment and historical experience operating the gas transmission system. These scenarios were generated for the limited purpose of complying with the Ruling within a short timeframe and do not constitute the basis of new design criteria.

This scenario analysis uses 160 MMcfd and reflects the capacity of a new 16-inch pipeline operating at 800 psi. The remainder of the Cost-Effectiveness Analysis assumes 150 MMcfd for all 16-inch pipelines. The capacity difference between a 16-inch pipeline at 640 psi and 800 psi is considered negligible and does not significantly impact the outcome of this analysis.

	1. Example Summer Low-EG Day MMcfd	2. Example Summer High-EG Day MMcfd	3. Example Winter Day MMcfd	4. Winter 1- in-10 Year Day MMcfd	5. Example Spring Day MMcfd	6. Example Fall Day MMcfd
Project Alterantives Capacity [MMcfd]						
Alternate Diameter Pipeline 24"	400	400	400	400	400	400
Alternate Diameter Pipeline 30"	600	600	600	600	600	600
Alternate Diameter Pipeline 42"	710	710	710	710	710	710
Replace Line 1600 In-Place Alternative	160	160	160	160	160	160
Otay Mesa Alternatives	400	400	400	400	400	400
LNG Storage Alternative	0	0	0	0	0	0
Alt Energy Alternative (Grid-Scale)	0	0	0	0	0	0
Alt Energy Alternative (Smaller-Scale)	0	0	0	0	0	0
Offshore Route	680	680	680	680	680	680
Blythe to Santee Alternative 1	680	680	680	680	680	680
Blythe to Santee Alternative 2	680	680	680	680	680	680
Cactus City to San Diego Alternative	680	680	680	680	680	680
Second Pipeline Along Line 3010 Alternative	680	680	680	680	680	680
Line 3010 Parameter						
Line 3010 Complete Outage	0	0	0	0	0	0
Line 3010 at 80%	380	380	380	380	380	380
Otay Mesa Supply ¹²⁷	ı					
Otay Mesa Full Supply	295	86	313	313	329	324
Otay Mesa Medium Supply	156	60	230	230	244	247
Otay Mesa Low Supply	33	33	148	148	130	168
Otay Mesa No Supply	0	0	0	0	0	0

Table 35 - Electric customer demand and supply combinations under each seasonal demand conditions

	1. Example Summer Low-EG Day MW	2. Example Summer High-EG Day MW	3. Example Winter Day MW	4. Winter 1- in-10 Year Day MW	5. Example Spring Day MW	6. Example Fall Day MW
Electric Demand (MW) ¹²⁸						
Peak Electric Demand	3,062	3,723	2,969	3,328	2,693	3,019
Electric Supply Combinations (MW)						
Natural Gas Fired Electric Generation	562	1,686	1,124	1,124	1,236	1,517

Otay Mesa supply provided over various seasonal conditions (source: SoCalGas/SDG&E Gas Transmission Planning Department).

128 The Scenario Analysis applies the order of gas customer curtailments as described in the Prepared Direct Testimony of Gwen Marelli (March 21, 2016), page 2.

	1. Example Summer Low-EG Day MW	2. Example Summer High-EG Day MW	3. Example Winter Day MW	4. Winter 1- in-10 Year Day MW	5. Example Spring Day MW	6. Example Fall Day MW
Renewable Electric Generation	70	70	70	70	70	70
Electric Import Capacity	2,500	2,500	2,500	2,500	2,500	2,500

Subsequently, supply combinations are established for each of the 960 scenarios, and then analyzed against the customer demand under those conditions. The following key outputs are gathered.

Table 36 - Outputs of Assessed Impacts

Outputs of As:	sessed Impacts
General	Is immediate curtailment at Electrical Generation stations required?
Impacts	Overall capacity shortfalls in MMcfd
Curtailment to	Curtailment for Core Customers (% of service impacted, # of customers affected) 130
Gas	Curtailment for Electric Generation (EG) Customers (% of service impacted)
Customers ¹²⁹	Curtailment for Non-Core, Non-EG Customers (% of service impacted)
Curtailment to	Curtailment to Electric Meters (% of service impacted, # of meters affected)
Electric	Curtailment to Electric Meters (70 of Service Impacted, # of meters affected)
Meters	

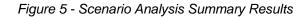
d) Summary Results

Outcomes of the 960 scenarios analyzed have been summarized in Figure 5 below. The graph presents the average percentage of curtailment for each gas customer class and outages to electric customers for the 20 situations.

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¹²⁹ The Scenario Analysis applies the order of gas customer curtailments as described in the Prepared Direct Testimony of Gwen Marelli (March 21, 2016), page 2.

Operational activities related to an outage are not factored in determining the number of core customers affected.



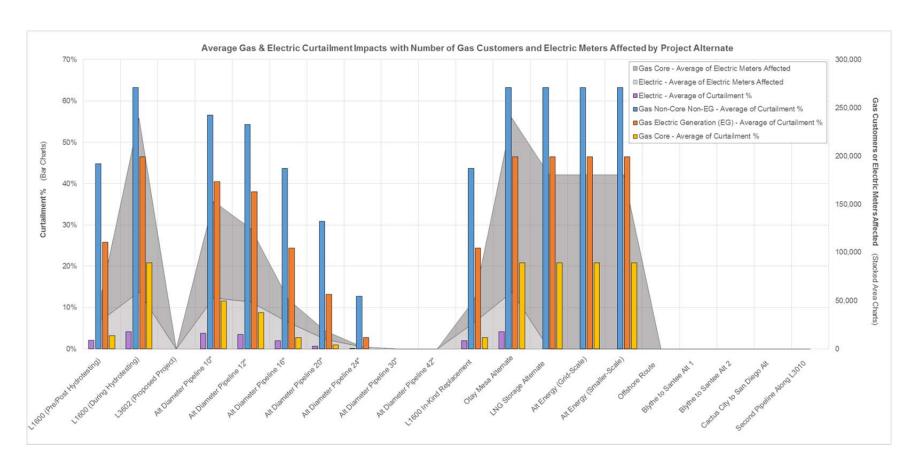


Table 37 - Ranking of Project Alternatives by Average Curtailment

Scoring of Average Curtailment Severity (Relative to other Project Alternatives, with range 1-Worst to 5-Best)

Project Alternative	Gas Non- Core, Non-EG Customers	Gas Electric Generation (EG) Customers	Gas Core Customers	Electric
Line 1600 (Pre/Post Hydrotesting)	2	3	5	3
Line 1600 (During Hydrotesting)	1	1	1	1
Line 3602 (Proposed Project)	5	5	5	5
Alt Diameter Pipeline 10"	1	1	3	1
Alt Diameter Pipeline 12"	1	1	3	1
Alt Diameter Pipeline 16"	2	3	5	3
Alt Diameter Pipeline 20"	3	4	5	5
Alt Diameter Pipeline 24"	4	5	5	5
Alt Diameter Pipeline 30"	5	5	5	5
Alt Diameter Pipeline 42"	5	5	5	5
Replace Line 1600 in Place with a New 16" Transmission Pipeline	2	3	5	3
Otay Mesa Alternatives	1	1	1	1
LNG Storage Alternative	1	1	1	5
Alt Energy (Grid-Scale)	1	1	1	5
Alt Energy (Smaller-Scale)	1	1	1	5
Offshore Route	5	5	5	5
Blythe to Santee Alt 1	5	5	5	5
Blythe to Santee Alt 2	5	5	5	5
Cactus City to San Diego Alt	5	5	5	5
Second Pipeline Along Line 3010	5	5	5	5

From the graph and table above, it is evident that the highest and lowest reliability impacts were observed as follows.

Table 38 - Best and Worst Performing Alternatives

Best Performing	Worst Performing
Line 3602 (Proposed Project)	Line 1600 (Pre/Post Hydrotesting)
Alternate Diameter Pipeline 24"	Line 1600 (During Hydrotesting)
Alternate Diameter Pipeline 30"	Alt Diameter Pipeline 10"
Otay Mesa Alternatives	Alt Diameter Pipeline 12"
Offshore Route	Alt Diameter Pipeline 16"
Blythe to Santee Alternative 1	Replace Line 1600 in Place with a New 16" Transmission Pipeline
Blythe to Santee Alternative 2	LNG Storage Alternative
Cactus City to San Diego Alternative	Alt Energy (Grid-Scale)
Second Pipeline Along Line 3010 Alternative	Alt Energy (Smaller-Scale)

I. Benefits Analysis Summary

The following table provides the relative rank of the Proposed Project and Alternatives.

Table 39 - Relative Benefits of Proposed Project and Alternatives from Greatest to Least Benefits

Alt No.	Project Name	Benefits Rank
Α	Proposed Project (36" Diameter)	1
C7	Alt Diameter Pipeline 42"	1
J1	Blythe to Santee Alternative 1	3
J2	Blythe to Santee Alternative 2	3
J3	Cactus City to San Diego Alternative	3
K	Second Pipeline Along Line 3010 Alternative	3
- 1	Offshore Route Alternative	7
C6	Alt Diameter Pipeline 30"	8
C5	Alt Diameter Pipeline 24"	9
C4	Alt Diameter Pipeline 20"	10
C3	Alt Diameter Pipeline 16"	11
D	Replace Line 1600 In Place with a New 16-inch Transmission Pipeline	12
E/F	Otay Mesa Alternatives	13
G	LNG Storage Alternative	14
В	Hydrotest	15
H1	Alternative Energy Alternative: Grid Scale Battery	16
H2	Alternate Energy Alternative: Smaller Scale Batteries	16
C1	Alt Diameter Pipeline 10"	18
C2	Alt Diameter Pipeline 12"	18

The results of the benefits analysis show that the Proposed Project and 42-inch Alternative Diameter Pipeline offer the most benefits. Four Alternatives comprise the next highest-ranked

group, the Cross-Country Pipeline Route Alternatives (Blythe to Santee Pipeline Routes, Alternatives 1 and 2; Cactus City to San Diego Alternative) and the Second Pipeline Along Line 3010 Alternative. The Off-Shore Route offers the third-most benefits, followed in descending order by several Alternative Diameter Pipelines (30-, 24-, 20-, and 16-inches), Replace Line 1600 In Place with a New 16-inch Alternative, the Otay Mesa Alternatives. The LNG Storage Alternative ranked 14th in terms of benefits, followed by the Hydrotest Alternative and the Alternative Energy Alternatives. The Alternative Diameter Pipelines of 10- and 12-inches offer the least benefits of all the Alternatives.

New, larger diameter pipelines outperform the "least-cost" (Hydrotest Alternative) in six out of the seven categories (safety, reliability, operational flexibility, system capacity, gas storage through line pack, and other benefits) and receive the same score for the category of reduction in gas price for ratepayers. As compared to other larger diameter pipelines, the Proposed Project provides additional reliability, operational flexibility, system capacity, gas storage through line pack, and other benefits.

VI. CONCLUSION

With data and input from the Applicants, PwC prepared this Cost-Effectiveness Analysis to comply with the Ruling. The analysis applies quantifiable data to define the relative costs and benefits of the Proposed Project and the range of Alternatives identified in the Ruling. The relative costs and benefits of the Proposed Project and Alternatives are set forth in the following table

Table 40 - Proposed Project and Alternatives Relative Benefit Ranking and Net Costs

	Description	Benefit Rank	Net Cost (\$M)
Α	Proposed Project (Rainbow to Line 2010 Route)	1	\$256.2
В	Hydrotest Alternative	15	\$118.7
C1	Alt Diameter Pipeline, Proposed Route (10")	18	\$302.7
C2	Alt Diameter Pipeline, Proposed Route (12")	18	\$291.6
C3	Alt Diameter Pipeline, Proposed Route (16")	11	\$241.4
C4	Alt Diameter Pipeline, Proposed Route (20")	10	\$239.2
C5	Alt Diameter Pipeline, Proposed Route (24")	9	\$229.6
C6	Alt Diameter Pipeline, Proposed Route (30")	8	\$233.5
C7	Alt Diameter Pipeline, Proposed Route (42")	1	\$341.9
D	Replace Line 1600 in Place with a New 16" Transmission Pipeline	12	\$460.1
E/F	Otay Mesa Alternatives	13	\$876.8
G	LNG Storage (Peak-Shaver) Alternative AKA (United States – LNG Alternative)	14	\$2,584.7
H1	Alternate Energy (Battery) Alternative – Grid Scale	16	\$8,330.1
H2	Alternate Energy (Battery) Alternative – Smaller Scale	16	\$10,010.1
I	Offshore Route Alternative	7	\$1,295.5
J1	Blythe to Santee Alternative 1	3	\$1,219.3
J2	Blythe to Santee Alternative 2	3	\$1,157.3
J3	Cactus City to San Diego Alternative	3	\$981.1
K	Second Pipeline Along Line 3010 Alternative	3	\$427.1

When considering both net project costs and benefits, the Proposed Project is the most cost-effective, prudent Alternative, as it provides more benefits than any of the Alternatives except for the 42-inch diameter pipeline, which provides the same level of benefits but costs \$86 million more (on a net cost basis) than the Proposed Project.

Although the costs analysis concludes that the "least-cost" alternative is the Hydrotest Alternative, which is estimated to cost \$118.7 million on a net cost basis, the group of "second least-cost" alternatives ranges from \$225 million to \$260 million and includes the Proposed Project. The third least-cost group has a larger range, from \$290 million to \$465 million, and the remaining two groups of Alternatives far exceed the net costs of the Proposed Project. These two "greatest cost" categories include Alternatives whose net costs range from \$500 million to

\$1 billion (Otay Mesa Alternatives, Cactus City to San Diego Alternative) and more than \$1 billion (Blythe to Santee Pipeline Routes, Alternatives 1 and 2, Off-Shore, LNG Storage, and Alternative Energy Alternatives).

In terms of benefits, the Proposed Project and 42-inch diameter pipeline ranked highest. Four Alternatives comprise the next highest-ranked group, the Cross-Country Pipeline Route Alternatives (Blythe to Santee Pipeline Routes, Alternatives 1 and 2; Cactus City to San Diego Alternative) and the Second Pipeline Along Line 3010 Alternative. The remaining projects are ranked in descending order, with the 10- and 12-inch Alternative Diameter Pipelines ranking lowest in terms of benefits. The "least-cost" Hydrotest Alternative ranked 15th out of 19.

New, larger diameter pipelines outperform the "least-cost" (Hydrotest Alternative) in six out of the seven benefits categories (safety, reliability, operational flexibility, system capacity, gas storage through line pack, and other benefits) and receive the same score for the category of reduction in gas price for ratepayers. As compared to other larger diameter pipelines, the Proposed Project provides additional reliability, operational flexibility, system capacity, gas storage through line pack, and other benefits.

The Proposed Project would provide more benefits than the 16-, 20-, 24- and 30-inch Alternate Diameter Pipelines without adding significantly higher costs. By contrast, the 42-inch Alternate Diameter Pipeline offers the same benefits as the Proposed Project but costs approximately \$86 million more. For these reasons, the Proposed Project is identified as the overall most cost-effective alternative.

PSRP Cost-Effectiveness Analysis Change Log – February 2017

Document	Witness	Page	Location	Revision Detail
CEA	Anthony Caletka	Cover	N/A	Added "as corrected February 2017"
CEA	Anthony Caletka	3	Table 2	For Alternative D, changed "\$560.4" to "\$460.1"
CEA	Anthony Caletka	4	6 th bullet point	Modified sentence as follows: "After the cluster that includes the Proposed Project, the next group of projects grouped by least net cost ranges from \$290 million to \$430 \$465 million and includes Alternate Diameters of 10-, 12- and 42-inches, the Replace Line 1600 In-Place with a New 16-inch Transmission Pipeline Alternative, and as well as the Second Pipeline Along Line 3010 Alternative;"
CEA	Anthony Caletka	4	7 th bullet point	Modified sentence as follows: "The two highest net cost categories include Alternatives with net costs ranging from \$500 million to \$1 billion (Replace Line 1600 In- Place with a New 16-inch Transmission Pipeline Alternative, Otay Mesa Alternatives, Cactus City to San Diego) and more than \$1 billion (Blythe to Santee Pipeline Route Alternatives 1 and 2, Off- Shore, Liquefied Natural Gas (LNG) Storage, and Alternate Energy Alternatives);"
CEA	Anthony Caletka	6	Figure 1	This figure is corrected to reflect the correction in Table 2. See the position of Alternative D: "1600 In-Kind Replacement"
CEA	Anthony Caletka	11	Section III.B second paragraph, first sentence	Modified sentence as follows: "The Hydrotest Alternative involves a complex four three year project to test the northern 45-miles of Line 1600, from Rainbow Metering Station to Kearny Villa Station."

Document	Witness	Page	Location	Revision Detail
CEA	Anthony Caletka	23	Under Alternative C1: second and third sentence	Modified sentences as follows: "Costs for this Alternative were sealed developed from the Proposed Project on a cost per mile basis estimate as a baseline. This project involves the same proposed route and similar components as the Proposed Project though in different quantities sizes."
CEA	Anthony Caletka	24	Under Alternative C2: second and third sentence	Modified sentences as follows: "Costs for this Alternative were scaled developed from the Proposed Project on a cost per mile basis estimate as a baseline. This project involves the same proposed route and similar components as the Proposed Project though in different quantities sizes."
CEA	Anthony Caletka	24	Under Alternative C3: second and third sentence	Modified sentences as follows: "Costs for this Alternative were sealed developed from the Proposed Project on a cost per mile basis estimate as a baseline. This project involves the same proposed route and similar components as the Proposed Project though in different quantities sizes."
CEA	Anthony Caletka	24	Under Alternative C4: second and third sentence	Modified sentences as follows: "Costs for this Alternative were sealed developed from the Proposed Project on a cost per mile basis estimate as a baseline. This project involves the same proposed route and similar components as the Proposed Project though in different quantities sizes."
CEA	Anthony Caletka	24	Under Alternative C5: second and third sentence	Modified sentences as follows: "Costs for this Alternative were scaled developed from the Proposed Project on a cost per mile basis estimate as a baseline. This project involves the same proposed route and similar components as the Proposed Project though in different quantities sizes."

Document	Witness	Page	Location	Revision Detail
CEA	Anthony Caletka	24	Under Alternative C6: second and third sentence	Modified sentences as follows: "Costs for this Alternative were scaled developed from the Proposed Project on a cost per mile basis estimate as a baseline. This project involves the same proposed route and similar components as the Proposed Project though in different quantities sizes."
CEA	Anthony Caletka	25	Under Alternative C7: second and third sentence	Modified sentences as follows: "Costs for this Alternative were scaled developed from the Proposed Project on a cost per mile basis estimate as a baseline. This project involves the same proposed route and similar components as the Proposed Project though in different quantities sizes."
CEA	Anthony Caletka	25	Under Alternative D: second and third sentence	Modified sentences as follows: "Costs for this Alternative were scaled from developed using the Proposed Project Alternative B and Alternative C3 estimates as a baseline. on a cost per mile basis. This project involves similar components as the Proposed Project though in different quantities.
CEA	Anthony Caletka	27	Section C first sentence	Modified sentence as follows: "The Applicants analyzed the total avoided costs that would accrue over an assumed 100 year useful life ⁶⁴ for the Proposed Project and Alternatives involving construction of a new pipeline (all Alternatives except the Hydrotest Alternative and the Replace Line 1600 In Place with a 16" Pipeline Alterative)."
CEA	Anthony Caletka	32	Table 8	For Alternative D: Avoided Cost – changed "\$0.0" to "(\$100.3)" Net Cost – changed "\$560.4" to "\$460.1"

Document	Witness	Page	Location	Revision Detail
CEA	Anthony Caletka	33	First paragraph, last sentence	Modified sentence as follows: "The third least-cost category has a larger range, from \$290 million to \$430\$465 million, and includes Alternative Diameters of 10-, 12- and 42-inches, the Replace Line 1600 In-Place with a New 16-inch Transmission Pipeline Alternative, and as well as the Second Pipeline Along Line 3010 Alternative."
CEA	Anthony Caletka	33	Second paragraph, second sentence	Modified sentence as follows: "These last two "greatest cost" categories include Alternatives whose net costs range from \$500 million to \$1 billion (Replace Line 1600 in Place with a New 16-inch Pipeline, Otay Mesa Alternatives and Cactus City to San Diego Alternative) and over \$1 billion (Blythe to Santee Pipeline Routes, Alternatives 1 and 2, Off-Shore, LNG Storage, and Alternative Energy Alternatives)."
CEA	Anthony Caletka	33	Table 9	Net Cost Range for Alternatives C2, C1, C7, K and D – change from "\$290 M to \$430 M" to "\$290 M to \$465 M" Change Net Cost for Alternative D from "\$560.4 M" to "\$460.1 M"
CEA	Anthony Caletka	68	Table 34	Change heading from "Natural Gas Demand [MMcfd]" to "Project Alternatives Capacity [MMcfd]"
CEA	Anthony Caletka	68	Footnote 127	Footnote 127 was missing in the original CEA and should read: "Otay Mesa supply provided over various seasonal conditions (source: SoCalGas/SDG&E Gas Transmission Planning Department)."
CEA	Anthony Caletka	68	Footnote 128	Footnote 128 was missing in the original CEA and should read: "The Scenario Analysis applies the order of gas customer curtailments as described in the Prepared Direct Testimony of Gwen Marelli (March 21, 2016), page 2."

Document	Witness	Page	Location	Revision Detail
CEA	Anthony Caletka	70	Figure 5	This figure is corrected to reflect the corrections in Table 37. See the scores for the Otay Mesa Alternatives
CEA	Anthony Caletka	71	Table 37	The scores for the Otay Mesa Alternatives are modified as follows:
				Gas Non-Core, Non-EG Customers – change "4" to "1"
				Gas Electric Generation (EG) Customers – change "5" to "1"
				Gas Core Customers – change "5" to "1"
				Electric – change "5" to "1"
CEA	Anthony Caletka	74	Table 40	For Alternative D, changed "\$560.4" to "\$460.1"
CEA	Anthony Caletka	74	Last	Modified sentence as follows:
			paragraph, second sentence	"The third least-cost group has a larger range, from \$290 million to \$430\\$465 million, and the remaining two groups of Alternatives far exceed the net costs of the Proposed Project."
CEA	Anthony Caletka	74-75	Last	Modified sentence as follows:
			paragraph, last sentence	"These two "greatest cost" categories include Alternatives whose net costs range from \$500 million to \$1 billion (Replace Line 1600 in Place with a New 16-inch Pipeline, Otay Mesa Alternatives, Cactus City to San Diego Alternative) and more than \$1 billion (Blythe to Santee Pipeline Routes, Alternatives 1 and 2, Off- Shore, LNG Storage, and Alternative Energy Alternatives)."
CEA	Anthony Caletka	Inputs	Second	Change heading from "Capacity Needed to Meet
Workpaper Avoided		Tab Page 1,	column	PSEP 1-in-10 Year Winter Day Requirements (MMcfd)" to "Current System Capacity
Cost Model		line 23		(MMcfd)" (MMcfd)"
CEA	Anthony Caletka	Inputs	Fourth	Change heading as follows:
Workpaper		Tab	column	"Capacity Shortfall of Min Req [MMcfd]"
Avoided Cost Model		Page 1, line 23		
Cost Model		11110 23		

Document	Witness	Page	Location	Revision Detail
CEA Workpaper Avoided Cost Model	Anthony Caletka	Costs over 100 Yrs Tab, Page 2, Line 127,	Years 2039 and 2040	Updated the Avoided Cost Model, Alternative D, by adding in the costs for replacing Line 1600 as a transmission pipeline. The resulting output is shown on the "Outputs" tab, Line 14, Column "Avoided Cost – Line 1600 Replacement" (-\$100.3M) and Line 14, Column "Net Cost" (\$460.1M)
CEA Workpaper Scenario Analysis	Anthony Caletka	Gas Tab, Line 25	Columns C through H	Changed the fixed gas supply from the Otay Mesa Alternative from 400 MMcfd to 0 MMcfd. The resulting output is shown on the "Scoring" tab, Line 15, Columns M through P. The scores for the Otay Mesa Alternatives are modified as follows: Gas Non-Core, Non-EG Customers – change "4" to "1" Gas Electric Generation (EG) Customers – change "5" to "1" Gas Core Customers – change "5" to "1" Electric – change "5" to "1"

A.15-09-013 Cost-Effectiveness Analysis Workpaper - Avoided Cost Model corrected February 2017

WORK PAPER TABLE - AVOIDED COST MODEL INPUTS (AC 1.1) INPUTS AND ASSUMPTIONS FOR AVOIDED COST MODEL, BY PROJECT ALTERNATE

APPLICATION 15-09-013 VOLUME III - COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 2017)

Line No.

1	Model Inputs		
2	Fixed Input Data		Assumptions / Sources:
	MCS O&M and Emissions Cost	(\$5,866,617)	Source: Moreno Valley Compressor Station – PSRP Benefit Analysis Final - 3-4-2016 Lou Pagdanganan 3-4-2016. Assumes 95% reduction in operations.
4	Future L1600 Replacement Cos		Based on 16" Alternate Diameter Pipeline running same route as the Proposed Project. Includes 11.9% contingency. This is the more cost effective option than "Replace Line 1600 In-Place With a 16-Inch Pipeline (In-Kind Replacement)" (
5	Discount Rate	7.79%	SDG&E Business Finance. Authorized Cost of Capital (to change in 2018
	Inflation Rate	2.90%	IHS Power Plant Q4 2014 Forecast - Construction Cost Indexes. Cost Trends of Gas Utility Construction. Pacific Region. Average percent change for Transmission Plant from 2017-2025. Provided by SDG&E Fina
	L1600 Hydrotesting Duration (yrs	3	Hydrotesting occurring on shoulder seasons only. See Prepared Direct Testimony of Neil Navin (March 21, 201
8	Est Useful Life of L1600 After Hydrotesting (yrs	20	From Cost Effectiveness Analysis. Installation of new L1600 starts 20 years after hydrotesting and is completed 2 years after tl
9	Project Lifetime Period (yrs	100	The Role of Pipeline Age in Pipeline Safety, Kiefner and Rosenfield states that "a well-maintained and periodically assessed pipeline can safety transport natural gas indefinitely." A 100 year lifetime period has been assumed for calculation pu

Inputs by Project Alternative

12			Barress d Barriant	Ibidaataa (I baa	Alt. Diameter Pipelines								O1 M	1 110 01		te Energy	0//-1	Cross-County Pipeline Alts			Second
13			(Line 3602)	Hydrotest (Line 1600)	10"		16"	20"	24"	30"	42"	Replace Line 1600 In-Place		LNG Storage (Peak-Shaver)	Grid-Scale Batteries	Smaller-Scale Batteries	Offshore Route	Blythe to Santee 1	Blythe to Santee 2	Cactus City to San Diego	Pipeline Along Line 3010
14	Footnotes	ALTERNATIVE REFERENCE:	Α	В	C1	C2	C3	C4	C5	C6	C7	D	E/F	G	H1	H2	ı	J1	J2	J3	K
15	N/A	Future L1600 Replacement Cos	✓	×	~	~	✓	✓	✓	✓	^	✓	✓	✓	✓	✓	√	✓	✓	✓	✓
16	6	MCS O&M and Emissions Cost	✓	×	~	~	×	✓	✓	✓	^	×	✓	×	×	×	√	✓	✓	✓	✓
17	6	MCS Usage %	100%	0%	0%	0%	0%	20%	40%	70%	100%	0%	0%	0%	0%	0%	100%	100%	100%	100%	100%
18	2	Est Time Until Operational (From 2015	6	6	6	6	6	6	6	6	6	11	9	10	10	10	15	10	10	10	11
19	2,3,5	Annual O&M Cost	\$240.0 K	\$300.0 K	\$240.0 K	\$240.0 K	\$240.0 K	\$240.0 K	\$240.0 K	\$240.0 K	\$240.0 K	\$300.0 K	\$.0 K	\$1200.0 K	\$1200.0 K	\$1200.0 K	\$450.0 K	\$1138.1 K	\$1139.1 K	\$819.3 K	\$230.3 K
20	2,4	TIMP Cost (Pigging Every 7 Years	\$500.0 K	\$1400.0 K	\$500.0 K	\$500.0 K	\$500.0 K	\$500.0 K	\$500.0 K	\$500.0 K	\$500.0 K	\$500.0 K	\$.0 K	\$.0 K	\$.0 K	\$.0 K	\$500.0 K	\$1500.0 K	\$1500.0 K	\$1500.0 K	\$500.0 K

21 22 Importing Gas¹

23	Alternative Pipeline Size	Current System Capacity (MMcfd)	System Capacity w/ Line 3010 [MMcfd]	Capacity Shortfall [MMcfd]	NG Incremental Transport Cost (\$/dekatherm)	NG Incremental Transport Cost (\$/MMcf)	
24	10 Inch	630	570	60	0.3	300	6,570,000
25	12 inch	630	590	40	0.3	300	4,380,000
26	16 inch	630	630	0	0.3	300	

- Focinotes

 1. The 10-inch and 12-inch alternate diameter pipelines do not meet regulatory requirements for natural gas demand on a one in ten year winter day. It is assumed that these alternatives will require the import of gas via the Clay Mesa receipt point. The fixed costs used for these alternatives include the present value of gas required for the period analyzed, assuming a 2015-rate of \$0.30!dekatherm, assuming a 60 MMcld shortfall for the 10-inch pipeline and a 40 MMcld shortfall for the 12-inch pipeline. It was assumed for either option that the required import capacity would have to be contracted for the entire year.

 2. See Prepared Direct Testimony of Neil Navin (March 21, 2016), page 31, workpaper Estimated Fixed and Operating Costs for Proposed Project and Alterna

 3. Following deating. Line 1600 maintenance will fall under the DIMP requirements. These have not been considered not be required for pipelines with a diameter of 36' or greater. It is assumed that no additional compression is assumed to not be required for pipelines with a diameter of 16' or less.

WORK PAPER TABLE - AVOIDED COST MODEL - COSTS OVER 00 YEARS (AC 1.2)
ANNUAL COSTS BY PROJECT ALTERNATE, FOR AVOIDED COSTS AND O&M COSTS
A.15-09-013 VOLUME III - COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 2017)

Line No.		PV (X years after operational)	0	1	2 3	4	5	6	7	8	9	10	11	12	13
2	A Proposed Project (Line 3602)	100													
4	,	PV	2015	2016 2	2018	2019	2020	2021 Operational Year	2022	2023	2024	2025	2026	2027	2028
6	1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$ (100,285,483) \$ (89,968,134)	S - S	- S	- \$ -	s -	S - S	- \$ (6.964.340) \$	- \$ (7.166.306) \$	(7,374,129) \$	- \$ (7.587.979) \$	- \$ (7.808.030) \$	- \$ (8.034.463) \$	- \$ (8.267.462) \$	(8,507,219)
8	3 Total Avoided Costs	\$ (190,253,617)		- \$	- \$	\$ -	\$ - \$	(6,964,340) \$	(7,166,306) \$		(7,587,979) \$	(7,808,030) \$		(8,267,462) \$	(8,507,219)
9 10	Manual PV calc over 100 yrs for L3602 (Columns H to DJ	(190,253,617)	\$ - \$	- \$	- \$ -	s -	s - s	(4,119,369) \$	(3,932,490) \$	(3,754,088) \$	(3,583,780) \$	(3,421,199) \$	(3,265,993) \$	(3,117,828) \$	(2,976,384)
11 12															
13	4 Annual O&M Cost 5 Pigging to Occur	\$ 3,680,546 N/A	\$ - \$	FALSE FA	- \$ -	\$ -	\$ - \$	284,907 \$ FALSE	293,170 \$	301,671 \$ FALSE	310,420 \$	319,422 \$	328,685 \$ FALSE	338,217 \$ FALSE	348,026 TRUE
15	6 TIMP Cost	\$ 904,581	s - s	- \$	- \$ -	\$ -	\$ - \$	- S	- \$	- \$	- \$	- \$	- \$	- \$	725,053
16 17	7 Total O&M Costs	\$ 4,585,126	s - s	- \$	- \$	\$ -	5 - 5	284,907 \$	293,170 \$	301,671 \$	310,420 \$	319,422 \$	328,685 \$	338,217 \$	1,073,079
18 19	B Hydrotest Alternate (Line 1600)	PV	2015	2016 2	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
20 21	1 Future L1600 Replacement Cost	\$ -	s - s	- \$	- s -	s -	s - s	Operational Year	- \$	- \$	- s	- \$	- S	- \$	-
22 23	2 MCS O&M and Émissions Cost 3 Total Avoided Costs	\$ -	S - S	- S	- \$	\$ -	\$ - \$	- S	- \$	- \$	- S	- \$	- S	- \$	-
24	3 Total Avoided Costs		- 3	- 3	- \$ -	3 -	s - s	- 3	- 3	- 3	- \$	- 13	- 3	- \$	-
25 26 27	4 Annual O&M Cost	\$ 4,242,275	s - s	- \$	- \$ -	\$ -	\$ - \$	356,134 \$	366,462 \$	377,089 \$	388,025 \$	399,278 \$	410,857 \$	422,772 \$	435,032
27 28	5 Pigging to Occur 6 TIMP Cost	N/A \$ 1,574,602	s - s	- 8	- S -	s -	s . s	FALSE - S	FALSE - S	FALSE - S	FALSE - S	FALSE - S	FALSE - S	FALSE - \$	TRUE 2,030,149
29	7 Total O&M Costs	\$ 5,816,878	s - s	- \$	- \$ -	\$ -	\$ - \$	356,134 \$	366,462 \$	377,089 \$	388,025 \$	399,278 \$	410,857 \$	422,772 \$	2,465,181
30 31	C1 Alternative Diameter Pipeline (10")	P.V.	****				0000	0001				0005			2000
32 33 34		PV	2015	2016 2	2018	2019	2020	2021 Operational Year	2022	2023	2024	2025	2026	2027	2028
34 35	1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$ (100,285,483) \$	\$ - \$	- \$ - \$	- \$ - \$	\$	\$ - \$ \$ - \$	- S	- \$	- \$	- \$	- S	- S	- \$ - \$	
36	3 Total Avoided Costs	\$ (100,285,483)	\$ - \$	- š	- \$ -	\$ -	\$ - \$	- Š	- \$	- \$	- \$	- \$	- Š	- \$	-
38															
39 40	4 Annual O&M Cost 5 Pigging to Occur	\$ 3,680,546 N/A	\$ - \$	FALSE FA	- \$ - ALSE FALSE	\$ - FALSE	FALSE - \$	284,907 \$ FALSE	293,170 \$ FALSE	301,671 \$ FALSE	310,420 \$ FALSE	319,422 \$ FALSE	328,685 \$ FALSE	338,217 \$ FALSE	348,026 TRUE
41 42	6 TIMP Cost 7 Cost of Importing Gas	\$ 904,581 \$ 100,754,939	\$ - \$ \$ - \$	- S	- \$ -	s -	\$ - \$ \$ - \$	- \$ 7,799,336 \$	- \$ 8,025,517 \$	- \$ 8,258,256 \$	- \$ 8,497,746 \$	- \$ 8,744,181 \$	- \$ 8,997,762 \$	- \$ 9,258,697 \$	725,053 9,527,199
43	8 Total O&M Costs	\$ 105,340,065	s - s	- \$	- \$ -	\$ -	\$ - \$	284,907 \$	293,170 \$	301,671 \$	310,420 \$	319,422 \$	328,685 \$	338,217 \$	1,073,079
44 45	C2 Alternative Diameter Pipeline (12")														
46 47		PV	2015	2016 2	2018	2019	2020	2021 Operational Year	2022	2023	2024	2025	2026	2027	2028
48	1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$ (100,285,483)	\$ - \$	- \$	- \$ -	\$ -	\$ - \$	- S	- \$	- \$	- \$	- \$ - \$	- \$	- \$	-
50	3 Total Avoided Costs	\$ (100,285,483)	\$ - \$	- \$	- \$ -	\$ -	\$ - \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
51 52															
53 54	4 Annual O&M Cost 5 Pigging to Occur	\$ 3,680,546 N/A	FALSE		- \$ -	\$ - FALSE	\$ - \$	284,907 \$ FALSE	293,170 \$ FALSE	301,671 \$ FALSE	310,420 \$ FALSE	319,422 \$ FALSE	328,685 \$ FALSE	338,217 \$ FALSE	348,026 TRUE
55 56	6 TIMP Cost 7 Cost of Importing Gas	\$ 904,581 \$ 67,169,959	S - S	- \$	- \$	\$ -	\$ - \$	- \$ 5,199,557 \$	5,350,344 \$	5,505,504 \$	5,665,164 \$	- \$ 5,829,454 \$	5,998,508 \$	6,172,465 \$	725,053 6,351,466
57	8 Total O&M Costs	\$ 71,755,086	\$ - \$	- Š	- š -	\$ -	\$ - \$	284,907 \$	293,170 \$	301,671 \$	310,420 \$	319,422 \$	328,685 \$	338,217 \$	1,073,079
58 59	C3 Alternative Diameter Pipeline (16")														
60 61		PV	2015	2016 2	017 2018	2019	2020	2021 Operational Year	2022	2023	2024	2025	2026	2027	2028
62 63	1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$ (100,285,483) \$	\$ - \$ \$ - \$	- S	- \$ - - \$ -	s -	\$ - \$ \$ - \$	- S	- \$ - \$	- S	- \$	- S	- S	- \$	-
64	3 Total Avoided Costs	\$ (100,285,483)	\$ - \$	- \$	- \$ -	\$ -	\$ - \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
66															
67 68	4 Annual O&M Cost 5 Pigging to Occur	\$ 3,680,546 N/A	FALSE	FALSE FA	- \$ - ALSE FALSE	\$ - FALSE	FALSE	284,907 \$ FALSE	293,170 \$ FALSE	301,671 \$ FALSE	310,420 \$ FALSE	319,422 \$ FALSE	328,685 \$ FALSE	338,217 \$ FALSE	348,026 TRUE
69 70	6 TIMP Cost 7 Total O&M Costs	\$ 904,581 \$ 4,585,126		- S	- \$ -	\$ -	\$ - <u>\$</u>	- S 284,907 \$	- \$ 293,170 \$	301,671 \$	310,420 \$	- \$ 319,422 \$	- S 328,685 \$	338,217 \$	725,053 1,073,079
71 72	C4 Alternative Diameter Pipeline (20")	4,000,120					1	204,007	250,110	001,011	010,420 0	010,422	020,000 0	000,211	1,010,010
73	C4 Alternative Diameter Pipeline (20)	PV	2015	2016 2	1017 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
74 75	1 Future L1600 Replacement Cost	\$ (100,285,483)	s - s	- \$	- S -	s -	s - s	Operational Year - \$	- \$	- \$	- \$	- \$	- S	- \$	-
76 77	2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$ (17,993,627) \$ (118,279,110)	s - s	- S	· \$ ·	\$ -	\$ - S	(1,392,868) \$ (1,392,868) \$	(1,433,261) \$ (1,433,261) \$	(1,474,826) \$ (1,474,826) \$	(1,517,596) \$	(1,561,606) \$	(1,606,893) \$ (1,606,893) \$	(1,653,492) \$	(1,701,444)
78		(**************************************					, ,,	(-)	(1) 100 (0) 1	(1)	(.,,,,,	(.,,==,,===)	(-))) -	(-)) +	(1) 1)
80	4 Annual O&M Cost	\$ 3,680,546	\$ - \$	- \$	- \$ -	\$ -	\$ - \$	284,907 \$	293,170 \$	301,671 \$	310,420 \$	319,422 \$	328,685 \$	338,217 \$	348,026
81 82	5 Pigging to Occur 6 TIMP Cost	N/A \$ 904,581		FALSE F/	ALSE FALSE	FALSE \$ -	\$ - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	725,053
83 84	7 Total O&M Costs	\$ 4,585,126	s - s	- \$	- \$ -	\$ -	\$ - \$	284,907 \$	293,170 \$	301,671 \$	310,420 \$	319,422 \$	328,685 \$	338,217 \$	1,073,079
85	C5 Alternative Diameter Pipeline (24")	DV	2015	2016	1017 2010	2010	2020	2021	2022	2022	2024	2025	2026	2027	2029 —
87	4 Fisher I 4000 Perlament Cost	PV (400	2013	2010 2	2016	2019	2020	2021 Operational Year	2022	2025	2024	2025	2020	2027	2020
88 89	1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$ (100,285,483) \$ (35,987,253)	s - s	- S	- \$ - - \$ -	\$ - \$ -	5 - S S - S	- \$ (2,785,736) \$	(2,866,522) \$	- \$ (2,949,652) \$	- \$ (3,035,192) \$	(3,123,212) \$	- \$ (3,213,785) \$	(3,306,985) \$	(3,402,888)
90	3 Total Avoided Costs	\$ (136,272,737)	s - s	- \$	- \$ -	\$ -	s - s	(2,785,736) \$	(2,866,522) \$	(2,949,652) \$	(3,035,192) \$	(3,123,212) \$	(3,213,785) \$	(3,306,985) \$	(3,402,888)
92	4 Assurat COM Cont	0 000 510	[e	Le	Te.	le '		204.00=1.0	202 472 17	204 671 72	240 420 72	240.4201.5	220 005 1 2	220 247 7	240.020
93 94	4 Annual O&M Cost 5 Pigging to Occur	\$ 3,680,546 N/A	\$ - \$	FALSE F	- \$ -	\$ - FALSE	\$ - \$	284,907 \$ FALSE	293,170 \$ FALSE	301,671 \$ FALSE	310,420 \$ FALSE	319,422 \$ FALSE	328,685 \$ FALSE	338,217 \$ FALSE	348,026 TRUE
95 96	6 TIMP Cost 7 Total O&M Costs	\$ 904,581 \$ 4,585,126	\$ - S	- \$ - \$	- \$ - \$	\$ - \$ -	\$ - \$ \$ - \$	- S 284,907 \$	- \$ 293,170 \$	- \$ 301,671 \$	- \$ 310,420 \$	- \$ 319,422 \$	- \$ 328,685 \$	- \$ 338,217 \$	725,053 1,073,079
97		.,,000,120	. 19	1,7	1.7			,3/	,./5						- specialized

Line No.		PV (X years aft	er operational)	14	15	16	17	18	19	20	21	22	23	24	25	26
2 3 4	A Proposed Project (Line 3602)	1	00 V	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
5 6 7	1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	S. c	(100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$ (10.391.907) \$	- \$	- \$	- \$ (11.322.475) \$	(334,683,589) \$	(344,389,413) \$	(12 336 373)
8	3 Total Avoided Costs	\$	(190,253,617) \$	(8,753,928) \$	(9,007,792) \$	(9,269,018) \$	(9,537,820) \$	(9,814,416) \$	(10,099,035) \$	(10,391,907) \$	(10,693,272) \$	(11,003,377) \$	(11,322,475) \$	(346,334,415) \$	(356,378,113) \$	(12,336,373)
9 10 11	Manual PV calc over 100 yrs for L3602 (Columns H to DJ	J) \$	(190,253,617) \$	(2,841,358) \$	(2,712,457) \$	(2,589,403) \$	(2,471,933) \$	(2,359,791) \$	(2,252,737) \$	(2,150,539) \$	(2,052,978) \$	(1,959,842) \$	(1,870,932) \$	(53,092,583) \$	(50,683,985) \$	(1,627,679)
12 13	4 Annual O&M Cost	S.	3,680,546 \$	358,118 \$ FALSE	368,504 \$ FALSE	379,190 \$	390,187 \$	401,502 \$ FALSE	413,146 \$ FALSE	425,127 \$	437,456 \$ FALSE	450,142 \$ FALSE	463,196 \$ FALSE	476,629 \$	490,451 \$ FALSE	504,674 FALSE
15 16	5 Pigging to Occur 6 TIMP Cost 7 Total O&M Costs	\$	904,581 \$ 4,585,126 \$	- \$ 358,118 \$	- \$ 368,504 \$	- \$ 379,190 \$	- \$ 390,187 \$	- \$ 401,502 \$	- \$ 413,146 \$	885,681 \$ 1,310,808 \$	- \$ 437,456 \$	- \$ 450,142 \$	- \$ 463,196 \$	- \$ 476,629 \$	- \$ 490,451 \$	504,674
17 18 19	B Hydrotest Alternate (Line 1600)	P	eV .	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
20 21	1 Future L1600 Replacement Cost			2020	2000	2001	2002	2000	2004	2000	2000	2007	2000	2003	2040	2041
22	2 MCS O&M and Emissions Cost	S	- \$	- \$	- \$	- \$	- 5	- S	- \$	- 5	- 5	- 5	- 5	- 5	- 5	-
23 24	3 Total Avoided Costs	\$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	
25 26 27	4 Annual O&M Cost	\$	4,242,275 \$	447,648 \$	460,630 \$	473,988 \$	487,734 \$	501,878 \$	516,432 \$	531,409 \$	546,820 \$	562,677 \$	578,995 \$	595,786 \$	613,064 \$	504,674
27 28	5 Pigging to Occur 6 TIMP Cost	N/A s	1.574.602 \$	FALSE . S	FALSE	FALSE . S	FALSE	FALSE	FALSE	TRUE 2.479.908 \$	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
29	7 Total O&M Costs	\$	5,816,878 \$	447,648 \$	460,630 \$	473,988 \$	487,734 \$	501,878 \$	516,432 \$	3,011,317 \$	546,820 \$	562,677 \$	578,995 \$	595,786 \$	613,064 \$	504,674
30 31 32	C1 Alternative Diameter Pipeline (10")			2020	2020	2024	2022	2022	2024	2025	2020	2027	2020	2020	2040	2044
32 33 34			•	2029	2030	2031	2032	2033	2034	2033	2036	2037	2036	2039	2040	2041
34 35	1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	S	(100,285,483) \$	- \$	- S	- S	- \$	- \$	- S	- \$	- \$	- \$	- \$	(334,683,589) \$	(344,389,413) \$	
36 37	3 Total Avoided Costs	\$	(100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	(334,683,589) \$	(344,389,413) \$	
38		_														
39 40	4 Annual O&M Cost 5 Pigging to Occur	N/A	3,680,546 \$	358,118 \$ FALSE	368,504 \$ FALSE	379,190 \$ FALSE	390,187 \$ FALSE	401,502 \$ FALSE	413,146 \$ FALSE	425,127 \$ TRUE	437,456 \$ FALSE	450,142 \$ FALSE	463,196 \$ FALSE	476,629 \$ FALSE	490,451 \$ FALSE	504,674 FALSE
41 42	6 TIMP Cost	S	904,581 \$ 100,754,939 \$	9.803.488 \$	- \$ 10.087.789 \$	- \$ 10,380,335 \$	10,681,365 \$	- \$ 10.991.124 \$	- \$ 11.309.867 \$	885,681 \$ 11,637,853 \$	- \$ 11.975.351 \$	- \$ 12,322,636 \$	- \$ 12,679,992 \$	- \$ 13.047.712 \$	13.426.096 \$	13,815,452
43	7 Cost of Importing Gas 8 Total O&M Costs	\$	105,340,065 \$	358,118 \$	368,504 \$	379,190 \$	390,187 \$	401,502 \$	413,146 \$	1,310,808 \$	437,456 \$	450,142 \$	463,196 \$	476,629 \$	490,451 \$	504,674
44 45	C2 Alternative Diameter Pipeline (12")		200	2020	2020	2024	2022	2022	2024	2025	2020	2027	2020	2020	2040	2044
46			·	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
48 49	1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$	(100,285,483) \$	- S	- \$	- S	- \$	- S	- S	- S	- \$	- \$	- S	(334,683,589) \$	(344,389,413) \$	-
50	3 Total Avoided Costs	\$	(100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	(334,683,589) \$	(344,389,413) \$	-
51 52																
52 53 54	4 Annual O&M Cost 5 Pigging to Occur	\$ N/A	3,680,546 \$	358,118 \$ FALSE	368,504 \$ FALSE	379,190 \$ FALSE	390,187 \$ FALSE	401,502 \$ FALSE	413,146 \$ FALSE	425,127 \$ TRUE	437,456 \$ FALSE	450,142 \$ FALSE	463,196 \$ FALSE	476,629 \$ FALSE	490,451 \$ FALSE	504,674 FALSE
55	6 TIMP Cost	\$	904,581 \$	- \$	- \$	- \$	- \$	- \$	- \$	885,681 \$	- \$	- \$	- \$	- \$	- \$	-
56 57	7 Cost of Importing Gas 8 Total O&M Costs	\$	67,169,959 \$ 71,755,086 \$	6,535,659 \$ 358,118 \$	6,725,193 \$ 368,504 \$	6,920,223 \$ 379,190 \$	7,120,910 \$ 390,187 \$	7,327,416 \$ 401,502 \$	7,539,911 \$ 413,146 \$	7,758,569 \$ 1,310,808 \$	7,983,567 \$ 437,456 \$	8,215,091 \$ 450,142 \$	8,453,328 \$ 463,196 \$	8,698,475 \$ 476,629 \$	8,950,730 \$ 490,451 \$	9,210,302 504,674
58 59 60	C3 Alternative Diameter Pipeline (16")			***		****	***	****	0001	2005	***		0000			2011
61		P	v I	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
62 63	Future L1600 Replacement Cost MCS O&M and Emissions Cost	\$	(100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	(334,683,589) \$	(344,389,413) \$	-
64	3 Total Avoided Costs	\$	(100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	(334,683,589) \$	(344,389,413) \$	-
65 66 67	4 Annual O&M Cost		0.000.510.10	050 440 0	000 504 0	070 100 10	390 187 \$	101 500 10	413 146 S	105 107 0	107 150 15	450 440 10	463 196 S	476 629 S	100 151 10	501.071
68	5 Pigging to Occur	N/A	3,680,546 \$	358,118 \$ FALSE	368,504 \$ FALSE	379,190 \$ FALSE	390,187 \$ FALSE	401,502 \$ FALSE	413,146 \$ FALSE	425,127 \$ TRUE	437,456 \$ FALSE	450,142 \$ FALSE	463,196 \$ FALSE	4/6,629 \$ FALSE	490,451 \$ FALSE	504,674 FALSE
69 70	6 TIMP Cost 7 Total O&M Costs	\$	904,581 \$ 4,585,126 \$	358,118 \$	368,504 \$	379,190 \$	390,187 \$	401,502 \$	413,146 \$	885,681 \$ 1,310,808 \$	437,456 \$	450,142 \$	463,196 \$	476,629 \$	490,451 \$	504,674
71 72	C4 Alternative Diameter Pipeline (20")															
73 74		P	V	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
75	1 Future L1600 Replacement Cost	\$	(100,285,483) \$	- \$	- \$	- S	- \$	- S	- \$	- S	- \$	- \$	- \$	(334,683,589) \$	(344,389,413) \$	-
76 77	2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$	(17,993,627) \$ (118,279,110) \$	(1,750,786) \$	(1,801,558) \$	(1,853,804) \$ (1,853,804) \$	(1,907,564) \$	(1,962,883) \$	(2,019,807) \$ (2,019,807) \$	(2,078,381) \$ (2,078,381) \$	(2,138,654) \$ (2,138,654) \$	(2,200,675) \$ (2,200,675) \$	(2,264,495) \$	(2,330,165) \$	(2,397,740) \$ (346,787,153) \$	(2,467,275)
78	o roun Avoided costs		(110,210,110)] \$	(1,100,100) \$	(1,001,000) \$	(1,000,004) 0	(1,001,004)] ©	(1,502,000)] \$	(2,015,007)	(2,010,001)	(2,100,004)] \$	(2,200,010)] \$	(2,204,400)] \$	(001,010,104)] \$	(040,101,100) \$	(2,407,270)
79 80	4 Annual O&M Cost	S	3,680,546 \$	358,118 \$	368,504 \$	379,190 \$	390,187 \$	401,502 \$	413,146 \$	425,127 \$	437,456 \$	450,142 \$	463,196 \$	476,629 \$	490,451 \$	504,674
81 82	5 Pigging to Occur 6 TIMP Cost	N/A e	904.581 \$	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE 885 681 S	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
83	7 Total O&M Costs	\$	4,585,126 \$	358,118 \$	368,504 \$	379,190 \$	390,187 \$	401,502 \$	413,146 \$	1,310,808 \$	437,456 \$	450,142 \$	463,196 \$	476,629 \$	490,451 \$	504,674
84 85	C5 Alternative Diameter Pipeline (24")			***	****	****	****		0004	2005	****		0000		***	0044
86 87	4.5. 14000 1		v	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
88 89	1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	S S	(100,285,483) \$	(3.501.571) \$	- \$ (3.603.117) \$	(3.707.607) \$	- \$ (3.815.128) \$	(3.925.767) \$	(4.039.614) \$	- S (4.156.763) S	(4.277.309) \$	- \$ (4.401.351) \$	- \$ (4.528.990) \$	(334,683,589) \$	(344,389,413) \$	(4,934,549)
90	3 Total Avoided Costs	\$	(136,272,737) \$	(3,501,571) \$	(3,603,117) \$	(3,707,607) \$	(3,815,128) \$	(3,925,767) \$	(4,039,614) \$	(4,156,763) \$	(4,277,309) \$	(4,401,351) \$	(4,528,990) \$	(339,343,920) \$	(349,184,893) \$	(4,934,549)
92	4 Annual O&M Cost	S	3.680.546 \$	358.118 I S	368.504 S	379.190 S	390,187 \$	401.502 \$	413,146 \$	425,127 \$	437,456 \$	450,142 \$	463,196 \$	476,629 \$	490,451 \$	504,674
94	5 Pigging to Occur 6 TIMP Cost	N/A	904 581 \$	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE 885 681 S	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
96	7 Total O&M Costs	\$	904,581 \$ 4,585,126 \$	358,118 \$	368,504 \$	379,190 \$	390,187 \$	401,502 \$	413,146 \$	885,681 \$ 1,310,808 \$	437,456 \$	450,142 \$	463,196 \$	476,629 \$	490,451 \$	504,674
97																

Line No. 1		PV (X years after operatio	nal) :	27	28	29	30	31	32	33	34	35	36	37	38 39	
2 3 4	A Proposed Project (Line 3602)	100 PV	2	042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053 2054	
5	1 Future L1600 Replacement Cost	\$ (100,28	5 483) \$. 9	. 9	. 9				. 9	. 9	. 9	. 9	. 9	- 18	4
7	2 MCS O&M and Emissions Cost	\$ (89,96)	8,134) \$	(12,694,127) \$	(13,062,257) \$	(13,441,063) \$	(13,830,853) \$	(14,231,948) \$	(14,644,675) \$	(15,069,370) \$	(15,506,382) \$	(15,956,067) \$	(16,418,793) \$	(16,894,938) \$	(17,384,891) \$ (17,889,05	53)
8	3 Total Avoided Costs	\$ (190,25	3,617) \$	(12,694,127) \$	(13,062,257) \$	(13,441,063) \$	(13,830,853) \$	(14,231,948) \$	(14,644,675) \$	(15,069,370) \$	(15,506,382) \$	(15,956,067) \$	(16,418,793) \$	(16,894,938) \$	(17,384,891) \$ (17,889,05	53)
10 11 12	Manual PV calc over 100 yrs for L3602 (Columns H to D	OJ) \$ (190,25	3,617) \$	(1,553,838) \$	(1,483,346) \$	(1,416,053) \$	(1,351,812) \$	(1,290,486) \$	(1,231,942) \$	(1,176,053) \$	(1,122,701) \$	(1,071,768) \$	(1,023,146) \$	(976,730) \$	(932,420) \$ (890,12	20)
12	4 Annual O&M Cost	\$ 3.68	0,546 \$	519,310 \$	534,370 \$	549,866 \$	565,812 \$	582,221 \$	599,105 \$	616,479 \$	634,357 \$	652,754 \$	671,684 \$	691,162 \$	711,206 \$ 731,83	31
14	5 Pigging to Occur	N/A	TF	RUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE FALSE	_
15	6 TIMP Cost 7 Total O&M Costs	\$ 90-	4,581 \$ 5,126 \$	1,081,895 \$ 1,601,205 \$	534,370 \$	549,866 \$	565,812 \$	582,221 \$	599,105 \$	616,479 \$	1,321,578 \$ 1,955,935 \$	652,754 \$	671,684 \$	691,162 \$	711,206 \$ 731,83	21
17 18 19	B Hydrotest Alternate (Line 1600)	9,30	5,120 \$	1,001,203	334,370 3	343,000 3	303,012	302,221	333,103 \$	010,475	1,000,000 \$	032,734 \$	071,004	051,102	711,200 3 731,03	
19		PV		.042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053 2054	
20 21	1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$	- \$	- \$	- \$	- S	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- S -	4
22 23	3 Total Avoided Costs	\$	- S	- S	- S	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- S	- S	· \$ ·	-
24	5 Total Avoided Costs	•	1.*			1.0									, i	
25	4 Annual O&M Cost	g 4.24	2.275 \$	519.310 S	534.370 \$	549,866 \$	565.812 \$	582,221 \$	599.105 \$	616,479 \$	634,357 \$	652,754 \$	671.684 S	691,162 \$	711,206 \$ 731,83	21
26 27	5 Pigging to Occur	N/A	EA	ALSE	FALSE SA4,370	FALSE S49,000 \$	FALSE \$	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE FALSE	-
28	6 TIMP Cost		4,602 \$	- \$	- \$	- \$	- \$	- \$	- \$	1,284,332 \$	- \$	- \$	- \$	- \$	- \$ -	_
29 30	7 Total O&M Costs	ə 5,810	6,878 \$	519,310 \$	534,370 \$	549,866 \$	565,812 \$	582,221 \$	599,105 \$	1,900,812 \$	634,357 \$	652,754 \$	671,684 \$	691,162 \$	711,206 \$ 731,83	31
30 31	C1 Alternative Diameter Pipeline (10")	DV.		242	2042	2044	2045	2046	2047	2040	2040	2050	2054	2052	2052	_
32 33 34 35		PV	2	.042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053 2054	
34	1 Future L1600 Replacement Cost	\$ (100,28	5,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	7
35 36	2 MCS O&M and Émissions Cost 3 Total Avoided Costs	\$ (100.28)	5,483) \$	- S	- S	- S	- \$ - \$	- S	- S	- S	- S	- S	- S	- S	- S -	-1
37		1.30,20.	.,n -			1.3	1.4	1.4	1.4	T.	1.*	1.4	1.4	1.9	1.*	
38 39	4 Annual O&M Cost	\$ 3.68	0,546 \$	519,310 \$	534,370 \$	549,866 \$	565,812 \$	582,221 \$	599,105 \$	616,479 \$	634,357 \$	652,754 \$	671,684 \$	691,162 \$	711,206 \$ 731,83	31
40	5 Pigging to Occur	N/A	TF	RUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE FALSE	
41 42	6 TIMP Cost 7 Cost of Importing Gas	\$ 90	4,581 \$	1,081,895 \$ 14,216,101 \$	- \$ 14,628,368 \$	- \$ 15,052,590 \$	- \$ 15,489,115 \$	- \$ 15,938,300 \$	- \$ 16,400,510 \$	- \$ 16,876,125 \$	1,321,578 \$ 17,365,533 \$	- \$ 17,869,133 \$	- \$ 18,387,338 \$	- \$ 18,920,571 \$	- \$ - 19,469,267 \$ 20,033,87	76
43	8 Total O&M Costs	\$ 105,34	0,065 \$	1,601,205 \$	534,370 \$	549,866 \$	565,812 \$	582,221 \$	599,105 \$	616,479 \$	1,955,935 \$	652,754 \$	671,684 \$	691,162 \$	711,206 \$ 731,83	
44 45	C2 Alternative Diameter Pipeline (12")												•		•	_
46	C2 Alternative Diameter Pipeline (12")	PV	2	042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053 2054	
47	1 Future L1600 Replacement Cost		5,483) \$											- 10		_
48 49 50	2 MCS O&M and Emissions Cost	\$ (100,28)	- S	- S	- s	- s	- s	- s	- S	- S	- S	- S	- S	- s	- S -	-
50	3 Total Avoided Costs	\$ (100,28	5,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$ -	
51 52 53 54 55 56 57																_
53	4 Annual O&M Cost 5 Pigging to Occur	\$ 3,68	0,546 \$	519,310 \$	534,370 \$	549,866 \$ FALSE	565,812 \$	582,221 \$	599,105 \$ FALSE	616,479 \$	634,357 \$	652,754 \$ FALSE	671,684 \$	691,162 \$	711,206 \$ 731,83	31
54 55	6 TIMP Cost	N/A \$ 90-	4,581 \$	1,081,895 \$	FALSE - S	FALSE - S	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	TRUE 1,321,578 \$	FALSE - S	FALSE - S	FALSE - S	FALSE FALSE	-
56	7 Cost of Importing Gas	\$ 67.16	9.959 \$	9,477,400 S	9,752,245 \$	10,035,060 \$	10,326,077 \$	10,625,533 \$	10,933,674 \$	11,250,750 \$	11,577,022 \$	11,912,755 \$	12,258,225 \$	12,613,714 \$	12,979,512 \$ 13,355,91	17
57	8 Total O&M Costs	\$ 71,75	5,086 \$	1,601,205 \$	534,370 \$	549,866 \$	565,812 \$	582,221 \$	599,105 \$	616,479 \$	1,955,935 \$	652,754 \$	671,684 \$	691,162 \$	711,206 \$ 731,83	31
58 59 60 61 62	C3 Alternative Diameter Pipeline (16")	PV	2	042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053 2054	
62	1 Future L1600 Replacement Cost	\$ (100,28	5,483) \$	- S	- S	- S	- \$	- \$	- \$	- \$	- \$	- \$	- S	- \$	- S -	₹.
63	2 MCS O&M and Emissions Cost	\$	- \$	- \$	- S	- S	- \$	- \$	- \$	- \$	- S	- \$	- S	- S	\$	コ
64 65 66	3 Total Avoided Costs		5,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$ -	=
66 67 68 69	4 Annual O&M Cost 5 Pigging to Occur	\$ 3,680 N/A	0,546 \$	519,310 \$	534,370 \$ FALSE	549,866 \$ FALSE	565,812 \$ FALSE	582,221 \$ FALSE	599,105 \$ FALSE	616,479 \$ FALSE	634,357 \$ TRUE	652,754 \$ FALSE	671,684 \$ FALSE	691,162 \$ FALSE	711,206 \$ 731,83 FALSE FALSE	31
69	6 TIMP Cost		4,581 \$	1,081,895 \$	- \$	- \$	- \$	- \$	- \$	- \$	1,321,578 \$	- \$	- \$	- \$	- S -	=
70	7 Total O&M Costs		5,126 \$	1,601,205 \$	534,370 \$	549,866 \$	565,812 \$	582,221 \$	599,105 \$	616,479 \$	1,955,935 \$	652,754 \$	671,684 \$	691,162 \$	711,206 \$ 731,83	31
71 72 73	C4 Alternative Diameter Pipeline (20")															
73 74		PV	2	042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053 2054	
74 75 76	1 Future L1600 Replacement Cost	\$ (100,28	5,483) \$	- \$	- \$	- \$ (2,688,213) \$	<u>-</u> \$	- \$	<u> </u>	\$	<u>-</u> \$	- \$	- \$	- \$	- S -	
76	2 MCS O&M and Emissions Cost	\$ (17,99)	3,627) \$	(2,538,825) \$	(2,612,451) \$		(2,766,171) \$	(2,846,390) \$	(2,928,935) \$	(3,013,874) \$	(3,101,276) \$	(3,191,213) \$	(3,283,759) \$	(3,378,988) \$	(3,476,978) \$ (3,577,81	
77 78	3 Total Avoided Costs	a (118,279	9,110) \$	(2,538,825) \$	(2,612,451) \$	(2,688,213) \$	(2,766,171) \$	(2,846,390) \$	(2,928,935) \$	(3,013,874) \$	(3,101,276) \$	(3,191,213) \$	(3,283,759) \$	(3,378,988) \$	(3,476,978) \$ (3,577,81	11)
79	4 Annual O&M Cost		0,546 \$	540.240 LC	534,370 S	549.866 S	565,812 \$	582,221 \$	599,105 \$	616,479 \$	634,357 \$	CEO 7E4 ^	671.684 S	691,162 \$	711,206 \$ 731,83	24
80 81	5 Pigging to Occur	N/A	TF	519,310 \$ RUE	534,370 \$ FALSE	FALSE	FALSE	FALSE	FALSE \$	FALSE	TRUE \$	652,754 \$ FALSE	FALSE	FALSE 5	711,206 \$ 731,83 FALSE FALSE	31
82	6 TIMP Cost		4,581 \$	1,081,895 \$	- \$	- \$	- \$	- \$	- \$	- \$	1,321,578 \$	- \$	- S	- \$	- \$ -	
83 84	7 Total O&M Costs	\$ 4,585	5,126 \$	1,601,205 \$	534,370 \$	549,866 \$	565,812 \$	582,221 \$	599,105 \$	616,479 \$	1,955,935 \$	652,754 \$	671,684 \$	691,162 \$	711,206 \$ 731,83	31
84 85 86 87	C5 Alternative Diameter Pipeline (24")	PV	2	042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053 2054	
88	1 Future L1600 Replacement Cost	\$ (100,28	5,483) \$	- S	- \$	- S	- \$	- \$	- \$	- \$	- \$	- S	- S	- \$	- \$ -	i
89 90	2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$ (35,98)	7,253) \$ 2,737) \$	(5,077,651) \$ (5,077,651) \$	(5,224,903) \$ (5,224,903) \$	(5,376,425) \$ (5,376,425) \$	(5,532,341) \$ (5,532,341) \$	(5,692,779) \$ (5,692,779) \$	(5,857,870) \$ (5,857,870) \$	(6,027,748) \$ (6,027,748) \$	(6,202,553) \$ (6,202,553) \$	(6,382,427) \$ (6,382,427) \$	(6,567,517) \$ (6,567,517) \$	(6,757,975) \$ (6,757,975) \$	(6,953,956) \$ (7,155,62 (6,953,956) \$ (7,155,62	
91 92											(7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7					
93	4 Annual O&M Cost 5 Pigging to Occur	\$ 3,68I	0,546 \$	519,310 \$	534,370 \$ FALSE	549,866 \$ FALSE	565,812 \$ FALSE	582,221 \$ FALSE	599,105 \$ FALSE	616,479 \$ FALSE	634,357 \$ TRUE	652,754 \$ FALSE	671,684 \$ FALSE	691,162 \$ FALSE	711,206 \$ 731,83 FALSE FALSE	31
94 95	6 TIMP Cost		4,581 \$	1,081,895 \$	- \$	- \$	- \$	- \$	- \$	- \$	1,321,578 \$	- \$	- \$	- \$	- \$ -	_
96	7 Total O&M Costs	\$ 4,58	5,126 \$	1,601,205 \$	534,370 \$	549,866 \$	565,812 \$	582,221 \$	599,105 \$	616,479 \$	1,955,935 \$	652,754 \$	671,684 \$	691,162 \$	711,206 \$ 731,83	31

Line No.		PV (X years after operational)	40	41	42	43	44	45	46	47	48	49	50	51	52
2	A Proposed Project (Line 3602)	100 PV	2055	2050	2057	2050	2050	2000	2004	2002	2002	2004	2005	2000	2007
5	1 Future L1600 Replacement Cost		2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067
7	2 MCS O&M and Emissions Cost	\$ (100,285,483) \$ \$ (89,968,134) \$	(18,407,836) \$	(18,941,663) \$	(19,490,971) \$	(20,056,209) \$	(20,637,839) \$	(21,236,337) \$	(21,852,190) \$	(22,485,904) \$	(23,137,995) \$	(23,808,997) \$	(24,499,458) \$	(25,209,942) \$	(25,941,030)
8	3 Total Avoided Costs	\$ (190,253,617) \$	(18,407,836) \$	(18,941,663) \$	(19,490,971) \$	(20,056,209) \$	(20,637,839) \$	(21,236,337) \$	(21,852,190) \$	(22,485,904) \$	(23,137,995) \$	(23,808,997) \$	(24,499,458) \$	(25,209,942) \$	(25,941,030)
10 11	Manual PV calc over 100 yrs for L3602 (Columns H to D	J) \$ (190,253,617) \$	(849,739) \$	(811,189) \$	(774,389) \$	(739,258) \$	(705,721) \$	(673,705) \$	(643,142) \$	(613,965) \$	(586,112) \$	(559,522) \$	(534,139) \$	(509,907) \$	(486,775)
12 13	4 Annual O&M Cost	\$ 3,680,546 \$	753,054 \$	774,893 \$	797,365 \$	820,488 \$	844,282 \$	868,767 \$	893,961 \$	919,886 \$	946,562 \$	974,013 \$	1,002,259 \$	1,031,325 \$	1,061,233
14 15	5 Pigging to Occur 6 TIMP Cost	N/A \$ 904 581 \$	FALSE	TRUE 1 614 360 S	FALSE . \$	FALSE . \$	FALSE . S	FALSE	FALSE	FALSE	TRUE 1 972 005 \$	FALSE	FALSE	FALSE	FALSE
16	7 Total O&M Costs	\$ 4,585,126 \$	753,054 \$	2,389,253 \$	797,365 \$	820,488 \$	844,282 \$	868,767 \$	893,961 \$	919,886 \$	2,918,567 \$	974,013 \$	1,002,259 \$	1,031,325 \$	1,061,233
17 18	B Hydrotest Alternate (Line 1600)														
19 20		PV	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067
21 22	1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	S - S	- \$ - \$	- S	- S	- S	- S	- S	- \$	- S	- \$	- S	- \$	- S	-
23	3 Total Avoided Costs	\$ - \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
24 25															
26 27	4 Annual O&M Cost 5 Pigging to Occur	\$ 4,242,275 \$ N/A	753,054 \$ TRUE	774,893 \$ FALSE	797,365 \$ FALSE	820,488 \$ FALSE	844,282 \$ FALSE	868,767 \$ FALSE	893,961 \$ FALSE	919,886 \$ TRUE	946,562 \$ FALSE	974,013 \$ FALSE	1,002,259 \$ FALSE	1,031,325 \$ FALSE	1,061,233 FALSE
28 29	6 TIMP Cost 7 Total O&M Costs	\$ 1,574,602 \$ \$ 5,816,878 \$	1,568,863 \$ 2,321,917 \$	- \$ 774,893 \$	- \$ 797,365 \$	- \$ 820.488 \$	- S 844,282 \$	- \$	- S 893,961 S	1,916,428 \$ 2,836,314 \$	- \$ 946,562 \$	- \$ 974.013 \$	1,002,259 \$	- \$ 1,031,325 \$	1,061,233
30		3,010,070 3	2,321,917 3	774,093 \$	797,305 \$	620,400 \$	044,202 \$	000,767 3	893,961 \$	2,636,314 \$	946,362 \$	974,013 \$	1,002,239 \$	1,031,325 \$	1,061,233
31 32	C1 Alternative Diameter Pipeline (10")	PV	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067
33 34	1 Future L1600 Replacement Cost	\$ (100,285,483) \$	- Is	- Is	- Is	- Is	- Is	- 18	- Is	- Is	- \$	- Is	- Is	- Is	
35	2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$ - \$ \$ (100,285,483) \$	- \$	- \$	- \$	- \$	- S	- S	- \$	- \$	- \$ - \$	- \$	- \$	- \$	-
37	3 Total Avoluted Costs	(100,285,483) \$	- 3	- \$	- \$	- \$	- \$	- 3	- \$	- \$	- 13	- \$	- 3	- \$	
38 39	4 Annual O&M Cost	\$ 3,680,546 \$	753,054 \$	774,893 \$	797,365 \$	820,488 \$	844,282 \$	868,767 \$	893,961 \$	919,886 \$	946,562 \$	974,013 \$	1,002,259 \$	1,031,325 \$	1,061,233
40	5 Pigging to Occur 6 TIMP Cost	N/A \$ 904.581 \$	FALSE - \$	TRUE 1.614.360 \$	FALSE - S	FALSE - S	FALSE - S	FALSE - S	FALSE - \$	FALSE - S	TRUE 1.972.005 \$	FALSE - S	FALSE - S	FALSE - S	FALSE
42	7 Cost of Importing Gas 8 Total O&M Costs	\$ 100,754,939 \$ \$ 105,340,065 \$	20,614,859 \$ 753,054 \$	21,212,689 \$ 2,389,253 \$	21,827,857 \$ 797,365 \$	22,460,865 \$ 820,488 \$	23,112,230 \$ 844.282 \$	23,782,485 \$ 868,767 \$	24,472,177 \$ 893,961 \$	25,181,870 \$ 919,886 \$	25,912,145 \$ 2.918,567 \$	26,663,597 \$ 974,013 \$	27,436,841 \$ 1,002,259 \$	28,232,509 \$ 1,031,325 \$	29,051,252
44		\$ 105,340,065 \$	753,054 \$	2,369,253 \$	797,365 \$	820,400 \$	044,202 \$	000,767 3	893,961 \$	919,000 \$	2,910,307 \$	974,013 \$	1,002,239 \$	1,031,325 \$	1,061,233
45 46	C2 Alternative Diameter Pipeline (12")	PV	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067
47 48	1 Future L1600 Replacement Cost	\$ (100,285,483) \$	- IS	- Is	- IS	- Is	- Is	- IS	- IS	- Is	- IS	- Is	- IS	- Is	-
49	2 MCS O&M and Emissions Cost 3 Total Avaided Costs	\$ - \$ \$ (100.285.483) \$	- \$	- S	- S	- \$	- S	- S	- S	- \$	- \$	- S	- \$	- S	-
51	3 Total Avoided Costs	\$ (100,265,465) \$	- 14	- 14				- 1		- 10	- 1*	- 1*	- 14	- 1*	
52 53	4 Annual O&M Cost	\$ 3,680,546 \$	753,054 \$	774,893 \$	797,365 \$	820,488 \$	844,282 \$	868,767 \$	893,961 \$	919,886 \$	946,562 \$	974,013 \$	1,002,259 \$	1,031,325 \$	1,061,233
54 55	5 Pigging to Occur 6 TIMP Cost	N/A \$ 904,581 \$	FALSE - \$	TRUE 1,614,360 \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	1,972,005 \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE -
56 57	7 Cost of Importing Gas 8 Total O&M Costs	\$ 67,169,959 \$ \$ 71,755,086 \$	13,743,239 \$ 753,054 \$	14,141,793 \$ 2,389,253 \$	14,551,905 \$ 797,365 \$	14,973,910 \$ 820,488 \$	15,408,154 \$ 844,282 \$	15,854,990 \$ 868,767 \$	16,314,785 \$ 893,961 \$	16,787,914 \$ 919,886 \$	17,274,763 \$ 2,918,567 \$	17,775,731 \$ 974,013 \$	18,291,227 \$ 1,002,259 \$	18,821,673 \$ 1,031,325 \$	19,367,501 1,061,233
58 59	C3 Alternative Diameter Pipeline (16")	¥ 11,100,000 ¥	100,004	2,000,200	757,505	020,400	044,202	000,707	050,501	515,000 \$	2,510,507	574,010	1,002,200	1,001,020	1,001,200
60	CS Alternative Diameter Pipeline (16)	PV	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067
61 62	1 Future L1600 Replacement Cost	\$ (100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- S	- \$	- \$	- \$	- \$	- \$	- \$	-
63	2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$ - \$ \$ (100,285,483) \$	- S	- \$	- S	- S	- S	- S	- S	- S	- \$ - \$	- S	- S	- S	
65	o roun avoided costs	(100,200,400)] \$		1.0	1,0	1,4		1,4			1,4	1,0	1,0	1,4	
67	4 Annual O&M Cost	\$ 3,680,546 \$	753,054 \$	774,893 \$	797,365 \$	820,488 \$	844,282 \$	868,767 \$	893,961 \$	919,886 \$	946,562 \$	974,013 \$	1,002,259 \$	1,031,325 \$	1,061,233
68 69	5 Pigging to Occur 6 TIMP Cost	N/A \$ 904,581 \$	FALSE - \$	1,614,360 \$	FALSE - \$	1,972,005 \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE -					
70 71	7 Total O&M Costs	\$ 4,585,126 \$	753,054 \$	2,389,253 \$	797,365 \$	820,488 \$	844,282 \$	868,767 \$	893,961 \$	919,886 \$	2,918,567 \$	974,013 \$	1,002,259 \$	1,031,325 \$	1,061,233
71 72 73	C4 Alternative Diameter Pipeline (20")	PV	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067
74	1 Future L1600 Replacement Cost	\$ (100,285,483) \$	To.	1000	10	1000	I e	10	100	Te.	I.e.	10	10	10	
75 76	2 MCS O&M and Emissions Cost	\$ (17,993,627) \$	(3,681,567) \$	(3,788,333) \$	(3,898,194) \$	- \$ (4,011,242) \$	(4,127,568) \$	- \$ (4,247,267) \$	(4,370,438) \$	(4,497,181) \$	(4,627,599) \$	(4,761,799) \$	(4,899,892) \$	(5,041,988) \$	(5,188,206)
77 78	3 Total Avoided Costs	\$ (118,279,110) \$	(3,681,567) \$	(3,788,333) \$	(3,898,194) \$	(4,011,242) \$	(4,127,568) \$	(4,247,267) \$	(4,370,438) \$	(4,497,181) \$	(4,627,599) \$	(4,761,799) \$	(4,899,892) \$	(5,041,988) \$	(5,188,206)
79 80	4 Annual O&M Cost	\$ 3,680,546 \$	753,054 \$	774,893 \$	797,365 \$	820,488 \$	844,282 \$	868,767 \$	893,961 \$	919,886 \$	946,562 \$	974,013 \$	1,002,259 \$	1,031,325 \$	1,061,233
81	5 Pigging to Occur 6 TIMP Cost	N/A \$ 904.581 \$	FALSE	TRUE 1.614.360 \$	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE 1.972.005 \$	FALSE	FALSE	FALSE	FALSE
83	7 Total O&M Costs	\$ 4,585,126 \$	753,054 \$	2,389,253 \$	797,365 \$	820,488 \$	844,282 \$	868,767 \$	893,961 \$	919,886 \$	2,918,567 \$	974,013 \$	1,002,259 \$	1,031,325 \$	1,061,233
84 85	C5 Alternative Diameter Pipeline (24")					·							·		_
86 87		PV	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067
88	1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$ (100,285,483) \$ \$ (35,987,253) \$	- \$ (7,363,134) \$	- \$ (7,576,665) \$	- \$ (7,796,388) \$	- \$ (8,022,484) \$	- \$ (8,255,136) \$	- \$ (8,494,535) \$	- \$ (8,740,876) \$	- \$ (8,994,362) \$	- \$ (9,255,198) \$	- \$ (9,523,599) \$	- \$ (9,799,783) \$	- \$ (10,083,977) \$	(10,376,412)
90	3 Total Avoided Costs	\$ (35,987,253) \$ \$ (136,272,737) \$	(7,363,134) \$	(7,576,665) \$	(7,796,388) \$	(8,022,484) \$	(8,255,136) \$	(8,494,535) \$	(8,740,876) \$	(8,994,362) \$	(9,255,198) \$	(9,523,599) \$	(9,799,783) \$	(10,083,977) \$	(10,376,412)
91 92															
93 94	4 Annual O&M Cost 5 Pigging to Occur	\$ 3,680,546 \$ N/A	753,054 \$ FALSE	774,893 \$ TRUE	797,365 \$ FALSE	820,488 \$ FALSE	844,282 \$ FALSE	868,767 \$ FALSE	893,961 \$ FALSE	919,886 \$ FALSE	946,562 \$ TRUE	974,013 \$ FALSE	1,002,259 \$ FALSE	1,031,325 \$ FALSE	1,061,233 FALSE
95	6 TIMP Cost 7 Total O&M Costs	\$ 904,581 \$ \$ 4,585,126 \$	- S 753,054 \$	1,614,360 \$ 2,389,253 \$	797,365 \$	- \$ 820,488 \$	- S 844,282 \$	- S 868,767 \$	- S 893,961 \$	- \$ 919,886 \$	1,972,005 \$ 2,918,567 \$	974,013 \$	1,002,259 \$	- \$ 1,031,325 \$	1,061,233
97	, , sai Cam Costs	4,303,126 \$	733,034 \$	2,309,233 \$	101,303	020,400 \$	044,202 3	000,/0/ \$	093,901 \$	a13,000 \$	2,010,30/ \$	3/4,013 \$	1,002,239 \$	1,031,323 \$	1,001,233

	PV (X years after opera	ational)	53	54	55	56	57	58	59	60	61	62	63	64	
Proposed Project (Line 3602)	PV		2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	
Future L1600 Replacement Cost	S (100),285,483) \$	- Is	- Is	- Is	- 1:	s - s	- S	- Is	- Is	- 15	- S	- IS	- Is	š
MCS O&M and Émissions Cost Total Avoided Costs	\$ (89,	9,968,134) \$ 0,253,617) \$	(26,693,320) \$ (26,693,320) \$	(27,467,427) \$ (27,467,427) \$	(28,263,982) \$ (28,263,982) \$	(29,083,638)		(30,794,948) \$ (30,794,948) \$	(31,688,001) \$	(32,606,953) \$	(33,552,555) \$	(34,525,579) \$	(35,526,821) \$ (35,526,821) \$	(36,557,099) \$	
														•	
Manual PV calc over 100 yrs for L3602 (Columns H to DJ) \$ (190,	7,253,617) \$	(464,692) \$	(443,611) \$	(423,486) \$	(404,274)	\$ (385,934) \$	(368,425) \$	(351,711) \$	(335,756) \$	(320,524) \$	(305,983) \$	(292,102) \$	(278,850) \$	\$
Annual O&M Cost Pigging to Occur	\$ 3. N/A	3,680,546 \$	1,092,009 \$ FALSE	1,123,677 \$ FALSE	1,156,264 \$	1,189,795 : FALSE	\$ 1,224,299 \$ FALSE	1,259,804 \$ FALSE	1,296,338 \$ FALSE	1,333,932 \$ FALSE	1,372,616 \$ FALSE	1,412,422 \$	1,453,382 \$ FALSE	1,495,530 \$ FALSE	\$
TIMP Cost	\$	904,581 \$	- \$	- \$	2,408,882 \$	FALSE - :	\$ - \$	- S	- \$	- \$	- 5	2,942,546 \$	- \$	- \$	\$
Total O&M Costs	\$ 4,	1,585,126 \$	1,092,009 \$	1,123,677 \$	3,565,146 \$	1,189,795	\$ 1,224,299 \$	1,259,804 \$	1,296,338 \$	1,333,932 \$	1,372,616 \$	4,354,968 \$	1,453,382 \$	1,495,530 \$	_
Hydrotest Alternate (Line 1600)	PV		2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	
Future L1600 Replacement Cost	s	- S	- S	- 8	- 8	- 1:	s - s	- S	- 8	- \$	- 15	- 8	- S	- S	
MCS O&M and Emissions Cost	\$	- \$	- \$	- \$	- \$	- !	s - s	- \$	- \$	- \$	- \$	- \$	- \$	- \$	\$
Total Avoided Costs	\$	- \$	- \$	- \$	- \$	- !	s - s	- \$	- \$	- \$	- \$	- \$	- \$	- \$	<u> </u>
Annual O&M Cost	\$ 4	1,242,275 \$	1,092,009 \$	1,123,677 \$	1,156,264 \$	1,189,795	\$ 1,224,299 \$	1,259,804 \$	1,296,338 \$	1,333,932 \$	1,372,616 \$	1,412,422 \$	1,453,382 \$	1,495,530 \$	\$
Pigging to Occur TIMP Cost	N/A	.574.602 \$	FALSE	TRUE 2 340 994 \$	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE 2 859 617 \$	FALSE	FALSE	FALSE	_
Total O&M Costs		5,816,878 \$	1,092,009 \$	2,340,994 \$ 3,464,671 \$	1,156,264 \$	1,189,795	\$ 1,224,299 \$	1,259,804 \$	1,296,338 \$	1,333,932 \$	4,232,233 \$	1,412,422 \$	1,453,382 \$	1,495,530 \$	<u> </u>
Alternative Diameter Pipeline (10")															
	PV		2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	
Future L1600 Replacement Cost MCS O&M and Emissions Cost	\$ (100, \$),285,483) \$ - \$	- \$	- S	- S		S - S	- S	- \$	- S	- \$	- \$	- \$	- S	<i>j</i> _
Total Avoided Costs	\$ (100),285,483) \$	- \$	- \$	- \$	- :	\$ - \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
Annual O&M Cost	¢ ^	3.680.546 \$	1.092.009 \$	1.123.677 \$	1,156,264 \$	1.189.795	\$ 1,224,299 \$	1.259.804 \$	1.296.338 \$	1.333.932 \$	1.372.616 \$	1.412.422 \$	1.453.382 \$	1.495.530 \$	_
Pigging to Occur	N/A		1,092,009 \$ FALSE	1,123,677 \$ FALSE	TRUE	1,189,795 3 FALSE	5 1,224,299 \$ FALSE	1,259,804 \$ FALSE	1,296,338 \$ FALSE	1,333,932 \$ FALSE	1,372,616 \$ FALSE	TRUE	1,453,382 \$ FALSE	1,495,530 \$ FALSE	_
TIMP Cost Cost of Importing Gas	\$ 400	904,581 \$	- \$ 29,893,739 \$	- \$ 30,760,657 \$	2,408,882 \$ 31,652,716 \$	32,570,645	S - S S 33.515.193 S	- \$ 34,487,134 \$	- \$ 35,487,261 \$	- \$ 36,516,392 \$	- \$	2,942,546 \$ 38,665,053 \$	- \$ 39,786,339 \$	- \$ 40,940,143 \$	_
Total O&M Costs		5,340,065 \$	1,092,009 \$	1,123,677 \$	3,565,146 \$	1,189,795		1,259,804 \$	1,296,338 \$	1,333,932 \$	1,372,616 \$	4,354,968 \$	1,453,382 \$	1,495,530 \$	
Alternative Diameter Pipeline (12")	P\/		2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	_
Future L1600 Replacement Cost	\$ (400	0,285,483) \$	2000	2009	-2070	2071	2012	2075	2074	20/5	20/6	2077	2076	2079	
MCS O&M and Emissions Cost	\$	- \$	- S	- S	- S	- 1	\$ - S	- S	- \$	- S	- 3	- S	- S	- S	_
Total Avoided Costs	\$ (100.),285,483) \$	- \$	- \$	- \$	- :	\$ - \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	_
Annual O&M Cost	\$ 3	3,680,546 \$	1,092,009 \$	1,123,677 \$	1,156,264 \$	1,189,795	\$ 1,224,299 \$	1,259,804 \$	1,296,338 \$	1,333,932 \$	1,372,616 \$	1,412,422 \$	1,453,382 \$	1,495,530 \$	5
Pigging to Occur TIMP Cost	N/A	904,581 \$	FALSE	FALSE	TRUE 2 408 882 \$	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE 2 942 546 \$	FALSE	FALSE	_
TIMP Cost Cost of Importing Gas		904,581 \$	19,929,159 \$	20.507.105 \$	2,408,882 \$	21,713,763	\$ - \$ \$ 22,343,462 \$	22,991,423 \$	23,658,174 \$	24,344,261 \$	25,050,245 \$	2,942,546 \$	26.524.226 S	27,293,429 \$	5
Total O&M Costs	\$ 71.	,755,086 \$	1,092,009 \$	1,123,677 \$	3,565,146 \$	1,189,795	\$ 1,224,299 \$	1,259,804 \$	1,296,338 \$	1,333,932 \$	1,372,616 \$	4,354,968 \$	1,453,382 \$	1,495,530 \$,
Alternative Diameter Pipeline (16")	PV		2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	
Future L1600 Replacement Cost	\$ (100),285,483) \$	- Is	- Is	- Is	- T:	s - Is	- Is	- 18	- Ts	- 15	- Is	- Is	- Is	\$
MCS O&M and Emissions Cost	\$	- \$	- \$	- \$	- \$	- 1	s - s	- S	- \$	- \$	- \$	- \$	- \$	- \$	<u> </u>
Total Avoided Costs	\$ (100,),285,483) \$	- \$	- \$	- \$	- !	s - s	- \$	- \$	- \$	- \$	- \$	- \$	- \$	_
Annual O&M Cost	\$ 3	3,680,546 \$	1,092,009 \$	1,123,677 \$	1,156,264 \$	1,189,795		1,259,804 \$	1,296,338 \$	1,333,932 \$	1,372,616 \$	1,412,422 \$	1,453,382 \$	1,495,530 \$	\$
Pigging to Occur TIMP Cost		904,581 \$	FALSE - \$	FALSE - \$	TRUE 2,408,882 \$	FALSE -	FALSE \$ - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	TRUE 2,942,546 \$	FALSE - \$	FALSE - \$	<u>. </u>
Total O&M Costs	\$ 4,	1,585,126 \$	1,092,009 \$	1,123,677 \$	3,565,146 \$	1,189,795	\$ 1,224,299 \$	1,259,804 \$	1,296,338 \$	1,333,932 \$	1,372,616 \$	4,354,968 \$	1,453,382 \$	1,495,530 \$	_
Alternative Diameter Pipeline (20")	PV		2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	
Future L1600 Replacement Cost	\$ (100	0,285,483) \$. le	. Ie	. Te	. 10	s . Te	. 10	. (e	. 10	. le	. 10	. Te	. 10	3
MCS O&M and Emissions Cost	\$ (17,	7,993,627) \$	(5,338,664) \$	(5,493,485) \$	(5,652,796) \$	(5,816,728)	\$ (5,985,413) \$	(6,158,990) \$	(6,337,600) \$	(6,521,391) \$	(6,710,511) \$	(6,905,116) \$	(7,105,364) \$	(7,311,420) \$	<u>. </u>
Total Avoided Costs	\$ (118,	3,279,110) \$	(5,338,664) \$	(5,493,485) \$	(5,652,796) \$	(5,816,728)	\$ (5,985,413) \$	(6,158,990) \$	(6,337,600) \$	(6,521,391) \$	(6,710,511) \$	(6,905,116) \$	(7,105,364) \$	(7,311,420) \$	<u>i</u>
Annual O&M Cost	\$ 3	3,680,546 \$	1,092,009 \$	1,123,677 \$	1,156,264 \$	1,189,795		1,259,804 \$	1,296,338 \$	1,333,932 \$	1,372,616 \$	1,412,422 \$	1,453,382 \$	1,495,530 \$	š
Pigging to Occur TIMP Cost	N/A S	904,581 \$	FALSE - \$	FALSE - S	TRUE 2,408,882 \$	FALSE -	FALSE S - S	FALSE - S	FALSE - \$	FALSE - \$	FALSE - S	TRUE 2,942,546 \$	FALSE - S	FALSE - S	ŝ
Total O&M Costs	\$ 4	1,585,126 \$	1,092,009 \$	1,123,677 \$	3,565,146 \$	1,189,795	\$ 1,224,299 \$	1,259,804 \$	1,296,338 \$	1,333,932 \$	1,372,616 \$	4,354,968 \$	1,453,382 \$	1,495,530 \$	<u> </u>
Alternative Diameter Pipeline (24")	PV		2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	
Future L1600 Replacement Cost	\$ /400	0,285,483) \$. 10	. 10	. 10	. 10		. 10	_ Te	. 10	. 10	. 10	_ 1e	_ 10	
MCS O&M and Emissions Cost	\$ (35,	5,987,253) \$	(10,677,328) \$	(10,986,971) \$	(11,305,593) \$	(11,633,455)	\$ (11,970,825) \$	(12,317,979) \$	(12,675,201) \$	(13,042,781) \$	(13,421,022) \$	(13,810,232) \$	(14,210,728) \$	(14,622,839) \$	ś
Total Avoided Costs	\$ (136,	5,272,737) \$	(10,677,328) \$	(10,986,971) \$	(11,305,593) \$	(11,633,455)	\$ (11,970,825) \$	(12,317,979) \$	(12,675,201) \$	(13,042,781) \$	(13,421,022) \$	(13,810,232) \$	(14,210,728) \$	(14,622,839) \$	_
		3,680,546 \$	1,092,009 \$	1,123,677 \$	1,156,264 \$	1,189,795	\$ 1,224,299 \$	1,259,804 \$	1,296,338 \$	1,333,932 \$	1,372,616 \$	1,412,422 \$	1,453,382 \$	1,495,530 \$	à
Annual O&M Cost	\$ 3,														
Annual O&M Cost Pigging to Occur TIMP Cost Total O&M Costs	N/A \$	904,581 \$ 1,585,126 \$	FALSE - \$	FALSE - \$ 1,123,677 \$	TRUE 2,408,882 \$ 3,565,146 \$	FALSE - :	FALSE \$ - \$ \$ 1,224,299 \$	FALSE - \$ 1,259,804 \$	FALSE - \$	FALSE - \$ 1,333,932 \$	FALSE - \$ 1,372,616 \$	TRUE 2,942,546 \$ 4,354,968 \$	FALSE - \$	FALSE - \$ 1,495,530 \$,

Line No.

	PV (X years after operational)	66	67	68	69	70	71	72	73	74	75	76	77	
A Proposed Project (Line 3602)	PV	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	
1 Future L1600 Replacement Cost	\$ (100,285,483)	e I		le.			- Is	le.		l e	l e	l e		
2 MCS O&M and Emissions Cost	\$ (89,968,134)	\$ (38,708,155)		(40,985,781) \$	- \$ (42,174,369) \$	(43,397,426) \$	(44,655,951) \$	- \$ (45,950,974) \$	(47,283,552) \$	(48,654,775) \$	- \$ (50,065,764) \$	(51,517,671) \$	(53,011,683) \$	=
3 Total Avoided Costs	\$ (190,253,617)	\$ (38,708,155)	(39,830,691) \$	(40,985,781) \$	(42,174,369) \$	(43,397,426) \$	(44,655,951) \$	(45,950,974) \$	(47,283,552) \$	(48,654,775) \$	(50,065,764) \$	(51,517,671) \$	(53,011,683) \$	_
Manual PV calc over 100 yrs for L3602 (Columns H to D.	J) \$ (190,253,617)	\$ (254, 124)	\$ (242,595) \$	(231,589) \$	(221,083) \$	(211,053) \$	(201,479) \$	(192,339) \$	(183,613) \$	(175,283) \$	(167,331) \$	(159,740) \$	(152,493) \$	=
4 Annual O&M Cost	\$ 3,680,546		1,629,451 \$	1,676,705 \$	1,725,330 \$	1,775,364 \$	1,826,850 \$	1,879,828 \$	1,934,344 \$	1,990,439 \$	2,048,162 \$	2,107,559 \$	2,168,678 \$	Ξ
5 Pigging to Occur 6 TIMP Cost	N/A \$ 904.581	FALSE	FALSE	FALSE	3,594,437 \$	FALSE . S	FALSE	FALSE . \$	FALSE . \$	FALSE	FALSE	4,390,748 \$	FALSE . \$	_
7 Total O&M Costs	\$ 4,585,126	\$ 1,583,529	1,629,451 \$	1,676,705 \$	5,319,767 \$	1,775,364 \$	1,826,850 \$	1,879,828 \$	1,934,344 \$	1,990,439 \$	2,048,162 \$	6,498,307 \$	2,168,678 \$	_
B Hydrotest Alternate (Line 1600)														
1 Future L1600 Replacement Cost	PV	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	
2 MCS O&M and Emissions Cost	\$ -	\$ -	- 3	- \$	- \$	- S	- S	- S	- \$	- \$	- \$	- \$	- 5	_
3 Total Avoided Costs	\$ -	\$ - :	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	_
														_
4 Annual O&M Cost 5 Pigging to Occur	\$ 4,242,275	\$ 1,583,529 :	1,629,451 \$ FALSE	1,676,705 \$	1,725,330 \$ FALSE	1,775,364 \$ FALSE	1,826,850 \$ FALSE	1,879,828 \$ FALSE	1,934,344 \$ FALSE	1,990,439 \$ FALSE	2,048,162 \$	2,107,559 \$ FALSE	2,168,678 \$ FALSE	_
6 TIMP Cost	\$ 1,574,602	\$ - :	- \$	3,493,136 \$	- \$	- \$	- S	- \$	- \$	- \$	4,267,005 \$	- \$	- \$	
7 Total O&M Costs	\$ 5,816,878	\$ 1,583,529	1,629,451 \$	5,169,841 \$	1,725,330 \$	1,775,364 \$	1,826,850 \$	1,879,828 \$	1,934,344 \$	1,990,439 \$	6,315,167 \$	2,107,559 \$	2,168,678 \$	
C1 Alternative Diameter Pipeline (10")	DV.	2021	2002	2002	2024	2025	2006	2097	2000	2020	2000	2001	2002	_
	FV	2001	2002	2003	2004	2003	2000	2007	2000	2009	2090	2091	2092	
1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$ (100,285,483) \$	S - :	- \$	- S	- \$	- S	- \$	- \$	- \$	- \$	- S	- S	- \$	_
3 Total Avoided Costs	\$ (100,285,483)	\$ -	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	_
														_
4 Annual O&M Cost 5 Pigging to Occur	\$ 3,680,546	\$ 1,583,529 : FALSE	1,629,451 \$ FALSE	1,676,705 \$ FALSE	1,725,330 \$ TRUE	1,775,364 \$ FALSE	1,826,850 \$ FALSE	1,879,828 \$ FALSE	1,934,344 \$ FALSE	1,990,439 \$ FALSE	2,048,162 \$ FALSE	2,107,559 \$ TRUE	2,168,678 \$ FALSE	;
6 TIMP Cost	N/A \$ 904,581	\$ - :	·	- S	3,594,437 \$	- S	- S	- \$	- S	- \$	- \$	4.390.748 S	- \$	_
7 Cost of Importing Gas 8 Total O&M Costs	\$ 100,754,939 \$ 105,340,065		44,606,226 \$	45,899,806 \$	47,230,901 \$	48,600,597 \$	50,010,014 \$ 1,826,850 \$	51,460,305 \$	52,952,653 \$	54,488,280 \$	56,068,441 \$	57,694,425 \$ 6,498,307 \$	59,367,564 \$	
	a 105,340,065	\$ 1,583,529	1,629,451 \$	1,676,705 \$	5,319,767 \$	1,775,364 \$	1,826,850 \$	1,879,828 \$	1,934,344 \$	1,990,439 \$	2,048,162 \$	ь,498,307	2,168,678 \$	_
C2 Alternative Diameter Pipeline (12")	PV	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	
1 Future L1600 Replacement Cost	\$ (100.285.483)			e										
2 MCS O&M and Emissions Cost	\$ -	\$ - :	- 3	- \$	- \$	- S	- S	- \$	- \$	- \$	- \$	- \$	- \$	_
3 Total Avoided Costs	\$ (100,285,483)	\$ -	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	_
4 Annual O&M Cost	\$ 3,680,546	\$ 1,583,529	1,629,451 \$	1.676.705 S	1,725,330 \$	1,775,364 \$	1,826,850 \$	1,879,828 \$	1,934,344 \$	1,990,439 \$	2,048,162 \$	2.107.559 \$	2,168,678 \$	
5 Pigging to Occur 6 TIMP Cost	N/A \$ 904,581	FALSE	FALSE	FALSE	TRUE 3,594,437 \$	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE 4,390,748 \$	FALSE	
7 Cost of Importing Gas	\$ 67,169,959	\$ 28.899.401	29.737.484 \$	30.599.871 S	3,594,437 \$ 31.487.267 \$	32.400.398 S	33.340.009 \$	34.306.870 \$	35.301.769 \$	36.325.520 \$	37.378.960 \$	4,390,748 \$ 38,462,950 \$	39.578.376 \$	_
8 Total O&M Costs	\$ 71,755,086	\$ 1,583,529	1,629,451 \$	1,676,705 \$	5,319,767 \$	1,775,364 \$	1,826,850 \$	1,879,828 \$	1,934,344 \$	1,990,439 \$	2,048,162 \$	6,498,307 \$	2,168,678 \$	_
C3 Alternative Diameter Pipeline (16")	PV	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	
1 Future L1600 Replacement Cost	\$ (100,285,483)			- 19	- 1			- 19	- 19	- 19	. 19	- 19	- 19	
2 MCS O&M and Emissions Cost	\$ -	\$ - :	5 - \$	- \$	- \$	- S	- \$	- S	- \$	- \$	- \$	- \$	- \$	=
3 Total Avoided Costs	\$ (100,285,483)	\$ -	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	
4 Annual O&M Cost	\$ 3,680,546	\$ 1,583,529	1,629,451 \$	1,676,705 \$	1,725,330 \$	1,775,364 \$	1,826,850 \$	1,879,828 \$	1,934,344 \$	1,990,439 \$	2,048,162 \$	2,107,559 \$	2,168,678 \$	
5 Pigging to Occur 6 TIMP Cost	N/A \$ 904.581	FALSE	FALSE	FALSE	TRUE 3 594 437 S	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE 4,390,748 \$	FALSE	
7 Total O&M Costs	\$ 4,585,126	\$ 1,583,529	1,629,451 \$	1,676,705 \$	5,319,767 \$	1,775,364 \$	1,826,850 \$	1,879,828 \$	1,934,344 \$	1,990,439 \$	2,048,162 \$	6,498,307 \$	2,168,678 \$	_
C4 Alternative Diameter Pipeline (20")														
	PV	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	
1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$ (100,285,483) \$ (17,993,627)	\$ (7.741.631)	- \$ (7.966.138) \$	- \$ (8 197 156) \$	(8 434 874) S	(8 679 485) S	- S (8 931 190) S	- \$ (9.190.195) \$	- \$ (9.456.710) \$	(9 730 955) \$	(10.013.153) \$	(10.303.534) S	(10 602 337) \$	_
3 Total Avoided Costs	\$ (118,279,110)		(7,966,138) \$	(8,197,156) \$	(8,434,874) \$	(8,679,485) \$	(8,931,190) \$	(9,190,195) \$	(9,456,710) \$	(9,730,955) \$	(10,013,153) \$	(10,303,534) \$	(10,602,337) \$	_
4 Annual O&M Cost	\$ 3,680,546	\$ 1,583,529	4 000 451 12	1,676,705 \$	4 705 000 1 0	1,775,364 \$	4 000 050 10	4 070 000 1 2	1,934,344 \$	4 000 400 12	2,048,162 \$	2,107,559 \$	0.400.070.1.0	
5 Pigging to Occur	N/A	FALSE	1,629,451 \$ FALSE	1,6/6,705 \$ FALSE	1,725,330 \$ TRUE	1,775,364 \$ FALSE	1,826,850 \$ FALSE	1,879,828 \$ FALSE	1,934,344 \$ FALSE	1,990,439 \$ FALSE	2,048,162 \$ FALSE	TRUE	2,168,678 \$ FALSE	_
6 TIMP Cost 7 Total O&M Costs	\$ 904,581 \$ 4,585,126		5 - S 5 1,629,451 \$	1,676,705 \$	3,594,437 \$ 5,319,767 \$	- \$ 1,775,364 \$	- S 1,826,850 \$	- \$ 1,879,828 \$	- \$ 1,934,344 \$	1,990,439 \$	2,048,162 \$	4,390,748 \$ 6,498,307 \$	2,168,678 \$	
	4,585,126	g 1,583,529	1,029,451 \$	1,0/6,/05 \$	3,319,/6/ \$	1,775,364 \$	1,626,850 \$	1,0/9,828 \$	1,934,344 \$	1,990,439 \$	2,048,162 \$	0,498,307	2,168,678 \$	_
C5 Alternative Diameter Pipeline (24")	PV	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	
1 Future L1600 Replacement Cost	\$ (100,285,483)	s :	<u> </u>	S	<u> </u>	<u>-</u> Is	<u>-</u> \$	\$	\$	I\$	\$	- \$		
	\$ (35,987,253) \$ (136,272,737)	\$ (15,483,262)	(15,932,277) \$ (15,932,277) \$	(16,394,313) \$ (16,394,313) \$	(16,869,748) \$ (16,869,748) \$	(17,358,970) \$ (17,358,970) \$	(17,862,380) \$ (17,862,380) \$	(18,380,390) \$ (18,380,390) \$	(18,913,421) \$ (18,913,421) \$	(19,461,910) \$ (19,461,910) \$	(20,026,305) \$ (20,026,305) \$	(20,607,068) \$ (20,607,068) \$	(21,204,673) \$ (21,204,673) \$	Ξ
2 MCS O&M and Emissions Cost 3 Total Avoided Costs														
3 Total Avoided Costs														
3 Total Avoided Costs 4 Annual O&M Cost 5 Pigging to Occur	\$ 3,680,546 N/A	\$ 1,583,529 : FALSE	1,629,451 \$ FALSE	1,676,705 \$ FALSE	1,725,330 \$ TRUE	1,775,364 \$ FALSE	1,826,850 \$ FALSE	1,879,828 \$ FALSE	1,934,344 \$ FALSE	1,990,439 \$ FALSE	2,048,162 \$ FALSE	2,107,559 \$ TRUE	2,168,678 \$ FALSE	_
3 Total Avoided Costs 4 Annual O&M Cost		FALSE - :	FALSE - \$	1,676,705 \$ FALSE - \$ 1,676,705 \$	1,725,330 \$ TRUE 3,594,437 \$ 5,319,767 \$	1,775,364 \$ FALSE - \$ 1,775,364 \$	1,826,850 \$ FALSE - \$ 1,826,850 \$	1,879,828 \$ FALSE - \$ 1,879,828 \$	1,934,344 \$ FALSE - \$ 1,934,344 \$	1,990,439 \$ FALSE - \$ 1,990,439 \$	2,048,162 \$ FALSE - \$ 2,048,162 \$	2,107,559 \$ TRUE 4,390,748 \$ 6,498,307 \$	2,168,678 \$ FALSE - \$ 2,168,678 \$	

Line No.		PV (X years after operational)	79	80	81	82	83	84	85	86	87	88	89	90 91	
2 3 4	A Proposed Project (Line 3602)	100 PV	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105 2106	
5	1 Future L1600 Replacement Cost	\$ (100,285,483)	e le	T e	l e	T e	Te	l e	l e	l e	Te.	l e	l e	l e	4
7	2 MCS O&M and Emissions Cost	\$ (89,968,134)	\$ (56,130,944) \$	(57,758,741) \$	(59,433,744) \$	(61,157,323) \$	(62,930,885) \$	(64,755,881) \$	(66,633,802) \$	(68,566,182) \$	(70,554,601) \$	(72,600,685) \$	(74,706,104) \$	(76,872,581) \$ (79,101,886)	6)
8	3 Total Avoided Costs	\$ (190,253,617)	\$ (56,130,944) \$	(57,758,741) \$	(59,433,744) \$	(61,157,323) \$	(62,930,885) \$	(64,755,881) \$	(66,633,802) \$	(68,566,182) \$	(70,554,601) \$	(72,600,685) \$	(74,706,104) \$	(76,872,581) \$ (79,101,886)	3)
9 10 11	Manual PV calc over 100 yrs for L3602 (Columns H to D	OJ) \$ (190,253,617)	\$ (138,971) \$	(132,667) \$	(126,648) \$	(120,903) \$	(115,418) \$	(110,182) \$	(105,183) \$	(100,411) \$	(95,856) \$	(91,508) \$	(87,356) \$	(83,393) \$ (79,610)	2))
12 13	4 Annual O&M Cost	\$ 3,680,546	\$ 2,296,285 \$	2,362,878 \$	2,431,401 \$	2,501,912 \$	2,574,467 \$	2,649,127 \$	2,725,951 \$	2,805,004 \$	2,886,349 \$	2,970,053 \$	3,056,185 \$	3,144,814 \$ 3,236,014	4
14	5 Pigging to Occur	N/A	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE FALSE	1
15 16	6 TIMP Cost 7 Total O&M Costs	\$ 904,581 \$ 4,585,126	\$ 2,296,285 \$	2,362,878 \$	2,431,401 \$	2,501,912 \$	5,363,473 \$ 7,937,940 \$	2,649,127 \$	2,725,951 \$	2,805,004 \$	2,886,349 \$	2,970,053 \$	3,056,185 \$	6,551,696 \$ - 9,696,510 \$ 3,236,014	4
17 18 19	B Hydrotest Alternate (Line 1600)	4,000,120	¥ ZįZJOĮZOJ ¥	2,002,010	2,401,401	2,001,012	1,551,545	2,040,121	2,120,001	2,000,004	2,000,040	2,570,000	0,000,100	5,550,510	_
19		PV	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105 2106	4
20 21	Future L1600 Replacement Cost MCS O&M and Emissions Cost	\$ -		- \$	- \$	- \$	- \$	- S	- \$	- \$	- \$	- \$	- \$	- S -]
22 23	3 Total Avoided Costs	\$ -	5 - 5	- \$	- \$	- S	- S	- S	- \$	- \$	- \$	- \$	- \$	- S -	-
24	5 Total Avoided Costs	ů	• •					1.0						, T	
25	4 Annual O&M Cost	\$ 4.242.275	\$ 2,296,285 \$	2.362.878 \$	2,431,401 \$	2,501,912 \$	2,574,467 \$	2.649.127 S	2,725,951 \$	2.805.004 \$	2.886.349 \$	2.970.053 \$	3.056.185 \$	3,144,814 \$ 3,236,014	4
26 27	5 Pigging to Occur	N/A	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE FALSE	i
28 29	6 TIMP Cost 7 Total O&M Costs	\$ 1,574,602 \$ 5,816,878	\$ - \$ \$ 2,296,285 \$	- \$ 2.362.878 \$	2.431.401 \$	5,212,316 \$ 7,714,228 \$	- \$ 2,574,467 \$	- \$ 2,649,127 \$	- \$ 2,725,951 \$	- \$ 2,805,004 \$	- \$ 2,886,349 \$	- \$ 2,970,053 \$	6,367,051 \$ 9,423,236 \$	- \$ - 3,144,814 \$ 3,236,014	-
30 31		9 3,816,878	φ ∠,∠90,∠65 \$	2,302,016	2,431,401 \$	1,114,220 \$	2,3/4,40/ \$	2,049,127	2,120,901 \$	2,000,004 \$	2,000,349 \$	2,970,000 \$	9,423,230 \$	3,236,014	=
31	C1 Alternative Diameter Pipeline (10")	PV	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105 2106	-
32 33 34 35			2000	2000	2000	2001	2000	2000	2100	2.01	2.02		2.07	2100	-
34 35	1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$ (100,285,483) \$	5 - \$	- S	- S	- \$	- S	- S	- \$	- \$	- \$	- S	- \$	- \$ -	4
36	3 Total Avoided Costs	\$ (100,285,483)	\$ - \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$ -	J
37															=
38 39	4 Annual O&M Cost	\$ 3,680,546	\$ 2,296,285 \$	2,362,878 \$	2,431,401 \$	2,501,912 \$	2,574,467 \$	2,649,127 \$	2,725,951 \$	2,805,004 \$	2,886,349 \$	2,970,053 \$	3,056,185 \$	3,144,814 \$ 3,236,014	4
40 41	5 Pigging to Occur 6 TIMP Cost	N/A \$ 904,581	FALSE	FALSE	FALSE	FALSE	TRUE 5.363.473 \$	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE FALSE 6.551.696 \$ -	4
42	7 Cost of Importing Gas	\$ 100,754,939	\$ 62,860,810 \$	64,683,774 \$	66,559,603 \$	68,489,832 \$	70,476,037 \$	72,519,842 \$	74,622,917 \$	76,786,982 \$	79,013,805 \$	81,305,205 \$	83,663,056 \$	86,089,284 \$ 88,585,874	
43	8 Total O&M Costs	\$ 105,340,065	\$ 2,296,285 \$	2,362,878 \$	2,431,401 \$	2,501,912 \$	7,937,940 \$	2,649,127 \$	2,725,951 \$	2,805,004 \$	2,886,349 \$	2,970,053 \$	3,056,185 \$	9,696,510 \$ 3,236,014	1
44 45	C2 Alternative Diameter Pipeline (12")														
46 47		PV	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105 2106	4
48	1 Future L1600 Replacement Cost	\$ (100,285,483)	s - s	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- S -	ī
49 50	2 MCS O&M and Émissions Cost 3 Total Avoided Costs	\$ (100,285,483)	s - s	- \$	- ş	- \$	- \$	- S	- S	- \$	- \$	- S	- S	· \$ ·]
51	3 Total Avoided Costs	\$ (100,285,483)		-	- 3	- \$	- 3	- 3	- 3	- 3	- 3	-	-	- \$ -	
52 53 54 55 56 57	4 Annual O&M Cost	\$ 3,680,546		0.000.000.10	0.404.404.70	2.501.912 S	2.574.467 S	0.040.407.0	0.705.054.10	0.005.004.	2.886.349 S	2.970.053 S	3.056.185 S	3.144.814 \$ 3.236.014	-
54	5 Pinging to Occur	N/A	\$ 2,296,285 \$ FALSE	2,362,878 \$ FALSE	2,431,401 \$ FALSE	FALSE \$	TRUE	2,649,127 \$ FALSE	2,725,951 \$ FALSE	2,805,004 \$ FALSE	2,000,349 \$ FALSE	FALSE	FALSE \$	TRUE FALSE	-
55	6 TIMP Cost 7 Cost of Importing Gas	\$ 904,581 \$ 67,169,959	\$ - \$	- \$	- \$	- \$	5,363,473 \$	- \$	- \$ 49.748.612 \$	- \$ 51,191,321 \$	- \$	- \$	- \$	6,551,696 \$ -	
56 57	7 Cost of Importing Gas 8 Total O&M Costs	\$ 67,169,959 \$ 71,755,086	\$ 41,907,207 \$ \$ 2,296,285 \$	43,122,516 \$ 2,362,878 \$	44,373,069 \$ 2,431,401 \$	45,659,888 \$ 2,501,912 \$	46,984,025 \$ 7,937,940 \$	48,346,561 \$ 2,649,127 \$	49,748,612 \$ 2,725,951 \$	2.805.004 \$	52,675,870 \$ 2,886,349 \$	54,203,470 \$ 2,970,053 \$	55,775,371 \$ 3,056,185 \$	57,392,856 \$ 59,057,249 9,696,510 \$ 3,236,014	4
58	C3 Alternative Diameter Pipeline (16")														_
58 59 60 61	CS Alternative Diameter Pipeline (16)	PV	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105 2106	
61 62	1 Future L1600 Replacement Cost	\$ (100,285,483)		. 19	- 19	. 19	- 19	. 19	. 19	. 19	. 18	. 19	. 19	. 19	4
63	2 MCS O&M and Emissions Cost	\$ -	s - s	- \$	- \$	- \$	- \$	- S	- S	- \$	- \$	- \$	- \$	- S	_
64 65	3 Total Avoided Costs	\$ (100,285,483)	\$ - \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$ -	ال
66															
66 67 68 69	4 Annual O&M Cost 5 Pigging to Occur	\$ 3,680,546 N/A	\$ 2,296,285 \$ FALSE	2,362,878 \$ FALSE	2,431,401 \$ FALSE	2,501,912 \$ FALSE	2,574,467 \$	2,649,127 \$ FALSE	2,725,951 \$ FALSE	2,805,004 \$ FALSE	2,886,349 \$ FALSE	2,970,053 \$ FALSE	3,056,185 \$ FALSE	3,144,814 \$ 3,236,014 TRUE FALSE	1
69	6 TIMP Cost	\$ 904,581	\$ - \$	- \$	- \$	- \$	5,363,473 \$	- \$	- \$	- \$	- \$	- S	- \$	6,551,696 \$ -	
70	7 Total O&M Costs	\$ 4,585,126	\$ 2,296,285 \$	2,362,878 \$	2,431,401 \$	2,501,912 \$	7,937,940 \$	2,649,127 \$	2,725,951 \$	2,805,004 \$	2,886,349 \$	2,970,053 \$	3,056,185 \$	9,696,510 \$ 3,236,014	ı
71 72 73	C4 Alternative Diameter Pipeline (20")														
74		PV	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105 2106	-
75 76	1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$ (100,285,483) \$ (17,993,627)	\$ - \$ \$ (11,226,189) \$	- \$ (11.551.748) \$	- \$ (11.886.749) \$	- \$ (12.231.465) \$	- \$ (12,586,177) \$	- S (12.951.176) S	- \$	- \$ (13.713.236) \$	- \$ (14.110.920) \$	- \$ (14.520.137) \$	- \$ (14.941.221) \$	- \$ - (15.374.516) \$ (15.820.377)	4
76	3 Total Avoided Costs	\$ (17,993,527) \$ (118,279,110)		(11,551,748) \$	(11,886,749) \$	(12,231,465) \$	(12,586,177) \$	(12,951,176) \$	(13,326,760) \$	(13,713,236) \$	(14,110,920) \$	(14,520,137) \$	(14,941,221) \$	(15,374,516) \$ (15,820,377)	
78		(**************************************	* (::);:// *	(1.1)==1): 1=1] +	(1.1)2221.12/14	())// +	((-=)==-)	()	(10)110)2007/4	(1.1).1.1)	(::,===,:=) +	(1.1)=1.1)=1/1 +	(10)011/010/	
79 80	4 Annual O&M Cost	\$ 3,680,546	\$ 2,296,285 \$	2,362,878 \$	2,431,401 \$	2,501,912 \$	2,574,467 \$	2,649,127 \$	2,725,951 \$	2,805,004 \$	2,886,349 \$	2,970,053 \$	3,056,185 \$	3,144,814 \$ 3,236,014 TRUE FALSE	4
80 81	5 Pigging to Occur 6 TIMP Cost	N/A \$ 904 581	FALSE	FALSE	FALSE	FALSE	TRUE 5.363.473 S	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE FALSE 6.551.696 \$ -	1
82 83	7 Total O&M Costs	\$ 904,581 \$ 4,585,126		2,362,878 \$	2,431,401 \$	2,501,912 \$	5,363,473 \$ 7,937,940 \$	2,649,127 \$	2,725,951 \$	2,805,004 \$	2,886,349 \$	2,970,053 \$	3,056,185 \$	6,551,696 \$ - 9,696,510 \$ 3,236,014	4
84 85 86 87		,,													_
86	C5 Alternative Diameter Pipeline (24")	PV	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105 2106	
87 88	1 Future L1600 Replacement Cost	\$ (100,285,483)		. 10	. 10	. 10	. 10	. 10	. 10	. 10	. 10	. 1e	. 10	- 19	4
89	2 MCS O&M and Emissions Cost	\$ (35,987,253)	\$ (22,452,377) \$	(23,103,496) \$	(23,773,498) \$	(24,462,929) \$	(25,172,354) \$	(25,902,352) \$	(26,653,521) \$	(27,426,473) \$	(28,221,840) \$	(29,040,274) \$	(29,882,442) \$	(30,749,033) \$ (31,640,755)	
90	3 Total Avoided Costs	\$ (136,272,737)		(23,103,496) \$	(23,773,498) \$	(24,462,929) \$	(25,172,354) \$	(25,902,352) \$	(26,653,521) \$	(27,426,473) \$	(28,221,840) \$	(29,040,274) \$	(29,882,442) \$	(30,749,033) \$ (31,640,755)	5)
91															
93	4 Annual O&M Cost 5 Pigging to Occur	\$ 3,680,546	\$ 2,296,285 \$ FALSE	2,362,878 \$ FALSE	2,431,401 \$ FALSE	2,501,912 \$ FALSE	2,574,467 \$	2,649,127 \$ FALSE	2,725,951 \$ FALSE	2,805,004 \$ FALSE	2,886,349 \$ FALSE	2,970,053 \$ FALSE	3,056,185 \$ FALSE	3,144,814 \$ 3,236,014 TRUE FALSE	4
94 95	6 TIMP Cost	\$ 904,581	\$ - \$	- \$	- \$	- \$	5,363,473 \$	- \$	- \$	- \$	- \$	- \$	- \$	6,551,696 \$ -	j
96	7 Total O&M Costs	\$ 4,585,126	\$ 2,296,285 \$	2,362,878 \$	2,431,401 \$	2,501,912 \$	7,937,940 \$	2,649,127 \$	2,725,951 \$	2,805,004 \$	2,886,349 \$	2,970,053 \$	3,056,185 \$	9,696,510 \$ 3,236,014	1

Line No.	113 VOLUME III – COST-EFFECTIVENESS ANALYSI:	PV (X years after		92	93	94	95	96	97	98	99	100	101	102	103	104
2 3 4	A Proposed Project (Line 3602)	100 PV		2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119
5 6 7 8	Future L1600 Replacement Cost MCS O&M and Emissions Cost Total Avoided Costs	\$ \$	(100,285,483) \$ (89,968,134) \$ (190,253,617) \$	- \$ (81,395,841) \$ (81,395,841) \$	- \$ (83,756,320) \$ (83,756,320) \$	- \$ (86,185,254) \$ (86,185,254) \$	- \$ (88,684,626) \$ (88,684,626) \$	- \$ (91,256,480) \$ (91,256,480) \$	- \$ (93,902,918) \$ (93,902,918) \$	- \$ (96,626,103) \$ (96,626,103) \$	- \$ (99,428,260) \$ (99,428,260) \$	- \$ (102,311,679) \$ (102,311,679) \$	- \$ (105,278,718) \$ (105,278,718) \$	- \$ (108,331,801) \$ (108,331,801) \$	- \$ (111,473,423) \$ (111,473,423) \$	(114,706,152) (114,706,152)
10 11	Manual PV calc over 100 yrs for L3602 (Columns H to I	DJ) \$	(190,253,617) \$	(75,998) \$	(72,551) \$	(69,259) \$	(66,117) \$	(63,118) \$	(60,254) \$	(57,521) \$	(54,911) \$	(52,420) \$	(50,042) \$	(47,772) \$	(45,605) \$	(43,536)
12 13 14 15	4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost 7 Total O&M Costs	\$ N/A \$	3,680,546 \$ 904,581 \$ 4,585,126 \$	3,329,858 \$ FALSE - \$ 3,329,858 \$	3,426,424 \$ FALSE - \$ 3,426,424 \$	3,525,790 \$ FALSE	3,628,038 \$ FALSE - \$ 3,628,038 \$	3,733,251 \$ FALSE	3,841,516 \$ TRUE 8,003,157 \$ 11,844,673 \$	3,952,919 \$ FALSE - \$ 3,952,919 \$	4,067,554 \$ FALSE - \$ 4,067,554 \$	4,185,513 \$ FALSE - \$ 4,185,513 \$	4,306,893 \$ FALSE - \$ 4,306,893 \$	4,431,793 \$ FALSE - \$ 4,431,793 \$	4,560,315 \$ FALSE - \$ 4,560,315 \$	4,692,564 TRUE 9,776,175 14,468,739
17 18 19	B Hydrotest Alternate (Line 1600)	PV		2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119
20 21 22 23 24	Future L1600 Replacement Cost MCS O&M and Emissions Cost Total Avoided Costs	\$ \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	
25 26 27 28 29	4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost 7 Total O&M Costs	\$ N/A \$	4,242,275 \$ 1,574,602 \$ 5,816,878 \$	3,329,858 \$ FALSE - \$ 3,329,858 \$	3,426,424 \$ FALSE - \$ 3,426,424 \$	3,525,790 \$ FALSE - \$ 3,525,790 \$	3,628,038 \$ FALSE - \$ 3,628,038 \$	3,733,251 \$ TRUE 7,777,607 \$ 11,510,858 \$	3,841,516 \$ FALSE	3,952,919 \$ FALSE - \$ 3,952,919 \$	4,067,554 \$ FALSE - \$ 4,067,554 \$	4,185,513 \$ FALSE - \$ 4,185,513 \$	4,306,893 \$ FALSE - \$ 4,306,893 \$	4,431,793 \$ FALSE	4,560,315 \$ TRUE 9,500,656 \$ 14,060,971 \$	4,692,564 FALSE - 4,692,564
30 31 32	C1 Alternative Diameter Pipeline (10")	PV		2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119
33 34 35 36 37	Future L1600 Replacement Cost MCS O&M and Emissions Cost Total Avoided Costs	\$ \$	(100,285,483) \$ - \$ (100,285,483) \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- S - S - S	- S - S - S	- \$ - \$ - \$						
38 39 40 41 42 43	4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost of Importing Gas 7 Cost of Importing Gas 8 Total O&M Costs	\$ N/A \$ \$	3,680,546 \$ 904,581 \$ 100,754,939 \$ 105,340,065 \$	3,329,858 \$ FALSE - \$ 91,154,864 \$ 3,329,858 \$	3,426,424 \$ FALSE	3,525,790 \$ FALSE - \$ 96,518,507 \$ 3,525,790 \$	3,628,038 \$ FALSE - \$ 99,317,544 \$ 3,628,038 \$	3,733,251 \$ FALSE	3,841,516 \$ TRUE 8,003,157 \$ 105,161,488 \$ 11,844,673 \$	3,952,919 \$ FALSE - \$ 108,211,171 \$ 3,952,919 \$	4,067,554 \$ FALSE - \$ 111,349,295 \$ 4,067,554 \$	4,185,513 \$ FALSE - \$ 114,578,424 \$ 4,185,513 \$	4,306,893 \$ FALSE - \$ 117,901,199 \$ 4,306,893 \$	4,431,793 \$ FALSE - \$ 121,320,333 \$ 4,431,793 \$	4,560,315 \$ FALSE - \$ 124,838,623 \$ 4,560,315 \$	4,692,564 TRUE 9,776,175 128,458,943 14,468,739
44 45	C2 Alternative Diameter Pipeline (12")	PV		2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119
47 48 49 50	Future L1600 Replacement Cost MCS O&M and Emissions Cost Total Avoided Costs	\$ \$ \$	(100,285,483) \$ - \$ (100,285,483) \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$: :
52 53 54 55 56 57	4 Annual O&M Cost 5 Pigging to Occur 6 TiMP Cost 7 Cost of Importing Gas 8 Total O&M Costs	\$ N/A \$ \$	3,680,546 \$ 904,581 \$ 67,169,959 \$ 71,755,086 \$	3,329,858 \$ FALSE - \$ 60,769,909 \$ 3,329,858 \$	3,426,424 \$ FALSE	3,525,790 \$ FALSE - \$ 64,345,672 \$ 3,525,790 \$	3,628,038 \$ FALSE - \$ 66,211,696 \$ 3,628,038 \$	3,733,251 \$ FALSE	3,841,516 \$ TRUE 8,003,157 \$ 70,107,658 \$ 11,844,673 \$	3,952,919 \$ FALSE	4,067,554 \$ FALSE	4,185,513 \$ FALSE - \$ 76,385,616 \$ 4,185,513 \$	4,306,893 \$ FALSE	4,431,793 \$ FALSE - \$ 80,880,222 \$ 4,431,793 \$	4,560,315 \$ FALSE - \$ 83,225,749 \$ 4,560,315 \$	4,692,564 TRUE 9,776,175 85,639,295 14,468,739
58 59 60	C3 Alternative Diameter Pipeline (16")	PV		2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119
61 62 63 64 65	Future L1600 Replacement Cost MCS O&M and Emissions Cost Total Avoided Costs	\$ \$ \$	(100,285,483) \$ - \$ (100,285,483) \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- S - S - S	- S - S - S	- \$ - \$ - \$	-					
66 67 68 69 70	4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost 7 Total O&M Costs	\$ N/A \$	3,680,546 \$ 904,581 \$ 4,585,126 \$	3,329,858 \$ FALSE - \$ 3,329,858 \$	3,426,424 \$ FALSE - \$ 3,426,424 \$	3,525,790 \$ FALSE - \$ 3,525,790 \$	3,628,038 \$ FALSE - \$ 3,628,038 \$	3,733,251 \$ FALSE - \$ 3,733,251 \$	3,841,516 \$ TRUE 8,003,157 \$ 11,844,673 \$	3,952,919 \$ FALSE - \$ 3,952,919 \$	4,067,554 \$ FALSE - \$ 4,067,554 \$	4,185,513 \$ FALSE - \$ 4,185,513 \$	4,306,893 \$ FALSE - \$ 4,306,893 \$	4,431,793 \$ FALSE - \$ 4,431,793 \$	4,560,315 \$ FALSE - \$ 4,560,315 \$	4,692,564 TRUE 9,776,175 14,468,739
71 72 73	C4 Alternative Diameter Pipeline (20")	PV		2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119
74 75 76 77 78	Future L1600 Replacement Cost MCS O&M and Emissions Cost Total Avoided Costs	\$ \$	(100,285,483) \$ (17,993,627) \$ (118,279,110) \$	(16,279,168) \$ (16,279,168) \$	(16,751,264) \$ (16,751,264) \$	- \$ (17,237,051) \$ (17,237,051) \$	- \$ (17,736,925) \$ (17,736,925) \$	- \$ (18,251,296) \$ (18,251,296) \$	- \$ (18,780,584) \$ (18,780,584) \$	(19,325,221) \$ (19,325,221) \$	(19,885,652) \$ (19,885,652) \$	- \$ (20,462,336) \$ (20,462,336) \$	- \$ (21,055,744) \$ (21,055,744) \$	(21,666,360) \$ (21,666,360) \$	- \$ (22,294,685) \$ (22,294,685) \$	(22,941,230) (22,941,230)
79 80 81 82 83	4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost 7 Total O&M Costs	\$ N/A \$	3,680,546 \$ 904,581 \$ 4,585,126 \$	3,329,858 \$ FALSE - \$ 3,329,858 \$	3,426,424 \$ FALSE - \$ 3,426,424 \$	3,525,790 \$ FALSE	3,628,038 \$ FALSE - \$ 3,628,038 \$	3,733,251 \$ FALSE - \$ 3,733,251 \$	3,841,516 \$ TRUE 8,003,157 \$ 11,844,673 \$	3,952,919 \$ FALSE - \$ 3,952,919 \$	4,067,554 \$ FALSE - \$ 4,067,554 \$	4,185,513 \$ FALSE - \$ 4,185,513 \$	4,306,893 \$ FALSE - \$ 4,306,893 \$	4,431,793 \$ FALSE - \$ 4,431,793 \$	4,560,315 \$ FALSE - \$ 4,560,315 \$	4,692,564 TRUE 9,776,175 14,468,739
64 85 86	C5 Alternative Diameter Pipeline (24")	PV		2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119
87 88 89 90	Future L1600 Replacement Cost MCS O&M and Emissions Cost Total Avoided Costs	\$ \$	(100,285,483) \$ (35,987,253) \$ (136,272,737) \$	(32,558,336) \$ (32,558,336) \$	- \$ (33,502,528) \$ (33,502,528) \$	- \$ (34,474,101) \$ (34,474,101) \$	- \$ (35,473,850) \$ (35,473,850) \$	- \$ (36,502,592) \$ (36,502,592) \$	- \$ (37,561,167) \$ (37,561,167) \$	(38,650,441) \$ (38,650,441) \$	- \$ (39,771,304) \$ (39,771,304) \$	- \$ (40,924,672) \$ (40,924,672) \$	- \$ (42,111,487) \$ (42,111,487) \$	- \$ (43,332,720) \$ (43,332,720) \$	(44,589,369) \$ (44,589,369) \$	(45,882,461) (45,882,461)
92 93 94 95 96 97	Annual O&M Cost Pigging to Occur TIMP Cost Total O&M Costs	\$ N/A \$ \$	3,680,546 \$ 904,581 \$ 4,585,126 \$	3,329,858 \$ FALSE - \$ 3,329,858 \$	3,426,424 \$ FALSE - \$ 3,426,424 \$	3,525,790 \$ FALSE - \$ 3,525,790 \$	3,628,038 \$ FALSE - \$ 3,628,038 \$	3,733,251 \$ FALSE - \$ 3,733,251 \$	3,841,516 \$ TRUE 8,003,157 \$ 11,844,673 \$	3,952,919 \$ FALSE - \$ 3,952,919 \$	4,067,554 \$ FALSE	4,185,513 \$ FALSE - \$ 4,185,513 \$	4,306,893 \$ FALSE	4,431,793 \$ FALSE - \$ 4,431,793 \$	4,560,315 \$ FALSE - \$ 4,560,315 \$	4,692,564 TRUE 9,776,175 14,468,739

Line No.		PV (X years after operational)	105	106	107	108	109	110	111	112	113	114	115	116
2	A Proposed Project (Line 3602)	100	0100	0101	0100			4405		0103	4440		0100	0101
5	1 Future I 1600 Replacement Cost	PV (100 005 100) 0	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131
7	2 MCS O&M and Emissions Cost	\$ (100,285,483) \$ \$ (89,968,134) \$	(118,032,631) \$	(121,455,577) \$	(124,977,789) \$	(128,602,145) \$	(132,331,607) \$	(136,169,223) \$	(140,118,131) \$	(144,181,557) \$	(148,362,822) \$	(152,665,344) \$	(157,092,638) \$	(161,648,325)
9	3 Total Avoided Costs	\$ (190,253,617) \$	(118,032,631) \$	(121,455,577) \$	(124,977,789) \$	(128,602,145) \$	(132,331,607) \$	(136,169,223) \$	(140,118,131) \$	(144,181,557) \$	(148,362,822) \$	(152,665,344) \$	(157,092,638) \$	(161,648,325)
10	Manual PV calc over 100 yrs for L3602 (Columns H to DJ)	\$ (190,253,617) \$	(41,561) \$	(39,675)										
12 13	4 Annual O&M Cost	\$ 3,680,546 \$	4,828,648 \$	4,968,679 \$	5,112,771 \$	5,261,041 \$	5,413,612 \$	5,570,606 \$	5,732,154 \$	5,898,386 \$	6,069,440 \$	6,245,453 \$	6,426,571 \$	6,612,942
14 15	5 Pigging to Occur 6 TIMP Cost	N/A \$ 904,581 \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE -
16 17	7 Total O&M Costs	\$ 4,585,126 \$	4,828,648 \$	4,968,679 \$	5,112,771 \$	5,261,041 \$	5,413,612 \$	5,570,606 \$	5,732,154 \$	5,898,386 \$	6,069,440 \$	6,245,453 \$	6,426,571 \$	6,612,942
18 19	B Hydrotest Alternate (Line 1600)	PV	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131
20 21	1 Future L1600 Replacement Cost	\$ - \$	- \$	- S	- \$	- \$	- \$	- S	- \$	- \$	- \$	- \$	- \$	-
22 23	2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$ - \$ \$ - \$	- \$ - \$	- \$ - \$	- \$ - \$	- \$	- \$ - \$	- \$	- \$ - \$	- \$ - \$	- \$ - \$	- \$ - \$	- \$ - \$	-
24 25 26 27														
26 27	4 Annual O&M Cost 5 Pigging to Occur	\$ 4,242,275 \$ N/A	4,828,648 \$ FALSE	4,968,679 \$ FALSE	5,112,771 \$ FALSE	5,261,041 \$ FALSE	5,413,612 \$ FALSE	5,570,606 \$ TRUE	5,732,154 \$ FALSE	5,898,386 \$ FALSE	6,069,440 \$ FALSE	6,245,453 \$ FALSE	6,426,571 \$ FALSE	6,612,942 FALSE
28 29	6 TIMP Cost 7 Total O&M Costs	\$ 1,574,602 \$ \$ 5,816,878 \$	- \$ 4,828,648 \$	- \$ 4,968,679 \$	- \$ 5,112,771 \$	- \$ 5,261,041 \$	- \$ 5,413,612 \$	11,605,430 \$ 17,176,036 \$	- \$ 5,732,154 \$	- \$ 5,898,386 \$	- \$ 6,069,440 \$	- \$ 6,245,453 \$	- \$ 6,426,571 \$	6,612,942
30 31	C1 Alternative Diameter Pipeline (10")													<u> </u>
32 33		PV	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131
32 33 34 35	Future L1600 Replacement Cost MCS O&M and Emissions Cost	\$ (100,285,483) \$ \$ - \$	- S	- \$ - \$	- S - S	- \$ - \$	- S - S	- \$ - \$	- \$ - \$	- S	- \$ - \$	- S	- S	-
36 37	3 Total Avoided Costs	\$ (100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
38 39 40	4 Annual O&M Cost	\$ 3.680.546 \$	4,828,648 \$	4.968.679 \$	5.112.771 S	5.261.041 \$	5.413.612 S	5.570.606 S	5.732.154 S	5.898.386 \$	6.069.440 \$	6,245,453 \$	6.426.571 S	6,612,942
41	5 Pigging to Occur 6 TIMP Cost	N/A \$ 904.581 \$	FALSE - \$	FALSE - S	FALSE - S	FALSE - S	FALSE - S	FALSE - S	FALSE - S	FALSE - \$	FALSE - \$	FALSE - S	FALSE - S	FALSE
42 43	7 Cost of Importing Gas 8 Total O&M Costs	\$ 100,754,939 \$ \$ 105,340,065 \$	132,184,253 \$ 4,828,648 \$	136,017,596 \$ 4,968,679 \$	139,962,106 \$ 5,112,771 \$	144,021,007 \$ 5,261,041 \$	148,197,616 \$ 5,413,612 \$	152,495,347 \$ 5,570,606 \$	156,917,712 \$ 5,732,154 \$	161,468,326 \$ 5,898,386 \$	166,150,908 \$ 6,069,440 \$	170,969,284 \$ 6,245,453 \$	175,927,393 \$ 6.426.571 \$	181,029,287 6,612,942
44 45 46	C2 Alternative Diameter Pipeline (12")		, , , , , ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	., ,	.,.,.		.,.,,,				., .,	., .,	
46 47		PV	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131
48 49	1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$ (100,285,483) \$ \$ - \$	- \$ - \$	- \$ - \$	- \$ - \$	- \$ - \$	- \$ - \$	- S	- \$ - \$	- \$ - \$	- \$ - \$	- \$ - \$	- \$ - \$	-
50 51	3 Total Avoided Costs	\$ (100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
	4 Annual O&M Cost	\$ 3,680,546 \$	4,828,648 \$	4,968,679 \$	5,112,771 \$	5,261,041 \$	5,413,612 \$	5,570,606 \$	5,732,154 \$	5,898,386 \$	6,069,440 \$	6,245,453 \$	6,426,571 \$	6,612,942
54 55	5 Pigging to Occur 6 TIMP Cost	N/A \$ 904,581 \$	FALSE - \$	FALSE - \$	FALSE - S	FALSE - S	FALSE - S	FALSE - S	FALSE - S	FALSE - \$	FALSE - \$	FALSE - S	FALSE - S	FALSE -
52 53 54 55 56 57	7 Cost of Importing Gas 8 Total O&M Costs	\$ 67,169,959 \$ \$ 71,755,086 \$	88,122,835 \$ 4,828,648 \$	90,678,397 \$ 4,968,679 \$	93,308,071 \$ 5,112,771 \$	96,014,005 \$ 5,261,041 \$	98,798,411 \$ 5,413,612 \$	101,663,565 \$ 5,570,606 \$	104,611,808 \$ 5,732,154 \$	107,645,551 \$ 5,898,386 \$	110,767,272 \$ 6,069,440 \$	113,979,523 \$ 6,245,453 \$	117,284,929 \$ 6,426,571 \$	120,686,192 6.612.942
58 59 60 61	C3 Alternative Diameter Pipeline (16")			,,			-3 -3-					, , ,		
60		PV	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131
62 63	1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$ (100,285,483) \$ \$ - \$	- S	- S	- \$ - \$	- S	- \$ - \$	- S	- \$ - \$	- \$ - \$	- \$ - \$	- S	- \$ - \$	-
64 65	3 Total Avoided Costs	\$ (100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
66 67	4 Annual O&M Cost	\$ 3.680.546 \$	4,828,648 \$	4.968.679 \$	5,112,771 \$	5,261,041 \$	5,413,612 \$	5.570.606 S	5,732,154 \$	5.898.386 \$	6.069.440 \$	6,245,453 \$	6,426,571 \$	6,612,942
66 67 68 69	5 Pigging to Occur 6 TIMP Cost	N/A 904 581 S	FALSE - \$	FALSE - S	FALSE - S	FALSE - S	FALSE - S	FALSE - S	FALSE - S	FALSE - \$	FALSE - S	FALSE - S	FALSE - S	FALSE
70	7 Total O&M Costs	\$ 4,585,126 \$	4,828,648 \$	4,968,679 \$	5,112,771 \$	5,261,041 \$	5,413,612 \$	5,570,606 \$	5,732,154 \$	5,898,386 \$	6,069,440 \$	6,245,453 \$	6,426,571 \$	6,612,942
71 72 73	C4 Alternative Diameter Pipeline (20")	PV	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131
74 75	1 Future L1600 Replacement Cost	\$ (100,285,483) \$	- Is	- S	- IS	- Is	- IS	- Is	- Is	- Is	- Is	- S	- Is	-
76 77	2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$ (17,993,627) \$ \$ (118,279,110) \$	(23,606,526) \$ (23,606,526) \$	(24,291,115) \$	(24,995,558) \$ (24,995,558) \$	(25,720,429) \$	(26,466,321) \$ (26,466,321) \$	(27,233,845) \$	(28,023,626) \$ (28,023,626) \$	(28,836,311) \$ (28,836,311) \$	(29,672,564) \$ (29,672,564) \$	(30,533,069) \$	(31,418,528) \$ (31,418,528) \$	(32,329,665)
78		, , , , , , , , , , , , , , , , , , ,	, .,,,,,,,		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		1 17 117 111	, ,		, .,,				
79 80 81	4 Annual O&M Cost 5 Pigging to Occur	\$ 3,680,546 \$ N/A	4,828,648 \$ FALSE	4,968,679 \$ FALSE	5,112,771 \$ FALSE	5,261,041 \$ FALSE	5,413,612 \$ FALSE	5,570,606 \$ FALSE	5,732,154 \$ FALSE	5,898,386 \$ FALSE	6,069,440 \$ FALSE	6,245,453 \$ FALSE	6,426,571 \$ FALSE	6,612,942 FALSE
82 83	6 TIMP Cost 7 Total O&M Costs	\$ 904,581 \$ \$ 4,585,126 \$	- S 4.828.648 S	- S 4.968.679 S	5.112.771 S	- \$ 5.261.041 \$	- S 5.413.612 S	- S 5,570,606 S	5.732.154 S	- \$ 5,898,386 \$	6,069,440 \$	- \$ 6,245,453 \$	- \$ 6,426,571 \$	6,612,942
84 85	C5 Alternative Diameter Pipeline (24")	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1	.,,	-,,,	-,,,	2)]	-,,,	3,,	-,,,	-101714	-1	.,,	-,,-
86 87		PV	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131
88 89	1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$ (100,285,483) \$ \$ (35,987,253) \$	- \$ (47,213,052) \$	- \$ (48,582,231) \$	- \$ (49,991,115) \$	- \$ (51,440,858) \$	- \$ (52,932,643) \$	- \$ (54,467,689) \$	- \$ (56,047,252) \$	- \$ (57,672,623) \$	- \$ (59,345,129) \$	- \$ (61,066,137) \$	- \$ (62,837,055) \$	(64,659,330)
90	3 Total Avoided Costs	\$ (136,272,737) \$	(47,213,052) \$	(48,582,231) \$	(49,991,115) \$	(51,440,858) \$	(52,932,643) \$	(54,467,689) \$	(56,047,252) \$	(57,672,623) \$	(59,345,129) \$	(61,066,137) \$	(62,837,055) \$	(64,659,330)
92 93	4 Annual O&M Cost	\$ 3,680,546 \$	4,828,648 \$	4,968,679 \$	5 112 771 Te	5,261,041 \$	5,413,612 \$	5,570,606 \$	5,732,154 \$	5,898,386 \$	6,069,440 \$	6,245,453 \$	6,426,571 \$	6,612,942
94 95	Pigging to Occur TIMP Cost	N/A S 904 581 S	FALSE - \$	FALSE - S	5,112,771 \$ FALSE - \$	FALSE - S	FALSE - S	FALSE - S	FALSE - S	FALSE - S	FALSE - \$	FALSE - S	FALSE - S	FALSE .
96 97	7 Total O&M Costs	\$ 4,585,126 \$	4,828,648 \$	4,968,679 \$	5,112,771 \$	5,261,041 \$	5,413,612 \$	5,570,606 \$	5,732,154 \$	5,898,386 \$	6,069,440 \$	6,245,453 \$	6,426,571 \$	6,612,942
al .														

WORK PAPER TABLE - AVOIDED COST MODEL - COSTS OVER 00 YEARS (AC 1.2)
ANNUAL COSTS BY PROJECT ALTERNATE, FOR AVOIDED COSTS AND O&M COSTS
A.15-09-013 VOLUME III - COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 2017)

C6 Alternative Diameter Pipeline (30")	PV (X years after opera	rational)	0	1	2	3	4	5	6	7	8	9	10	11	12
C6 Alternative Diameter Pipeline (30")	PV		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
1 Future L1600 Replacement Cost	\$ (100	0,285,483) \$	- \$	- S	- \$	- \$	- \$	- :	Operational Year \$	- \$	- \$	- S	- \$	- S	-
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$ (62 \$ (163	2,977,694) \$ 3,263,177) \$	- \$	- S	- S	- \$	- S		\$ (4,875,038) \$ \$ (4,875,038) \$	(5,016,414) \$ (5,016,414) \$	(5,161,890) \$ (5,161,890) \$	(5,311,585) \$ (5,311,585) \$	(5,465,621) \$ (5,465,621) \$	(5,624,124) \$ (5,624,124) \$	(5,787,224) (5,787,224)
4 Annual O&M Cost		3.680.546 \$							\$ 284.907 \$	293,170 \$	301.671 \$	310.420 \$	319,422 \$	328,685 \$	338,217
5 Pigging to Occur 6 TIMP Cost	N/A	904.581 \$	ALSE	FALSE . S	FALSE C	FALSE	FALSE	FALSE	FALSE	293,170 \$ FALSE	501,671 \$ FALSE	310,420 \$ FALSE	319,422 \$ FALSE	328,685 \$ FALSE	FALSE
7 Total O&M Costs		4,585,126 \$	- \$	- \$	- \$	- \$	- \$	- :	\$ 284,907 \$	293,170 \$	301,671 \$	310,420 \$	319,422 \$	328,685 \$	338,217
C7 Alternative Diameter Pipeline (42")	PV		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
1 Future L1600 Replacement Cost	\$ (100	0,285,483) \$	- \$	- \$	- \$	- \$	- [\$		Operational Year	- \$	- \$	- IS	- \$	- \$	
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$ (89	9,968,134) \$ 0,253,617) \$	- \$	- \$ - \$	- \$ - \$	- \$ - \$	- \$ - \$	- :	\$ (6,964,340) \$ \$ (6,964,340) \$	(7,166,306) \$ (7,166,306) \$	(7,374,129) \$ (7,374,129) \$	(7,587,979) \$ (7,587,979) \$	(7,808,030) \$ (7,808,030) \$	(8,034,463) \$ (8,034,463) \$	(8,267,462) (8,267,462)
4 Annual O&M Cost	\$ 3	3,680,546 \$	- \$	- \$	- \$	- \$	- \$	- :	\$ 284,907 \$	293,170 \$ FALSE	301,671 \$ FALSE	310,420 \$ FALSE	319,422 \$	328,685 \$ FALSE	338,217 FALSE
5 Pigging to Occur 6 TIMP Cost 7 Total O&M Costs	N/A \$	904,581 \$ 4.585,126 \$	ALSE - \$	FALSE - \$	- \$	FALSE - \$	FALSE - \$	FALSE -	FALSE S 284.907 S	- \$	- \$ 301.671 \$	- \$	- \$	- S	-
D Replace Line 1600 In-Place	3 4	1,585,126 \$	- 3	- \$	- 3	- \$	- 3	- ;	284,907	293,170 \$	301,6/1 \$	310,420 \$	319,422 \$	328,685 \$	338,217
b Replace Line 1000 III-Place	PV		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Future L1600 Replacement Cost MCS O&M and Emissions Cost	\$ (100	0,285,483) \$	- \$	- \$	- S	- \$	- \$	- :	3 - \$	- \$	- \$	- \$	- \$	- S	-
3 Total Avoided Costs	\$ (100	0,285,483) \$	- \$	- \$	- \$	- š	- \$	-	s - š	- \$	- š	- Š	- š	- \$	-
4 Annual O&M Cost	\$ 3	3,647,596 \$	- Is	- S	- Is	- Is	- s	- 1:	s - Is	- Is	- Is	- Is	- Is	410,857 \$	422,772
5 Pigging to Occur 6 TIMP Cost	N/A S	717.186 S	ALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE -	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE
7 Total O&M Costs	\$ 4	4,364,782 \$	- \$	- \$	- \$	- \$	- \$	- :	\$ - \$	- \$	- \$	- \$	- \$	410,857 \$	422,772
E/F Otay Mesa Alternative	PV		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Future L1600 Replacement Cost MCS O&M and Emissions Cost	\$ (100	0,285,483) \$	- \$	- S	- \$	- \$	- s	- 1	s - s	- \$	- \$	Operational Year - \$	- \$	- S	-
3 Total Avoided Costs	\$ (100	0,285,483) \$	- \$	- \$	- \$	- \$	- \$		5 - 5	- \$	- \$	- \$	- \$	- \$	-
4 Annual O&M Cost		- 18	- 18	- Is	Te.	- Is	- 18	. I:		- 15	- 1s	- 18	- 18	- 15	- 1
5 Total O&M Costs	\$	- \$	- \$	- \$	- \$	- \$	- \$	- :		- \$	- \$		- \$		
G LNG Storage (Peak-Shaver)	PV		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
1 Future L1600 Replacement Cost	\$ (100	0,285,483) \$	- 15	- IS	- 5	- \$	- 18	. 1	3 - 5	- \$	- \$	- S	perational Year	- IS	-
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$	- \$ 0.285.483) \$	- \$	- \$	- \$	- \$	- \$		- Š	- \$	- \$	- \$	· \$	- \$	-
	(+*		!*	, , , , , , , , , , , , , , , , , , ,	#		+*				+*	+
4 Annual O&M Cost 5 Total O&M Costs	\$ 15 \$ 15	5,283,747 \$ 5,283,747 \$	- S	- \$ - \$	- S	- S	- S	- 1	- S	- \$ - \$	- \$ - \$	- S	1,597,111 \$ 1,597,111 \$	1,643,427 \$ 1,643,427 \$	1,691,086 1,691,086
H1 Alternative Energy (Grid-Scale Battery)															
1 Future L1600 Replacement Cost	PV		2015		2017	2018	2019	2020	2021	2022	2023	2024 C	2025 perational Year	2026	2027
2 MCS O&M and Emissions Cost	\$	0,285,483) \$	- \$	- S	- S	- \$	- \$		- S	- \$	- \$	- \$	- \$	- S	-
3 Total Avoided Costs	\$ (100	0,285,483) \$	- \$	- \$	- \$	- \$	- \$	- :	5 - 5	- \$	- \$	- \$	- \$	- \$	-
4 Annual O&M Cost 5 Total O&M Costs		5,283,747 \$ 5,283,747 \$	- \$	- \$	- S	- \$	- S	- 1	S - S	- \$	- \$ - \$	- S	1,597,111 \$ 1,597,111 \$	1,643,427 \$ 1,643,427 \$	1,691,086 1,691,086
H2 Alternative Energy (Smaller-Scale Battery)	3 13	3,203,747	-	- •	-	-	- 14	- [,	- 10	- 14	- •	- 13	1,557,111	1,043,427 3	1,051,000
	PV		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025 perational Year	2026	2027
1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$	0,285,483) \$	- \$ - \$	- \$ - \$	- \$ - \$	- \$ - \$	- \$ - \$	- :	S - S	- \$ - \$	-				
3 Total Avoided Costs	\$ (100	0,285,483) \$	- \$	- \$	- \$	- \$	- \$	-	s - s	- \$	- \$	- \$	- \$	- \$	-
4 Annual O&M Cost	\$ 15	5,283,747 \$	- \$	- \$	- S	- s	- \$	- 1:	- 8	- \$	- \$	- \$	1,597,111 \$	1,643,427 \$	1,691,086
5 Total O&M Costs I Off-shore Route	\$ 15	5,283,747 \$	- \$	- \$	- \$	- \$	- \$	- :	- \$	- \$	- \$	- \$	1,597,111 \$	1,643,427 \$	1,691,086
1 On-shore Route	PV		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Future L1600 Replacement Cost MCS O&M and Emissions Cost		0,285,483) \$ 9,240,789) \$	- \$	- S	- S	- \$	- \$	- : 1	S - S	- \$	- \$	- S	- \$	- S	- :
3 Total Avoided Costs		9,526,272) \$	- \$	- \$	- \$	- \$	- \$	- :	- \$	- \$	- \$	- \$	- \$	- \$	
4 Annual O&M Cost	S 4	4.544.076 \$	- IS	- Is	- IS	- Is	- Is	- 1:	s - Is	- Is	- Is	- Is	- Is	- IS	- 1
5 Pigging to Occur 6 TIMP Cost	N/A \$	595,634 \$	ALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE -	FALSE S	FALSE - \$	FALSE -				
7 Total O&M Costs	\$ 5	5,139,710 \$	- \$	- \$	- \$	- \$	- \$	- 1	s - \$	- \$	- \$	- \$	- \$	- \$	-
J1 Blythe to Santee Alternative 1	PV		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
1 Future L1600 Replacement Cost	\$ (100	0,285,483) \$	- \$	- \$	- \$	- \$	- \$	- [:	- \$	- \$	- \$	- \$	perational Year	- \$	
2 MCS O&M and Emissions Cost 3 Total Avoided Costs		4,719,907) \$ 5,005,390) \$	- \$ - \$	- \$ - \$	- \$ - \$	- \$ - \$	- \$ - \$		5 - S 5 - S	- \$ - \$	- \$ - \$	- \$ - \$	(7,808,030) \$ (7,808,030) \$	(8,034,463) \$ (8,034,463) \$	(8,267,462) (8,267,462)
4 Annual O&M Cost	9 44	4,495,118 \$		Te	Te	Te	Te			Te-	T.	To.	1,514,701 \$	1,558,627 \$	1,603,828
5 Pigging to Occur 6 TIMP Cost	N/A	9,495,116 \$ F 2,253,804 \$	ALSE	FALSE . S	FALSE . S	FALSE	FALSE	FALSE	FALSE	FALSE . \$	FALSE . \$	FALSE - S	FALSE - S	FALSE - S	FALSE
6 TIMP Cost															

C6 Alternative Diameter Pipeline (30")	PV (X years after operational)	14	13	10	17	10	19	20	21		20		20
	PV	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$ (100,285,483) \$ \$ (62,977,694) \$	- \$ (6.127.750) \$	- \$ (6.305.455) \$	- \$ (6.488.313) \$	- \$ (6.676.474) \$	- \$ (6.870.092) \$	- \$ (7.069.324) \$	- \$ (7 274 335) \$	- \$ (7.485.290) \$	- \$ (7.702.364) \$	- \$ (7 925 732) \$	(334,683,589) \$	(344,389,413) \$
3 Total Avoided Costs	\$ (163,263,177) \$	(6,127,750) \$	(6,305,455) \$	(6,488,313) \$	(6,676,474) \$	(6,870,092) \$	(7,069,324) \$	(7,274,335) \$	(7,485,290) \$	(7,702,364) \$	(7,925,732) \$	(342,839,167) \$	(352,781,503) \$
4 Annual O&M Cost	\$ 3,680,546 \$	358,118 \$	368,504 \$	379,190 \$	390,187 \$	401,502 \$	413,146 \$	425,127 \$	437,456 \$	450,142 \$	463,196 \$	476,629 \$	490,451 \$
4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost	N/A \$ 904,581 \$	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE 885,681 \$	FALSE	FALSE	FALSE	FALSE	FALSE
7 Total O&M Costs	\$ 4,585,126 \$	358,118 \$	368,504 \$	379,190 \$	390,187 \$	401,502 \$	413,146 \$	1,310,808 \$	437,456 \$	450,142 \$	463,196 \$	476,629 \$	490,451 \$
C7 Alternative Diameter Pipeline (42")	21/	2000		0004	****	0000	2021	****	2022	0003	2000	****	0010
1 Future L1600 Replacement Cost	PV	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
2 MCS O&M and Emissions Cost	\$ (100,285,483) \$ \$ (89,968,134) \$	(8,753,928) \$	(9,007,792) \$	- \$ (9,269,018) \$	(9,537,820) \$	(9,814,416) \$	- \$ (10,099,035) \$	- \$ (10,391,907) \$	(10,693,272) \$	(11,003,377) \$	(11,322,475) \$	(334,683,589) \$ (11,650,826) \$	(344,389,413) \$ (11,988,700) \$
3 Total Avoided Costs	\$ (190,253,617) \$	(8,753,928) \$	(9,007,792) \$	(9,269,018) \$	(9,537,820) \$	(9,814,416) \$	(10,099,035) \$	(10,391,907) \$	(10,693,272) \$	(11,003,377) \$	(11,322,475) \$	(346,334,415) \$	(356,378,113) \$
4 Annual O&M Cost	\$ 3,680,546 \$	358,118 \$	368,504 \$	379,190 \$	390,187 \$	401,502 \$	413,146 \$	425,127 \$	437,456 \$	450,142 \$	463,196 \$	476,629 \$	490,451 \$
5 Pigging to Occur 6 TIMP Cost	N/A S 904 581 S	FALSE - S	FALSE - S	FALSE - S	FALSE - S	FALSE - S	FALSE - S	TRUE 885 681 S	FALSE - S	FALSE - S	FALSE - S	FALSE - S	FALSE - S
7 Total O&M Costs	\$ 4,585,126 \$	358,118 \$	368,504 \$	379,190 \$	390,187 \$	401,502 \$	413,146 \$	1,310,808 \$	437,456 \$	450,142 \$	463,196 \$	476,629 \$	490,451 \$
D Replace Line 1600 In-Place	PV	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
1 Future L1600 Replacement Cost	\$ (100,285,483) \$. Te	. 10	_ e	. 10	_ [e	. 10	. e	. e	_ Te	. 10	(334,683,589) \$	(344.389.413) \$
2 MCS O&M and Emissions Cost	s - s	- \$	- \$	- \$	- \$	- \$	- \$	- S	- \$	- \$	- \$	(334,683,589) \$	- \$
3 Total Avoided Costs	\$ (100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	(334,683,589) \$	(344,389,413) \$
4 Annual O&M Cost	\$ 3,647,596 \$	447,648 \$	460,630 \$	473,988 \$	487,734 \$	501,878 \$	516,432 \$	531,409 \$	546,820 \$	562,677 \$	578,995 \$	595,786 \$	613,064 \$
5 Pigging to Occur 6 TIMP Cost	N/A \$ 717,186 \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	TRUE 836,463 \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	TRUE 1,021,773 \$ 1,634,837 \$
7 Total O&M Costs	\$ 4,364,782 \$	447,648 \$	460,630 \$	473,988 \$	487,734 \$	1,338,341 \$	516,432 \$	531,409 \$	546,820 \$	562,677 \$	578,995 \$	595,786 \$	1,634,837 \$
E/F Otay Mesa Alternative	PV	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
1 Future L1600 Replacement Cost	\$ (100,285,483) \$	- \$	- Is	- 8	- 18	- Is	- \$	- Is	- Is	- \$	- s	(334,683,589) \$	(344,389,413) \$
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$ - \$ \$ (100.285.483) \$	- \$	- Š	- \$	- \$	- \$	- \$	- S	- s	- \$	- \$	(334.683.589) \$	(344,389,413) \$
3 Total Avoided Costs	\$ (100,265,465) \$	- 3	- 3	- 3	- 3	- 3	- 3	- 3	- -	- 13	- 3	(334,663,369)] \$	(344,369,413) \$
4 Annual O&M Cost 5 Total O&M Costs	s - s	- \$	- \$	- S	- \$ - \$	- \$	- S	- \$	- \$	- \$	- \$	- \$	- \$ - \$
		- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$
G LNG Storage (Peak-Shaver)	PV	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
1 Future L1600 Replacement Cost	\$ (100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	(334,683,589) \$	(344,389,413) \$
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$ (100,285,483) \$	- S	- S	- S	- S	- S	- S	- S	- S	- \$ - \$	- S	(334,683,589) \$	(344,389,413) \$
			<u> </u>	•	•	<u> </u>	•	•		•	•		
4 Annual O&M Cost 5 Total O&M Costs	\$ 15,283,747 \$ \$ 15,283,747 \$	1,790,591 \$	1,842,519 \$ 1,842,519 \$	1,895,952 \$ 1,895,952 \$	1,950,934 \$ 1,950,934 \$	2,007,511 \$ 2,007,511 \$	2,065,729 \$ 2,065,729 \$	2,125,635 \$ 2,125,635 \$	2,187,279 \$ 2,187,279 \$	2,250,710 \$ 2,250,710 \$	2,315,980 \$ 2,315,980 \$	2,383,144 \$ 2,383,144 \$	2,452,255 \$ 2,452,255 \$
H1 Alternative Energy (Grid-Scale Battery)	10,200,141	1,750,051	1,042,010 0	1,000,002	1,550,554	2,007,011	2,000,720 0	2,120,000 0	2,107,275	2,200,110 0	2,010,000 0	2,000,144 4	2,402,200 0
manate Energy (one some Buttery)	PV	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$ (100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- S	- \$	- \$	- \$	(334,683,589) \$	(344,389,413) \$
3 Total Avoided Costs	\$ (100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- 5	- \$	- \$	(334,683,589) \$	(344,389,413) \$
4 Annual O&M Cost 5 Total O&M Costs	\$ 15,283,747 \$ \$ 15,283,747 \$	1,790,591 \$ 1,790,591 \$	1,842,519 \$ 1,842,519 \$	1,895,952 \$ 1,895,952 \$	1,950,934 \$ 1,950,934 \$	2,007,511 \$ 2,007,511 \$	2,065,729 \$ 2,065,729 \$	2,125,635 \$ 2,125,635 \$	2,187,279 \$ 2,187,279 \$	2,250,710 \$ 2,250,710 \$	2,315,980 \$ 2,315,980 \$	2,383,144 \$ 2,383,144 \$	2,452,255 \$ 2,452,255 \$
H2 Alternative Energy (Smaller-Scale Battery)													
	PV	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Future L1600 Replacement Cost MCS O&M and Emissions Cost	\$ (100,285,483) \$ \$ - \$	- S	- \$ - \$	- S	- \$ - \$	- S	- \$ - \$	- S	- \$ - \$	- \$ - \$	- \$ - \$	(334,683,589) \$	(344,389,413) \$
3 Total Avoided Costs	\$ (100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	(334,683,589) \$	(344,389,413) \$
4 Annual O&M Cost	\$ 15 283 747 \$	1 790 591 \$	1.842.519 S	1 895 952 S	1 950 934 \$	2 007 511 \$	2.065.729 \$	2 125 635 S	2.187.279 \$	2 250 710 \$	2.315.980 S	2 383 144 \$	2 452 255 \$
5 Total O&M Costs	\$ 15,283,747 \$	1,790,591 \$	1,842,519 \$	1,895,952 \$	1,950,934 \$	2,007,511 \$	2,065,729 \$	2,125,635 \$	2,187,279 \$	2,250,710 \$	2,315,980 \$	2,383,144 \$	2,452,255 \$
I Off-shore Route	ru.	2020	2020	2024	2022	2022	2024	2025	2020	2027	2020	2020	2040
4.5. 14000	PV	2029	2030 Operational Year	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$ (100,285,483) \$ \$ (59,240,789) \$	- \$ - \$	- \$ (9,007,792) \$	- \$ (9,269,018) \$	(9,537,820) \$	(9,814,416) \$	- \$ (10,099,035) \$	- \$ (10,391,907) \$	- \$ (10,693,272) \$	- \$ (11,003,377) \$	- \$ (11,322,475) \$	(334,683,589) \$ (11,650,826) \$	(344,389,413) \$ (11,988,700) \$
3 Total Avoided Costs	\$ (159,526,272) \$	- \$	(9,007,792) \$	(9,269,018) \$	(9,537,820) \$	(9,814,416) \$	(10,099,035) \$	(10,391,907) \$	(10,693,272) \$	(11,003,377) \$	(11,322,475) \$	(346,334,415) \$	(356,378,113) \$
4 Annual O&M Cost	\$ 4,544,076 \$	- \$	690,944 \$	710,982 \$	731,600 \$	752,817 \$	774,648 \$	797,113 \$	820,229 \$	844,016 \$	868,493 \$	893,679 \$	919,596 \$
5 Pigging to Occur 6 TIMP Cost	N/A \$ 595,634 \$	FALSE - \$	FALSE - S	FALSE - \$	TRUE 937,796 \$	FALSE - S	FALSE - \$	FALSE - S					
7 Total O&M Costs	\$ 5,139,710 \$	- \$	690,944 \$	710,982 \$	731,600 \$	752,817 \$	774,648 \$	797,113 \$	820,229 \$	1,781,812 \$	868,493 \$	893,679 \$	919,596 \$
J1 Blythe to Santee Alternative 1	PV	2029	2020	2021	2022	2022	2024	2025	2026	2027	2029	2020	2040
1 Future L1600 Replacement Cost		2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
2 MCS O&M and Emissions Cost	\$ (100,285,483) \$ \$ (74,719,907) \$	- \$ (8,753,928) \$	(9,007,792) \$	- \$ (9,269,018) \$	(9,537,820) \$	(9,814,416) \$	(10,099,035) \$	- \$ (10,391,907) \$	- \$ (10,693,272) \$	- \$ (11,003,377) \$	- \$ (11,322,475) \$	(334,683,589) \$ (11,650,826) \$	(344,389,413) \$ (11,988,700) \$
3 Total Avoided Costs	\$ (175,005,390) \$	(8,753,928) \$	(9,007,792) \$	(9,269,018) \$	(9,537,820) \$	(9,814,416) \$	(10,099,035) \$	(10,391,907) \$	(10,693,272) \$	(11,003,377) \$	(11,322,475) \$	(346,334,415) \$	(356,378,113) \$
4 Annual O&M Cost	\$ 14,495,118 \$	1,698,198 \$	1,747,446 \$	1,798,122 \$	1,850,268 \$	1,903,925 \$	1,959,139 \$	2,015,954 S	2,074,417 \$	2,134,575 \$	2,196,478 \$	2,260,176 \$	2,325,721 \$
5 Pigging to Occur	N/A \$ 2.253.804 \$	FALSE - S	FALSE - S	FALSE - S	TRUE 2 438 668 \$	1,903,925 \$ FALSE - \$	FALSE - S	2,015,954 \$ FALSE - \$	2,074,417 \$ FALSE - \$	2,134,575 \$ FALSE - \$	FALSE - S	TRUE 2 978 930 \$	FALSE - \$
6 TIMP Cost													

ANNUAL COSTS BY PROJECT ALTERNATE, FOR AVOIDED COSTS AND O&M COSTS

C6 Alternative Diameter Pipeline (30")	PV (X years after operational)												
	PV	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$ (100,285,483) \$ \$ (62,977,694) \$	- \$ (8,885,889) \$	- \$ (9,143,580) \$	- S (9,408,744) S	- \$ (9,681,597) \$	(9,962,364) \$	- \$ (10,251,272) \$	- \$ (10,548,559) \$	- \$ (10,854,467) \$	- \$ (11,169,247) \$	- \$ (11,493,155) \$	- \$ (11,826,457) \$	- \$ (12,169,424) \$
3 Total Avoided Costs	\$ (163,263,177) \$	(8,885,889) \$	(9,143,580) \$	(9,408,744) \$	(9,681,597) \$	(9,962,364) \$	(10,251,272) \$	(10,548,559) \$	(10,854,467) \$	(11,169,247) \$	(11,493,155) \$	(11,826,457) \$	(12,169,424) \$
4 Annual O&M Cost	\$ 3,680,546 \$	519,310 \$	534,370 \$	549,866 \$	565,812 \$	582,221 \$	599,105 \$	616,479 \$	634.357 \$	652,754 \$	671,684 \$	691,162 \$	711,206 \$
4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost	N/A \$ 904 581 \$	TRUE 1 081 895 \$	FALSE - S	TRUE 1 321 578 \$	FALSE - S	FALSE - S	FALSE - S	FALSE - S					
7 Total O&M Costs	\$ 4,585,126 \$	1,601,205 \$	534,370 \$	549,866 \$	565,812 \$	582,221 \$	599,105 \$	616,479 \$	1,955,935 \$	652,754 \$	671,684 \$	691,162 \$	711,206 \$
C7 Alternative Diameter Pipeline (42")	PV	2042	2042	2044	2045	2046	2047	2049	2040	2050	2051	2052	2053
1 Future L1600 Replacement Cost	PV (100 005 100) 0	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2093
2 MCS O&M and Emissions Cost	\$ (100,285,483) \$ \$ (89,968,134) \$	(12,694,127) \$	(13,062,257) \$	(13,441,063) \$	(13,830,853) \$	(14,231,948) \$	(14,644,675) \$	(15,069,370) \$	(15,506,382) \$	(15,956,067) \$	(16,418,793) \$	(16,894,938) \$	(17,384,891) \$
3 Total Avoided Costs	\$ (190,253,617) \$	(12,694,127) \$	(13,062,257) \$	(13,441,063) \$	(13,830,853) \$	(14,231,948) \$	(14,644,675) \$	(15,069,370) \$	(15,506,382) \$	(15,956,067) \$	(16,418,793) \$	(16,894,938) \$	(17,384,891) \$
4 Annual O&M Cost	\$ 3,680,546 \$	519,310 \$	534,370 \$	549,866 \$	565,812 \$	582,221 \$	599,105 \$	616,479 \$	634,357 \$	652,754 \$	671,684 \$	691,162 \$	711,206 \$
5 Pigging to Occur 6 TIMP Cost	N/A \$ 904.581 \$	TRUE 1.081.895 \$	FALSE - S	FALSE - S	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - S	TRUE 1,321,578 \$	FALSE - S	FALSE - S	FALSE - S	FALSE - S
7 Total O&M Costs	\$ 4,585,126 \$	1,601,205 \$	534,370 \$	549,866 \$	565,812 \$	582,221 \$	599,105 \$	616,479 \$	1,955,935 \$	652,754 \$	671,684 \$	691,162 \$	711,206 \$
D Replace Line 1600 In-Place	PV	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
1 Future L1600 Replacement Cost	\$ (100.285.483) \$	10	16	10	1000	1.0		10.0	10	16		1002	100
2 MCS O&M and Emissions Cost	S - S	- \$	- S	- S	- 5	- \$	- \$	- \$	- \$	- \$	- \$	- 5	- S
3 Total Avoided Costs	\$ (100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$
4 Annual O&M Cost 5 Pigging to Occur	\$ 3,647,596 \$	649,137 \$	667,962 \$	687,333 \$	707,266 \$	727,776 \$	748,882 \$	770,599 \$	792,947 \$	815,942 \$	839,604 \$	863,953 \$	889,008 \$
5 Pigging to Occur 6 TIMP Cost	N/A \$ 717,186 \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	TRUE 1,248,136 \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$
7 Total O&M Costs	\$ 4,364,782 \$	649,137 \$	667,962 \$	687,333 \$	707,266 \$	727,776 \$	1,997,018 \$	770,599 \$	792,947 \$	815,942 \$	839,604 \$	863,953 \$	889,008 \$
E/F Otay Mesa Alternative	DV	20.42	2042	2044	2045	2040	2047	2040	2040	2050	2054	2052	2052
1 Future L1600 Replacement Cost	\$ (100.285.483) \$	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2032	2093
2 MCS O&M and Emissions Cost	\$ - \$	- S	- S	- S	- S	- \$	- 3	- S	- S	- S	- \$	- 5	- 3
3 Total Avoided Costs	\$ (100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$
4 Annual O&M Cost	s - \$	- \$	- IS	- IS	- \$	- \$	- \$	- Is	- \$	- IS	- IS	- \$	- \$
5 Total O&M Costs	\$ - \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$
G LNG Storage (Peak-Shaver)	DV	2042	2042	2044	2045	2046	2047	2049	2040	2050	2051	2052	2052
1 Future L1600 Replacement Cost	\$ (100,285,483) \$	2042	2043	2044	2045	2040	2047	2040	2049	2030	2031	2032	2000
2 MCS O&M and Emissions Cost	\$ - \$	- \$	- S	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- 5
3 Total Avoided Costs	\$ (100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- 5	- 5	- \$	- \$
4 Annual O&M Cost	\$ 15,283,747 \$	2,596,548 \$	2,671,848 \$	2,749,332 \$	2,829,062 \$	2,911,105 \$	2,995,527 \$	3,082,397 \$	3,171,787 \$	3,263,769 \$	3,358,418 \$	3,455,812 \$	3,556,031 \$
5 Total O&M Costs	\$ 15,283,747 \$	2,596,548 \$	2,671,848 \$	2,749,332 \$	2,829,062 \$	2,911,105 \$	2,995,527 \$	3,082,397 \$	3,171,787 \$	3,263,769 \$	3,358,418 \$	3,455,812 \$	3,556,031 \$
H1 Alternative Energy (Grid-Scale Battery)	PV	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
1 Future L1600 Replacement Cost	\$ (100.285.483) \$	- S	- Is	- \$	- S	- 18							
2 MCS O&M and Émissions Cost 3 Total Avoided Costs	\$ - \$ \$ (100,285,483) \$	- \$	- S	- S	- \$	- \$	- \$	- \$	- S	- \$	- S	- \$	- \$
3 Total Avoided Costs	\$ (100,265,463) \$	- 3	- 3	- 3	- 3	- 3	- 3	- 3	- 13	- 3	- 3	- 19	- 13
4 Annual O&M Cost	\$ 15,283,747 \$	2,596,548 \$	2,671,848 \$	2,749,332 \$	2,829,062 \$	2,911,105 \$	2,995,527 \$	3,082,397 \$	3,171,787 \$	3,263,769 \$	3,358,418 \$	3,455,812 \$	3,556,031 \$
5 Total O&M Costs	\$ 15,283,747 \$	2,596,548 \$	2,671,848 \$	2,749,332 \$	2,829,062 \$	2,911,105 \$	2,995,527 \$	3,082,397 \$	3,171,787 \$	3,263,769 \$	3,358,418 \$	3,455,812 \$	3,556,031 \$
H2 Alternative Energy (Smaller-Scale Battery)	PV	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
1 Future L1600 Replacement Cost	\$ (100,285,483) \$	- \$	- IS	- IS	- \$	- \$	- \$	- Is	- \$	- IS	- IS	- \$	- \$
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$ - \$ \$ (100,285,483) \$	- S	- S	- S	- \$ - \$	- \$ - \$	- \$ - \$	- \$ - \$	- S	- \$ - \$	- S	- S	- S
	(,,)	+*		1-		+*			+*	+*			
4 Annual O&M Cost 5 Total O&M Costs	\$ 15,283,747 \$ \$ 15,283,747 \$	2,596,548 \$ 2,596,548 \$	2,671,848 \$	2,749,332 \$ 2,749,332 \$	2,829,062 \$ 2,829,062 \$	2,911,105 \$ 2,911,105 \$	2,995,527 \$ 2,995,527 \$	3,082,397 \$	3,171,787 \$ 3,171,787 \$	3,263,769 \$ 3,263,769 \$	3,358,418 \$	3,455,812 S	3,556,031 S
Off-shore Route	\$ 15,265,747 \$	2,596,546 \$	2,671,646 \$	2,749,332 \$	2,829,062 \$	2,911,105 \$	2,995,527 \$	3,062,397 \$	3,171,767 \$	3,263,769 \$	3,336,416 \$	3,455,612 \$	3,556,031 \$
1 On-snore Route	PV	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
1 Future L1600 Replacement Cost 2 MCS Q&M and Emissions Cost	\$ (100,285,483) \$	- \$	- \$	- S	- \$	- \$	- \$	- \$	- \$	- S	- S	- S	- S
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$ (59,240,789) \$ \$ (159,526,272) \$	(12,694,127) \$ (12,694,127) \$	(13,062,257) \$ (13,062,257) \$	(13,441,063) \$ (13,441,063) \$	(13,830,853) \$ (13,830,853) \$	(14,231,948) \$ (14,231,948) \$	(14,644,675) \$	(15,069,370) \$ (15,069,370) \$	(15,506,382) \$ (15,506,382) \$	(15,956,067) \$ (15,956,067) \$	(16,418,793) \$ (16,418,793) \$	(16,894,938) \$ (16,894,938) \$	(17,384,891) \$ (17,384,891) \$
4 Annual O&M Cost 5 Pigging to Occur	\$ 4,544,076 \$ N/A	973,706 \$ FALSE	1,001,943 \$ FALSE	1,030,999 \$ TRUE	1,060,898 \$ FALSE	1,091,664 \$ FALSE	1,123,323 \$ FALSE	1,155,899 \$ FALSE	1,189,420 \$ FALSE	1,223,913 \$ FALSE	1,259,407 \$ TRUE	1,295,930 \$ FALSE	1,333,511 \$ FALSE
5 Pigging to Occur 6 TIMP Cost 7 Total O&M Costs	\$ 595,634 \$ \$ 5,139,710 \$	973,706 \$	- S 1.001.943 S	1,145,555 \$ 2,176,554 \$	1 060 000	- \$ 1,091,664 \$	- \$ 1.123.323 \$	1 155 000	- S 1,189,420 S	- S 1,223,913 S	1,399,341 \$ 2,658,748 \$	- S 1,295,930 S	- \$ 1,333,511 \$
J1 Blythe to Santee Alternative 1	5,139,710 \$	ar3,700 \$	1,001,343 \$	2,110,004 \$	1,000,000 \$	1,031,004 \$	1,123,323 \$	1,133,033 \$	1,109,420 \$	1,618,633,1	2,030,740 \$	1,200,800 \$	1,333,311 \$
J1 Diyune to Santee Alternative 1	PV	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
1 Future L1600 Replacement Cost	\$ (100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- S	- S
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$ (74,719,907) \$ \$ (175,005,390) \$	(12,694,127) \$ (12,694,127) \$	(13,062,257) \$ (13,062,257) \$	(13,441,063) \$ (13,441,063) \$	(13,830,853) \$ (13,830,853) \$	(14,231,948) \$ (14,231,948) \$	(14,644,675) \$ (14,644,675) \$	(15,069,370) \$ (15,069,370) \$	(15,506,382) \$ (15,506,382) \$	(15,956,067) \$ (15,956,067) \$	(16,418,793) \$ (16,418,793) \$	(16,894,938) \$ (16,894,938) \$	(17,384,891) \$ (17,384,891) \$
	(),,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,												
4 Annual O&M Cost	\$ 14,495,118 \$	2,462,568 \$ FALSE	2,533,983 \$ FALSE	2,607,468 \$ FALSE	2,683,085 \$ FALSE - \$	2,760,894 \$ TRUE	2,840,960 \$ FALSE	2,923,348 \$ FALSE	3,008,125 \$ FALSE	3,095,361 \$ FALSE	3,185,126 \$ FALSE	3,277,495 \$ FALSE	3,372,542 \$ TRUE
5 Pigging to Occur						3 638 881 \$. / 1202						4 445 038 S

	PV (X years af	ter operational)	40	41	42	43	44	45	46	47	48	49	50	51
C6 Alternative Diameter Pipeline (30")	1	00 PV	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066
1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	S	(100,285,483) \$ (62,977,694) \$	- \$ (12.885,485) \$	- \$ (13.259.164) \$	- \$ (13.643.680) \$	- \$ (14 ()39 (346) \$	- S	- \$ (14.865.436) \$	- \$ (15.296.533) \$	- \$ (15.740.133) \$	- \$ (16.196.597) \$	- \$ (16.666,298) \$	- \$ (17 149 621) \$	- \$ (17.646.960) \$
3 Total Avoided Costs	\$	(163,263,177) \$	(12,885,485) \$	(13,259,164) \$	(13,643,680) \$	(14,039,346) \$	(14,446,487) \$	(14,865,436) \$	(15,296,533) \$	(15,740,133) \$	(16,196,597) \$	(16,666,298) \$	(17,149,621) \$	(17,646,960) \$
4 Annual O&M Cost 5 Pigging to Occur	\$	3,680,546 \$	753,054 \$ FALSE	774,893 \$	797,365 \$ FALSE	820,488 \$ FALSE	844,282 \$ FALSE	868,767 \$ FALSE	893,961 \$ FALSE	919,886 \$ FALSE	946,562 \$	974,013 \$ FALSE	1,002,259 \$ FALSE	1,031,325 \$ FALSE
6 TIMP Cost 7 Total O&M Costs	\$ \$	904,581 \$ 4,585,126 \$	753,054 \$	1,614,360 \$ 2,389,253 \$	- \$ 797.365 \$	FALSE - \$ 820,488 \$	FALSE - \$ 844.282 \$	- \$ 868.767 \$	FALSE - \$ 893,961 \$	919.886 \$	1,972,005 \$ 2,918,567 \$	974.013 \$	1.002.259 \$	- \$ 1.031.325 \$
C7 Alternative Diameter Pipeline (42")		,,,,,,	,	-,, +	,	,, -			,, ,	,	-,,, -		.,,	.,,
1 Future L1600 Replacement Cost	S	(100.285.483) \$	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$	(89,968,134) \$ (190,253,617) \$	(18,407,836) \$ (18,407,836) \$	(18,941,663) \$ (18,941,663) \$	(19,490,971) \$ (19,490,971) \$	(20,056,209) \$ (20,056,209) \$	(20,637,839) \$ (20,637,839) \$	(21,236,337) \$ (21,236,337) \$	(21,852,190) \$ (21,852,190) \$	(22,485,904) \$ (22,485,904) \$	(23,137,995) \$ (23,137,995) \$	(23,808,997) \$ (23,808,997) \$	(24,499,458) \$ (24,499,458) \$	(25,209,942) \$ (25,209,942) \$
4 Annual O&M Cost		3.680.546 \$	753,054 \$	774,893 \$	797.365 \$	820.488 S	844,282 \$	868.767 S	893,961 \$	919,886 \$	946,562 \$	974,013 \$	1,002,259 \$	4 024 205 6
5 Pigging to Occur 6 TIMP Cost	N/A S	904,581 \$	753,054 \$ FALSE - \$	TRUE 1,614,360 \$	797,305 \$ FALSE - \$	FALSE - \$	FALSE - S	FALSE - S	FALSE - S	FALSE - \$	TRUE 1,972,005 \$	FALSE - \$	FALSE - \$	1,031,325 \$ FALSE - \$
7 Total O&M Costs	\$	4,585,126 \$	753,054 \$	2,389,253 \$	797,365 \$	820,488 \$	844,282 \$	868,767 \$	893,961 \$	919,886 \$	2,918,567 \$	974,013 \$	1,002,259 \$	1,031,325 \$
D Replace Line 1600 In-Place	F	PV	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066
Future L1600 Replacement Cost MCS O&M and Emissions Cost	S S	(100,285,483) \$	- \$ - \$	- S - S	- \$ - \$	- \$ - \$	- S - S	- S	- \$ - \$	- \$ - \$	- \$ - \$	- \$ - \$	- S - S	- S
3 Total Avoided Costs	\$	(100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$
4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost	\$ N/A	3,647,596 \$	941,318 \$ FALSE	968,616 \$ FALSE	996,706 \$ FALSE	1,025,610 \$ FALSE	1,055,353 \$ FALSE	1,085,958 \$ FALSE	1,117,451 \$ TRUE	1,149,857 \$ FALSE	1,183,203 \$ FALSE	1,217,516 \$ FALSE	1,252,824 \$ FALSE	1,289,156 \$ FALSE
6 TIMP Cost 7 Total O&M Costs	\$	717,186 \$ 4,364,782 \$	941,318 \$	- S 968,616 \$	996,706 \$	- \$ 1,025,610 \$	- S 1,055,353 \$	- S 1,085,958 \$	1,862,418 \$ 2,979,869 \$	- \$ 1,149,857 \$	- \$ 1,183,203 \$	1,217,516 \$	1,252,824 \$	- \$ 1,289,156 \$
E/F Otay Mesa Alternative	F	PV	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066
Future L1600 Replacement Cost MCS O&M and Emissions Cost	S	(100,285,483) \$	- \$	- S	- S	- S	- \$	- S	- S	- s	- \$	- \$	- \$	- S
3 Total Avoided Costs	\$	(100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$
4 Annual O&M Cost	\$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$
5 Total O&M Costs G LNG Storage (Peak-Shaver)	\$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$
	- F	PV	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066
1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$	(100,285,483) \$ - \$ (100,285,483) \$	- \$ - \$	- S	- \$ - \$	- \$ - \$								
	3	(100,265,463) \$	- 3	- 3	- 3	- 3	- \$	- \$	- ,	- 3	- \$	- 19	- 3	- \$
4 Annual O&M Cost 5 Total O&M Costs	\$	15,283,747 \$ 15,283,747 \$	3,765,271 \$ 3,765,271 \$	3,874,464 \$ 3,874,464 \$	3,986,823 \$ 3,986,823 \$	4,102,441 \$ 4,102,441 \$	4,221,412 \$ 4,221,412 \$	4,343,833 \$ 4,343,833 \$	4,469,804 \$ 4,469,804 \$	4,599,428 \$ 4,599,428 \$	4,732,812 \$ 4,732,812 \$	4,870,063 \$ 4,870,063 \$	5,011,295 \$ 5,011,295 \$	5,156,623 \$ 5,156,623 \$
H1 Alternative Energy (Grid-Scale Battery)		PV	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066
1 Future L1600 Replacement Cost	\$	(100,285,483) \$	- \$	- \$	- S	- S	- s	- S	- \$	- s	- \$	- s	- \$	- S
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$	(100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$
4 Annual O&M Cost	\$	15,283,747 \$	3,765,271 \$	3,874,464 \$	3,986,823 \$	4,102,441 \$	4,221,412 \$	4,343,833 \$	4,469,804 \$	4,599,428 \$	4,732,812 \$	4,870,063 \$	5,011,295 \$	5,156,623 \$
5 Total O&M Costs H2 Alternative Energy (Smaller-Scale Battery)	\$	15,283,747 \$	3,765,271 \$	3,874,464 \$	3,986,823 \$	4,102,441 \$	4,221,412 \$	4,343,833 \$	4,469,804 \$	4,599,428 \$	4,732,812 \$	4,870,063 \$	5,011,295 \$	5,156,623 \$
	F	ν	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066
1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$	(100,285,483) \$ - \$ (100,285,483) \$	- \$	- S	- S	- \$	- S	- S	- \$ - \$	- \$	- \$ - \$	- \$	- \$	- \$
		•	- 1,	- •	- 13	- 3	- 1	- 18	- 18	- \$	- 18	-	- \$	-
4 Annual O&M Cost 5 Total O&M Costs	\$	15,283,747 \$ 15,283,747 \$	3,765,271 \$ 3,765,271 \$	3,874,464 \$ 3,874,464 \$	3,986,823 \$ 3,986,823 \$	4,102,441 \$ 4,102,441 \$	4,221,412 \$ 4,221,412 \$	4,343,833 \$ 4,343,833 \$	4,469,804 \$ 4,469,804 \$	4,599,428 \$ 4,599,428 \$	4,732,812 \$ 4,732,812 \$	4,870,063 \$ 4,870,063 \$	5,011,295 \$ 5,011,295 \$	5,156,623 \$ 5,156,623 \$
I Off-shore Route		ν	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066
1 Future L1600 Replacement Cost	s	(100,285,483) \$	- S	- S	- \$	- S	- S	- S	- S	- s	- \$	- S	- \$	- S
2 MCS O&M and Émissions Cost 3 Total Avoided Costs	\$	(59,240,789) \$ (159,526,272) \$	(18,407,836) \$ (18,407,836) \$	(18,941,663) \$ (18,941,663) \$	(19,490,971) \$ (19,490,971) \$	(20,056,209) \$ (20,056,209) \$	(20,637,839) \$ (20,637,839) \$	(21,236,337) \$ (21,236,337) \$	(21,852,190) \$ (21,852,190) \$	(22,485,904) \$ (22,485,904) \$	(23,137,995) \$ (23,137,995) \$	(23,808,997) \$ (23,808,997) \$	(24,499,458) \$ (24,499,458) \$	(25,209,942) \$ (25,209,942) \$
4 Annual O&M Cost	\$	4,544,076 \$	1,411,977 \$	1,452,924 \$	1,495,059 \$	1,538,415 \$	1,583,029 \$	1,628,937 \$	1,676,177 \$	1,724,786 \$	1,774,804 \$	1,826,274 \$	1,879,236 \$	1,933,734 \$
5 Pigging to Occur 6 TIMP Cost 7 Total O&M Costs	N/A \$	595,634 \$ 5,139,710 \$	FALSE - \$	FALSE - \$ 1.452.924 \$	FALSE - \$	1,709,350 \$ 3,247,766 \$	FALSE - \$ 1.583.029 \$	FALSE - \$	FALSE - \$	FALSE - \$ 1.724.786 \$	FALSE - \$	FALSE - \$ 1.826,274 \$	7RUE 2,088,040 \$ 3,967,275 \$	FALSE - \$
7 Total O&M Costs J1 Blythe to Santee Alternative 1	•	5,139,/TU \$	1,417,9// \$	1,452,924 \$	1,490,059 \$	3,24/,/66 \$	1,363,029 \$	1,028,937 \$	1,0/0,1// \$	1,124,/86 \$	1,774,804 \$	1,020,274 \$	3,307,275 \$	1,933,734 \$
1 Future L1600 Replacement Cost	e F	(400 20E 400) e	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$	(100,285,483) \$ (74,719,907) \$ (175,005,390) \$	(18,407,836) \$ (18,407,836) \$	(18,941,663) \$ (18,941,663) \$	(19,490,971) \$ (19,490,971) \$	(20,056,209) \$ (20,056,209) \$	(20,637,839) \$ (20,637,839) \$	(21,236,337) \$ (21,236,337) \$	(21,852,190) \$ (21,852,190) \$	(22,485,904) \$ (22,485,904) \$	(23,137,995) \$ (23,137,995) \$	(23,808,997) \$ (23,808,997) \$	(24,499,458) \$ (24,499,458) \$	(25,209,942) \$ (25,209,942) \$
4 Annual O&M Cost	e	14.495.118 \$	3.570.986 \$	3.674.545 \$			4.003.591 \$		4.239.166 S			4.618.772 \$	4.752.717 \$	4.890.545 S
4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost	N/A	14,495,118 \$	3,570,986 \$ FALSE	3,674,545 \$ FALSE	3,781,107 \$ FALSE	3,890,759 \$ FALSE	4,003,591 \$ FALSE	4,119,695 \$	4,239,166 \$ FALSE	4,362,102 \$ FALSE	4,488,603 \$ FALSE	4,618,772 \$ FALSE	4,752,717 \$ FALSE	4,890,545 \$ FALSE

C. Alexandra Dissanta Disalia (2011)	PV (X years after operational) 100	53	54	55	56	57	58	59	60	61	62	63	64
6 Alternative Diameter Pipeline (30")	PV	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079
Future L1600 Replacement Cost	\$ (100,285,483) \$	- \$	- \$	- \$	- s	- S	- S	- S	- s	- S	- S	- \$	- 1
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$ (62,977,694) \$ \$ (163,263,177) \$	(18,685,324) \$ (18,685,324) \$	(19,227,199) \$	(19,784,787) \$ (19,784,787) \$	(20,358,546) \$ (20,358,546) \$	(20,948,944) \$ (20,948,944) \$	(21,556,463) \$ (21,556,463) \$	(22,181,601) \$ (22,181,601) \$	(22,824,867) \$ (22,824,867) \$	(23,486,788) \$	(24,167,905) \$ (24,167,905) \$	(24,868,775) \$ (24,868,775) \$	(25,589,969) (25,589,969)
Total Avoided Costs	\$ (103,203,177) \$	(10,003,324)] \$	(15,227,155)	(15,704,707) 3	(20,330,340) 3	(20,540,544)	(21,550,405)] \$	(22,101,001)] \$	(22,024,007) \$	(23,400,700) \$	(24,107,903) \$	(24,000,773)] \$	(23,365,565)
Annual O&M Cost	\$ 3.680.546 \$	1,092,009 \$	1,123,677 \$	1.156.264 S	1.189.795 S	1,224,299 \$	1,259,804 \$	1,296,338 \$	1,333,932 \$	1,372,616 \$	1,412,422 \$	1.453.382 \$	1.495.530
5 Pigging to Occur 6 TIMP Cost	N/A \$ 904.581 \$	FALSE	FALSE	TRUE 2 408 882 \$	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE 2 942 546 \$	FALSE	FALSE
7 Total O&M Costs	\$ 4,585,126 \$	1,092,009 \$	1,123,677 \$	3,565,146 \$	1,189,795 \$	1,224,299 \$	1,259,804 \$	1,296,338 \$	1,333,932 \$	1,372,616 \$	4,354,968 \$	1,453,382 \$	1,495,530
7 Alternative Diameter Pipeline (42")													
Alternative Diameter Fipeline (42)	PV	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079
Future L1600 Replacement Cost	\$ (100.285.483) \$	- IS	- IS	- Is	- IS	- 15							
MCS O&M and Emissions Cost Total Avoided Costs	\$ (100,285,483) \$ \$ (89,968,134) \$	(26,693,320) \$	(27,467,427) \$ (27,467,427) \$	(28,263,982) \$ (28,263,982) \$	(29,083,638) \$ (29,083,638) \$	(29,927,063) \$ (29,927,063) \$	(30,794,948) \$ (30,794,948) \$	(31,688,001) \$	(32,606,953) \$	(33,552,555) \$	(34,525,579) \$	(35,526,821) \$ (35,526,821) \$	(36,557,099) 3
3 Total Avoided Costs	\$ (190,253,617) \$	(26,693,320) \$	(27,467,427) \$	(28,263,982) \$	(29,083,638) \$	(29,927,063) \$	(30,794,948) \$	(31,688,001) \$	(32,606,953) \$	(33,552,555) \$	(34,525,579) \$	(35,526,821) \$	(36,557,099)
4 Annual O&M Cost	\$ 3,680,546 \$	1,092,009 \$	1,123,677 \$	1,156,264 \$	1,189,795 \$	1,224,299 \$	1,259,804 \$	1,296,338 \$	1,333,932 \$	1,372,616 \$	1,412,422 \$	1,453,382 \$	1,495,530
5 Pigging to Occur 6 TIMP Cost	N/A	FALSE \$	FALSE	TRUE \$	FALSE \$	FALSE \$	FALSE \$	FALSE 5	FALSE \$	FALSE	TRUE	FALSE \$	FALSE
TIMP Cost Total O&M Costs	\$ 904,581 \$ \$ 4,585,126 \$	1,092,009 \$	- S 1.123.677 S	2,408,882 \$ 3,565,146 \$	1.189.795 S	- S 1,224,299 \$	1,259,804 \$	- S 1,296,338 \$	1,333,932 \$	1,372,616 \$	2,942,546 \$ 4,354,968 \$	- S 1,453,382 S	1.495.530
	4,363,120 3	1,032,005	1,123,077	3,303,140 3	1,103,733 3	1,224,255	1,235,004	1,250,330 \$	1,333,832 9	1,372,010	4,334,800 \$	1,455,562 9	1,455,530
Replace Line 1600 In-Place	PV	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079
1 Future L1600 Replacement Cost	\$ (100,285,483) \$		1-			1-		1-	1 -	12	To-	7.0	
2 MCS O&M and Emissions Cost	s - s	- S	- S	- S	- S	- S	- S	- S	- 5	- S	- S	- S	- 8
3 Total Avoided Costs	\$ (100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- 5
4 Annual O&M Cost 5 Pigging to Occur	\$ 3,647,596 \$ N/A	1,365,011 \$ TRUE	1,404,596 \$ FALSE	1,445,329 \$ FALSE	1,487,244 \$ FALSE	1,530,374 \$ FALSE	1,574,755 \$ FALSE	1,620,423 \$ FALSE	1,667,415 \$ TRUE	1,715,770 \$ FALSE	1,765,528 \$ FALSE	1,816,728 \$ FALSE	1,869,413 \$ FALSE
Pigging to Occur TIMP Cost	\$ 717,186 \$	2,275,018 \$	- \$	- \$	- \$	- S	- \$	- \$	2,779,025 \$	- S	- S	- \$	- 9
Total O&M Costs	\$ 4,364,782 \$	3,640,029 \$	1,404,596 \$	1,445,329 \$	1,487,244 \$	1,530,374 \$	1,574,755 \$	1,620,423 \$	4,446,440 \$	1,715,770 \$	1,765,528 \$	1,816,728 \$	1,869,413
/F Otay Mesa Alternative	PV.	2000	2000	2070	2074	2072	2072	2074	2075	2070	2077	2070	2070
	PV	2068	2069	2070	20/1	2072	2073	2074	2075	2076	2077	2078	2079
1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$ (100,285,483) \$	- \$	- ş	- \$	- \$	- \$	- S	- S	- \$	- \$	- \$	- \$	- 9
3 Total Avoided Costs	\$ (100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- 1
4 Annual O&M Cost	S - S	- \$	- \$	- \$	- \$	- S	- \$	- \$	- \$	- \$	- \$	- \$	- 9
5 Total O&M Costs	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- 1
3 LNG Storage (Peak-Shaver)	PV.	2000	2000	2070	2074	2072	2072	2074	2075	2070	2077	2078	2070
	PV	2068	2069	2070	20/1	2072	2073	2074	2075	2076	2077	2078	2079
1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$ (100,285,483) \$	- \$	- \$	- \$	- \$	- S	- \$	- \$	- \$	- \$	- \$	- \$	- S
3 Total Avoided Costs	\$ (100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- 1
	·	·	<u> </u>	•		<u> </u>	•	· ·	<u> </u>	·	<u> </u>		
4 Annual O&M Cost	\$ 15,283,747 \$	5,460,044 \$	5,618,385 \$	5,781,318 \$	5,948,976 \$	6,121,497 \$	6,299,020 \$ 6,299,020 \$	6,481,692 \$	6,669,661 \$	6,863,081 \$	7,062,110 \$	7,266,911 \$ 7,266,911 \$	7,477,652 \$
5 Total O&M Costs	\$ 15,283,747 \$	5,460,044 \$	5,618,385 \$	5,781,318 \$	5,948,976 \$	6,121,497 \$	6,299,020 \$	6,481,692 \$	6,669,661 \$	6,863,081 \$	7,062,110 \$	7,266,911 \$	7,477,652 \$
11 Alternative Energy (Grid-Scale Battery)	PV.	2000	2000	2070	2071	2072	2072	2074	2075	2070	2077	2078	2079
	F*	2000	2069	2070	20/1	2012	2073	2074	20/5	2076	2011	2076	2079
1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$ (100,285,483) \$ \$ - \$	- \$ - \$	- S	- S	- S	- S	- S	- \$ - \$	- S	- \$ - \$	- S	- S	- S
3 Total Avoided Costs	\$ (100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$
4 Annual O&M Cost	\$ 15,283,747 \$	5,460,044 \$	5,618,385 \$	5,781,318 \$	5,948,976 \$	6,121,497 \$	6,299,020 \$	6,481,692 \$	6,669,661 \$	6,863,081 \$	7,062,110 \$	7,266,911 \$	7,477,652 \$
5 Total O&M Costs	\$ 15,283,747 \$	5,460,044 \$	5,618,385 \$	5,781,318 \$	5,948,976 \$	6,121,497 \$	6,299,020 \$	6,481,692 \$	6,669,661 \$	6,863,081 \$	7,062,110 \$	7,266,911 \$	7,477,652 \$
12 Alternative Energy (Smaller-Scale Battery)	PV	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079
		2000	2009	2010	2071	2012	2013	20/4	2013	2070	2011	2070	2075
Future L1600 Replacement Cost MCS O&M and Emissions Cost	\$ (100,285,483) \$ \$ - \$	- \$ - \$	- \$ - \$	- \$ - \$	- S	- \$ - \$	- S	- S	- \$ - \$	- \$ - \$	- \$ - \$	- S	- \$
3 Total Avoided Costs	\$ (100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$
4 Annual O&M Cost 5 Total O&M Costs	\$ 15,283,747 \$ \$ 15,283,747 \$	5,460,044 \$ 5,460,044 \$	5,618,385 \$ 5,618,385 \$	5,781,318 \$ 5,781,318 \$	5,948,976 \$ 5,948,976 \$	6,121,497 \$ 6,121,497 \$	6,299,020 \$ 6,299,020 \$	6,481,692 \$ 6,481,692 \$	6,669,661 \$ 6,669,661 \$	6,863,081 \$ 6,863,081 \$	7,062,110 \$ 7,062,110 \$	7,266,911 \$ 7,266,911 \$	7,477,652 \$ 7,477,652 \$
	\$ 15,283,747 \$	3,400,044 \$	3,010,300 \$	3,701,316 \$	3,840,876	0,121,497 \$	0,233,020 \$	0,401,092 \$	0,009,001	0,003,001 \$	7,002,110 \$	7,200,911 \$	1,411,052 \$
Off-shore Route	PV	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079
1 Future L1600 Replacement Cost		T-	Т-	Т-	1.	Т-	1-	1-	Т-	Te	Te	T-	Т.
Future L1600 Replacement Cost MCS O&M and Emissions Cost	\$ (100,285,483) \$ \$ (59,240,789) \$	(26,693,320) \$	(27,467,427) \$	(28,263,982) \$	(29,083,638) \$	- \$ (29,927,063) \$	(30,794,948) \$	- \$ (31,688,001) \$	(32,606,953) \$	- \$ (33,552,555) \$	(34,525,579) \$	- \$ (35,526,821) \$	(36,557,099) \$
3 Total Avoided Costs	\$ (159,526,272) \$	(26,693,320) \$	(27,467,427) \$	(28,263,982) \$	(29,083,638) \$	(29,927,063) \$	(30,794,948) \$	(31,688,001) \$	(32,606,953) \$	(33,552,555) \$	(34,525,579) \$	(35,526,821) \$	(36,557,099) \$
4 Annual O&M Cost 5 Pigging to Occur	\$ 4,544,076 \$	2,047,516 \$ FALSE	2,106,894 \$ FALSE	2,167,994 \$ FALSE	2,230,866 \$ FALSE	2,295,561 \$	2,362,132 \$ FALSE	2,430,634 \$ FALSE	2,501,123 \$ FALSE	2,573,655 \$ FALSE	2,648,291 \$ FALSE	2,725,092 \$ FALSE	2,804,119 \$
6 TIMP Cost	\$ 595,634 \$	- \$	- \$	- \$	- \$	2,550,624 \$	- \$	- \$	- \$	- \$	- \$	- \$	3,115,688 \$
7 Total O&M Costs	\$ 5,139,710 \$	2,047,516 \$	2,106,894 \$	2,167,994 \$	2,230,866 \$	4,846,185 \$	2,362,132 \$	2,430,634 \$	2,501,123 \$	2,573,655 \$	2,648,291 \$	2,725,092 \$	5,919,808 \$
1 Blythe to Santee Alternative 1					0001	0000	0000		0000			2000	0000
	PV	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079
1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$ (100,285,483) \$	- \$ (26,693,320) \$	- \$ (27,467,427) \$	- \$ (28,263,982) \$	- \$ (29,083,638) \$	- \$ (29,927,063) \$	- \$ (30,794,948) \$	- \$ (31,688,001) \$	- \$ (32,606,953) \$	- \$ (33,552,555) \$	- \$ (34,525,579) \$	- \$ (35,526,821) \$	- \$ (36,557,099) \$
MCS O&M and Emissions Cost Total Avoided Costs	\$ (74,719,907) \$ \$ (175,005,390) \$	(26,693,320) \$	(27,467,427) \$	(28,263,982) \$	(29,083,638) \$	(29,927,063) \$	(30,794,948) \$	(31,688,001) \$	(32,606,953) \$	(33,552,555) \$	(34,525,579) \$	(35,526,821) \$	(36,557,099) \$
Annual O&M Cost	\$ 14,495,118 \$	5,178,310 \$	5,328,481 \$	5,483,007 \$	5,642,014 \$	5,805,632 \$	5,973,996 \$	6,147,242 \$	6,325,512 \$	6,508,951 \$	6,697,711 \$	6,891,945 \$	7,091,811 \$
Pigging to Occur TIMP Cost	N/A \$ 2.253.804 \$	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE
								8.102.114 \$					

WORK PAPER TABLE - AVOIDED COST MODEL - COSTS OVER-00 YEARS (AC 1.2)
ANNUAL COSTS BY PROJECT ALTERNATE, FOR AVOIDED COSTS AND O&M COSTS
A.15-09-013 VOLUME III - COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 20

	PV (X years after operation 100	66 66	67	68	69	70	71	72	73	74	75	76	π
C6 Alternative Diameter Pipeline (30")	PV	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092
1 Future L1600 Replacement Cost	\$ (100,285		\$ -	s - s	- S	- \$	- S	- \$	- \$	- \$	- \$	- \$	
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$ (62,977 \$ (163,263	7,694) \$ (27,095,70) 3,177) \$ (27,095,70)		\$ (28,690,047) \$ \$ (28,690,047) \$	(29,522,058) \$ (29,522,058) \$	(30,378,198) \$ (30,378,198) \$	(31,259,166) \$ (31,259,166) \$	(32,165,682) \$	(33,098,486) \$ (33,098,486) \$	(34,058,343) \$	(35,046,034) \$	(36,062,369) \$	(37,108,178) (37,108,178)
4 Annual O&M Cost	2 200	0.546 \$ 1.583.52	1.629.451	IS 1.676.705 IS	1.725.330 \$	1.775.364 S	1.826.850 S	1.879.828 \$	1.934.344 \$	1.990.439 \$	2040 402 16	2.107.559 \$	0.400.070
Pigging to Occur TIMP Cost	N/A	FALSE -	FALSE	FALSE	TRUE 3.594.437 \$	FALSE 8	FALSE e	FALSE e	FALSE e	1,990,439 \$ FALSE	2,048,162 \$ FALSE	TRUE 4.390,748 \$	2,168,678 FALSE
7 Total O&M Costs		5,126 \$ 1,583,529	1,629,451	\$ 1,676,705 \$	5,319,767	1,775,364 \$	1,826,850 \$	1,879,828 \$	1,934,344 \$	1,990,439 \$	2,048,162 \$	6,498,307 \$	2,168,678
C7 Alternative Diameter Pipeline (42")	PV	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092
1 Future L1600 Replacement Cost	\$ (100,285	5,483) \$ -	\$ -	\$ - \$	- IS	- IS	- \$	- \$	- \$	- \$	- \$	- [\$	3
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$ (89,968 \$ (190,253	8,134) \$ (38,708,15		\$ (40,985,781) \$ \$ (40,985,781) \$	(42,174,369) \$ (42,174,369) \$	(43,397,426) \$ (43,397,426) \$	(44,655,951) \$ (44,655,951) \$	(45,950,974) \$ (45,950,974) \$	(47,283,552) \$ (47,283,552) \$	(48,654,775) \$ (48,654,775) \$	(50,065,764) \$ (50,065,764) \$	(51,517,671) \$ (51,517,671) \$	(53,011,683) (53,011,683)
4 Annual O&M Cost 5 Pigging to Occur	\$ 3,68	0,546 \$ 1,583,529	9 \$ 1,629,451 FALSE	\$ 1,676,705 \$ FALSE	1,725,330 \$	1,775,364 \$	1,826,850 \$ FALSE	1,879,828 \$	1,934,344 \$ FALSE	1,990,439 \$ FALSE	2,048,162 \$ FALSE	2,107,559 \$	2,168,678 FALSE
Timp Cost Total OSM Costs		4,581 \$ - 5,126 \$ 1,583,529	\$ -	\$ - \$ \$ 1,676,705 \$	3,594,437 \$ 5,319,767 \$	1.775.364 S	- \$ 1,826,850 \$	1.879.828 S	1.934.344 S	- \$ 1,990,439 \$	- \$ 2.048.162 \$	4,390,748 \$ 6,498,307 \$	2.168.678
D Replace Line 1600 In-Place	\$ 4,500	5,126 \$ 1,565,52	1,029,451	\$ 1,676,705 \$	5,319,767 3	1,775,364 3	1,020,030 3	1,079,020 \$	1,934,344 \$	1,990,439 \$	2,040,162 3	6,496,307	2,100,070
b Replace Line 1000 III-riace	PV	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092
Future L1600 Replacement Cost MCS O&M and Emissions Cost	\$ (100,285	5,483) \$ -	\$ -	\$ - \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	
3 Total Avoided Costs	\$ (100,285	5,483) \$ -	\$ -	\$ - \$	- s	- \$	- \$	- \$	- \$	- \$	- \$	- \$	
4 Annual O&M Cost	\$ 3,64	7,596 \$ 1,979,41	\$ 2,036,814	\$ 2,095,882 \$	2,156,662 \$	2,219,205 \$	2,283,562 \$	2,349,786 \$	2,417,929 \$	2,488,049 \$	2,560,203 \$	2,634,449 \$	2,710,848
5 Pigging to Occur 6 TIMP Cost		7,186 \$ -	TRUE \$ 3,394,690	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	FALSE - \$	TRUE 4,146,749 \$	FALSE - \$	FALSE - \$	FALSE -
7 Total O&M Costs	\$ 4,364	4,782 \$ 1,979,41	\$ 5,431,504	\$ 2,095,882 \$	2,156,662 \$	2,219,205 \$	2,283,562 \$	2,349,786 \$	2,417,929 \$	6,634,798 \$	2,560,203 \$	2,634,449 \$	2,710,848
E/F Otay Mesa Alternative	PV	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092
Future L1600 Replacement Cost MCS O&M and Emissions Cost	\$ (100,285	5,483) \$ -	\$ -	s - s	- Is	- S	· \$	- S	- s	- \$	- S	- S	
3 Total Avoided Costs	\$ (100,285	5,483) \$	\$ -	\$ - \$	- S	- \$	- \$	- S	- \$	- \$	- \$	- \$	-
4 Annual O&M Cost		- 18 -	Te.	Te Te	- Is	Te.	. 18	- Is	- Is	Te.	Te.	- \$	-
5 Total O&M Costs	\$	- \$ -	\$ -	\$ - \$	- \$		- \$	- \$	- \$	- \$	- \$	- \$	
G LNG Storage (Peak-Shaver)	PV	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092
1 Future L1600 Replacement Cost	\$ (100.285	5 483) \$ -	IS -	S - IS	- 18	- 18	- 18	- \$	- \$	- IS	- S	- 18	
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$ (100,285	- \$	\$ -	\$ - \$	· \$	- S	- \$	- \$	- \$	- \$	- S	- S	
	(111)			1.		1.5		+ ·		+*			
4 Annual O&M Cost 5 Total O&M Costs	\$ 15,28° \$ 15,28°	3,747 \$ 7,917,64 3,747 \$ 7,917,64	\$ 8,147,256 \$ 8,147,256	\$ 8,383,526 \$ \$ 8,383,526 \$	8,626,649 \$ 8,626,649 \$	8,876,821 \$ 8,876,821 \$	9,134,249 \$ 9,134,249 \$	9,399,142 \$ 9,399,142 \$	9,671,718 \$ 9,671,718 \$	9,952,197 \$ 9,952,197 \$	10,240,811 \$ 10,240,811 \$	10,537,795 \$ 10,537,795 \$	10,843,391 10,843,391
H1 Alternative Energy (Grid-Scale Battery)					.,,		.,.,	.,,		.,	., .,.	.,,,	.,
	PV	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092
Future L1600 Replacement Cost MCS O&M and Emissions Cost	\$ (100,285 \$	- \$ -	\$ - \$ -	\$ - \$ \$ - \$	- S	- S	- S	- \$ - \$					
3 Total Avoided Costs	\$ (100,285	5,483) \$ -	\$ -	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
4 Annual O&M Cost		3,747 \$ 7,917,64			8,626,649 \$		9,134,249 \$	9,399,142 \$	9,671,718 \$	9,952,197 \$	10,240,811 \$	10,537,795 \$	10,843,391
5 Total O&M Costs	\$ 15,283	3,747 \$ 7,917,64	\$ 8,147,256	\$ 8,383,526 \$	8,626,649 \$	8,876,821 \$	9,134,249 \$	9,399,142 \$	9,671,718 \$	9,952,197 \$	10,240,811 \$	10,537,795 \$	10,843,391
H2 Alternative Energy (Smaller-Scale Battery)	PV	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092
1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$ (100,285	5,483) \$ -	\$ -	\$ - \$	- \$	- \$	- \$	- S	- \$	- \$	- \$	- \$	
3 Total Avoided Costs	\$ (100,285	5,483) \$ -	\$ -	\$ - \$	- \$	- Š	- \$	- \$	- \$	- \$	- \$	- \$	
4 Annual O&M Cost	S 15.28	3,747 \$ 7,917,64	\$ 8,147,256	\$ 8,383,526 \$	8,626,649 \$	8,876,821 \$	9,134,249 \$	9,399,142 \$	9,671,718 \$	9,952,197 \$	10,240,811 \$	10,537,795 \$	10,843,391
5 Total O&M Costs	\$ 15,280	3,747 \$ 7,917,64	\$ 8,147,256	\$ 8,383,526 \$	8,626,649 \$	8,876,821 \$	9,134,249 \$	9,399,142 \$	9,671,718 \$	9,952,197 \$	10,240,811 \$	10,537,795 \$	10,843,391
I Off-shore Route	PV	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092
1 Future L1600 Replacement Cost	\$ (100,285	5,483) \$ -	\$ -	s - s	- S	· s	- S	- S	- \$	- \$	- \$	- S	-
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$ (59,240 \$ (159,526	0,789) \$ (38,708,159 6,272) \$ (38,708,159		\$ (40,985,781) \$ \$ (40,985,781) \$	(42,174,369) \$ (42,174,369) \$	(43,397,426) \$ (43,397,426) \$	(44,655,951) \$ (44,655,951) \$	(45,950,974) \$ (45,950,974) \$	(47,283,552) \$ (47,283,552) \$	(48,654,775) \$ (48,654,775) \$	(50,065,764) \$ (50,065,764) \$	(51,517,671) \$ (51,517,671) \$	(53,011,683) (53,011,683)
A Assural COM Cont								45				0.05	
4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost	N/A	4,076 \$ 2,969,111 FALSE 5,634 \$ -	7 \$ 3,055,221 FALSE	\$ 3,143,822 \$ FALSE	3,234,993 \$ FALSE	3,328,808 \$ FALSE	3,425,343 \$ TRUE	3,524,678 \$ FALSE	3,626,894 \$ FALSE	3,732,074 \$ FALSE	3,840,304 \$ FALSE	3,951,673 \$ FALSE	4,066,271 FALSE
6 TIMP Cost 7 Total O&M Costs	\$ 595	9,710 \$ 2,969,11	\$ 3,055,221	\$ 3,143,822 \$	3,234,993 \$	3,328,808 \$	3,805,937 \$ 7,231,281 \$	3,524,678 \$	3,626,894 \$	3,732,074 \$	3,840,304 \$	3,951,673 \$	4,066,271
J1 Blythe to Santee Alternative 1		-2004	2002	2002	2004	2005	2006	2007	2000	2080	2000	2004	2002
Future L1600 Replacement Cost	\$ (100,285	2081	2082	2063	2004	2005	2000	2007	2006	2009	2030	2091	2092
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$ (74,715 \$ (175,005	9,907) \$ (38,708,15			(42,174,369) \$ (42,174,369) \$		(44,655,951) \$ (44,655,951) \$	(45,950,974) \$ (45,950,974) \$	(47,283,552) \$ (47,283,552) \$	(48,654,775) \$ (48,654,775) \$	(50,065,764) \$ (50,065,764) \$	(51,517,671) \$ (51,517,671) \$	(53,011,683) (53,011,683)
, sai Avoided Costs	¢ (1/5,005	J. J	,11 4 (38,030,091)	(40,300,701) \$	(42,174,309)) \$	(45,387,420)	(44,030,831)] \$	(43,330,374)] \$	(41,203,332)] \$	(40,034,773)] \$	(30,003,704)] \$	(31,311,011)] \$	(55,011,063)
						8.418.785 S	8,662,930 \$	8.914.154 S	9,172,665 \$	9,438,672 \$	9,712,394 \$	9,994,053 \$	10,283,881
4 Annual O&M Cost 5 Pigging to Occur	\$ 14,495 N/A	5,118 \$ 7,509,100 TRUE	7,726,864 FALSE	\$ 7,950,943 \$ FALSE	8,181,521 \$ FALSE	FALSE	FALSE	FALSE 5	7,172,005 \$	FALSE	FALSE	9,994,053 \$ FALSE	FALSE

C6 Alternative Diameter Pipeline (30")	PV (X yea	rs after operational)	79	80	81	62	63	04	65	00	67	00	09	90
Co Alternative Diameter Expense (30)		PV	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105
1 Future L1600 Replacement Cost	S	(100,285,483) \$	- \$	- \$	- \$	- \$	- S	- S	- \$	- \$	- \$	- S	- \$	
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$	(62,977,694) \$ (163,263,177) \$	(39,291,660) \$ (39,291,660) \$	(40,431,119) \$ (40,431,119) \$	(41,603,621) \$ (41,603,621) \$	(42,810,126) \$ (42,810,126) \$	(44,051,620) \$ (44,051,620) \$	(45,329,117) \$ (45,329,117) \$	(46,643,661) \$ (46,643,661) \$	(47,996,327) \$ (47,996,327) \$	(49,388,221) \$ (49,388,221) \$	(50,820,479) \$ (50,820,479) \$	(52,294,273) \$ (52,294,273) \$	(53,810,807) (53,810,807)
4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost	N/A	3,680,546 \$	2,296,285 \$ FALSE	2,362,878 \$ FALSE	2,431,401 \$ FALSE	2,501,912 \$ FALSE	2,574,467 \$ TRUE 5.363.473 \$	2,649,127 \$ FALSE	2,725,951 \$ FALSE	2,805,004 \$ FALSE	2,886,349 \$ FALSE	2,970,053 \$ FALSE	3,056,185 \$ FALSE	3,144,814 TRUE
7 Total O&M Costs	\$	904,581 \$ 4,585,126 \$	2,296,285 \$	2,362,878 \$	2,431,401 \$	2,501,912 \$	5,363,473 \$ 7,937,940 \$	2,649,127 \$	2,725,951 \$	2,805,004 \$	2,886,349 \$	2,970,053 \$	3,056,185 \$	6,551,696 9,696,510
C7 Alternative Diameter Pipeline (42")		01/	0001	0005	****			0000		0101	0100		0101	0105
1 Future L1600 Replacement Cost	0	(100,285,483) \$	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105
2 MCS O&M and Emissions Cost	\$	(89,968,134) \$	(56,130,944) \$	(57,758,741) \$	(59,433,744) \$	(61,157,323) \$	(62,930,885) \$	(64,755,881) \$	(66,633,802) \$	(68,566,182) \$	(70,554,601) \$	(72,600,685) \$	(74,706,104) \$	(76,872,581)
3 Total Avoided Costs	\$	(190,253,617) \$	(56,130,944) \$	(57,758,741) \$	(59,433,744) \$	(61,157,323) \$	(62,930,885) \$	(64,755,881) \$	(66,633,802) \$	(68,566,182) \$	(70,554,601) \$	(72,600,685) \$	(74,706,104) \$	(76,872,581)
4 Annual O&M Cost	\$ N/A	3,680,546 \$	2,296,285 \$ FALSE	2,362,878 \$ FALSE	2,431,401 \$ FALSE	2,501,912 \$ FALSE	2,574,467 \$	2,649,127 \$ FALSE	2,725,951 \$ FALSE	2,805,004 \$ FALSE	2,886,349 \$ FALSE	2,970,053 \$ FALSE	3,056,185 \$ FALSE	3,144,814
5 Pigging to Occur 6 TIMP Cost	\$	904,581 \$	- \$	- 3	- \$		5,363,473 \$	- S	- 3		- \$	- \$	- \$	6,551,696
7 Total O&M Costs	\$	4,585,126 \$	2,296,285 \$	2,362,878 \$	2,431,401 \$	2,501,912 \$	7,937,940 \$	2,649,127 \$	2,725,951 \$	2,805,004 \$	2,886,349 \$	2,970,053 \$	3,056,185 \$	9,696,510
D Replace Line 1600 In-Place		PV	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105
1 Future L1600 Replacement Cost	s	(100,285,483) \$	- 15	- Is	- Is	- Is	- Is	- Is	- Is	- Is	- Is	- Is	- Is	
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$	- S (100,285,483) \$	- \$ - \$	- S	- S	- S	- S	- S	- S	- S	- \$	- \$ - \$	- S	-
		(100,200,400)		•	•			•		1.*				
4 Annual O&M Cost 5 Pigging to Occur	S N/A	3,647,596 \$	2,870,357 \$ FALSE	2,953,597 \$ FALSE	3,039,251 \$	3,127,390 \$ FALSE	3,218,084 \$ FALSE	3,311,408 \$ FALSE	3,407,439 \$ FALSE	3,506,255 \$ FALSE	3,607,936 \$ FALSE	3,712,566 \$	3,820,231 \$ FALSE	3,931,018 FALSE
6 TIMP Cost	\$	717,186 \$	- \$	- \$	5,065,419 \$	- \$	- S	- \$	- \$	- \$	- \$	6,187,611 \$	- S	
7 Total O&M Costs	\$	4,364,782 \$	2,870,357 \$	2,953,597 \$	8,104,670 \$	3,127,390 \$	3,218,084 \$	3,311,408 \$	3,407,439 \$	3,506,255 \$	3,607,936 \$	9,900,177 \$	3,820,231 \$	3,931,018
E/F Otay Mesa Alternative		PV	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105
1 Future L1600 Replacement Cost	\$	(100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- S	- \$	- \$	- \$	- \$	- \$	
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$	- \$ (100,285,483) \$	- S	- S	- S	- S	- S	- S	- S	- S	- S	- S	- S	
				, ,	1.		1	**		**	**		**	
4 Annual O&M Cost 5 Total O&M Costs	\$	- \$	- \$	- \$	- \$	- \$	- \$	- S	- \$	- \$	- \$	- S	- \$	
G LNG Storage (Peak-Shaver)	•	- +	- 14	- 14	- 1	- 14	- •	- 1,	- 1*	- 10	- 1*	- 14	- 14	
C LNG Storage (Peak-Snaver)		PV	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105
1 Future L1600 Replacement Cost	\$	(100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	×
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$	(100,285,483) \$	- S	- \$ - \$	- S	- \$	- S	- \$ - \$	- S	- \$	- \$	- S	- \$	
4 Annual O&M Cost 5 Total O&M Costs	\$	15,283,747 \$ 15,283,747 \$	11,481,427 \$ 11,481,427 \$	11,814,388 \$ 11,814,388 \$	12,157,005 \$ 12,157,005 \$	12,509,558 \$ 12,509,558 \$	12,872,336 \$ 12,872,336 \$	13,245,633 \$ 13,245,633 \$	13,629,757 \$ 13,629,757 \$	14,025,020 \$ 14,025,020 \$	14,431,745 \$ 14,431,745 \$	14,850,266 \$ 14,850,266 \$	15,280,923 \$ 15,280,923 \$	15,724,070 15,724,070
H1 Alternative Energy (Grid-Scale Battery)														
		PV	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105
1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$	(100,285,483) \$	- S	- \$ - \$	- \$ - \$	- \$ - \$	- S	- S	- \$ - \$	- \$ - \$	- \$ - \$	- \$	- \$ - \$	
3 Total Avoided Costs	\$	(100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	
4 Annual O&M Cost	s	15 283 747 \$	11.481.427 \$	11 814 388 I \$	12,157,005 \$	12 509 558 \$	12.872.336 \$	13.245.633 S	13,629,757 \$	14 025 020 \$	14.431.745 \$	14.850.266 LS	15.280.923 \$	15 724 070
5 Total O&M Costs	\$	15,283,747 \$	11,481,427 \$	11,814,388 \$	12,157,005 \$	12,509,558 \$	12,872,336 \$	13,245,633 \$	13,629,757 \$	14,025,020 \$	14,431,745 \$	14,850,266 \$	15,280,923 \$	15,724,070
H2 Alternative Energy (Smaller-Scale Battery)		PV	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105
1 Future L1600 Replacement Cost	s	(100.285.483) \$	- 18	- 18	- 18	- 18	- 18	- 18	- 18	- 18	- 15	- 18	- 18	
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$	(100,285,483) \$	- \$	- \$	- \$	- \$	- S	- S	- \$ - \$	- S	- \$ - \$	- S	- \$	-
3 Total Avoided Costs		(100,203,403) \$	- 14		- 1*	- 14	- •		- 1*	- 10		- 14	•	
4 Annual O&M Cost 5 Total O&M Costs	\$	15,283,747 \$	11,481,427 \$ 11,481,427 \$	11,814,388 \$ 11,814,388 \$	12,157,005 \$	12,509,558 \$ 12,509,558 \$	12,872,336 \$	13,245,633 \$ 13,245,633 \$	13,629,757 \$	14,025,020 \$ 14,025,020 \$	14,431,745 \$ 14,431,745 \$	14,850,266 \$ 14,850,266 \$	15,280,923 \$ 15,280,923 \$	15,724,070 15,724,070
5 Total O&M Costs I Off-shore Route	\$	15,283,747 \$	11,481,427 \$	11,814,388 \$	12,157,005 \$	12,509,558 \$	12,872,336 \$	13,245,633 \$	13,629,757 \$	14,025,020 \$	14,431,745 \$	14,850,266 \$	15,280,923 \$	15,724,070
on-shore Route		PV	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105
Future L1600 Replacement Cost MCS O&M and Emissions Cost	S	(100,285,483) \$	- \$	- S	- \$	- \$	- S	- \$	- S	- \$	- \$	- \$	- S	
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$	(59,240,789) \$ (159,526,272) \$	(56,130,944) \$ (56,130,944) \$	(57,758,741) \$ (57,758,741) \$	(59,433,744) \$ (59,433,744) \$	(61,157,323) \$ (61,157,323) \$	(62,930,885) \$ (62,930,885) \$	(64,755,881) \$ (64,755,881) \$	(66,633,802) \$ (66,633,802) \$	(68,566,182) \$ (68,566,182) \$	(70,554,601) \$ (70,554,601) \$	(72,600,685) \$ (72,600,685) \$	(74,706,104) \$ (74,706,104) \$	(76,872,581) (76,872,581)
								•						
4 Annual O&M Cost 5 Pigging to Occur	\$ N/A	4,544,076 \$	4,305,535 \$ FALSE	4,430,395 \$ FALSE	4,558,877 \$ FALSE	4,691,084 \$ FALSE	4,827,126 \$ FALSE	4,967,112 \$ FALSE	5,111,159 \$ TRUE	5,259,382 \$ FALSE	5,411,904 \$ FALSE	5,568,850 \$ FALSE	5,730,346 \$ FALSE	5,896,526 FALSE
6 TIMP Cost 7 Total O&M Costs	\$	595,634 \$ 5,139,710 \$	- \$ 4.305.535 \$	- S 4.430.395 S	- \$ 4.558.877 \$	- S 4.691.084 S	- \$ 4,827,126 \$	- S 4.967.112 S	5,679,065 \$ 10,790,224 \$	5,259,382 \$	5,411,904 \$	- \$ 5.568.850 \$	- S 5.730.346 S	5,896,526
J1 Blythe to Santee Alternative 1	*	3,135,710 3	*,303,333 \$	4,400,000 \$	4,000,011	4,001,004 \$	4,027,120 3	4,007,112 3	10,130,224 3	3,235,302 3	3,411,504 3	3,300,030 \$	3,730,340 \$	3,030,320
51 Biyone & Santee Alternative 1		PV	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105
1 Future L1600 Replacement Cost	\$	(100,285,483) \$ (74,719,907) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$	(74,719,907) \$ (175,005,390) \$	(56,130,944) \$ (56,130,944) \$	(57,758,741) \$ (57,758,741) \$	(59,433,744) \$ (59,433,744) \$	(61,157,323) \$ (61,157,323) \$	(62,930,885) \$ (62,930,885) \$	(64,755,881) \$ (64,755,881) \$	(66,633,802) \$ (66,633,802) \$	(68,566,182) \$ (68,566,182) \$	(70,554,601) \$ (70,554,601) \$	(72,600,685) \$ (72,600,685) \$	(74,706,104) \$ (74,706,104) \$	(76,872,581) (76,872,581)
4 Annual O&M Cost 5 Pigging to Occur	\$ N/A	14,495,118 \$	10,888,995 \$ FALSE	11,204,775 \$ TRUE	11,529,714 \$ FALSE	11,864,076 \$ FALSE	12,208,134 \$ FALSE	12,562,170 \$ FALSE	12,926,473 \$ FALSE	13,301,340 \$ FALSE	13,687,079 \$ TRUE	14,084,004 \$ FALSE	14,492,441 \$ FALSE	14,912,721 FALSE
7 Total O&M Costs	\$	2,253,804 \$ 16,748,922 \$	10,888,995 \$	14,767,985 \$ 25,972,760 \$	- \$ 11.529.714 \$	- S 11.864.076 S	12,208,134 \$	- \$ 12,562,170 \$	12,926,473 \$	13,301,340 \$	18,039,681 \$ 31,726,761 \$	14,084,004 \$	- S 14.492.441 S	14,912,721
	•	10,740,022 3	10,000,000 \$	20,012,100 3	,020,114 3	,004,070 \$	12,200,104 3	12,002,110	12,020,413 3	10,001,040 \$	51,120,701 \$,004,004	17,702,441 3	17,012,121

J2 Blythe to Santee Alternative 2

ANNUAL COSTS BY PROJECT ALTERNATE, FOR AVOIDED COSTS AND O&M COSTS

C6 Alternative Diameter Pipeline (30")	PV (X years after operational) 100												
	PV	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118
1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$ (100,285,483) \$ \$ (62,977,694) \$	- \$ (56,977,089) \$	- \$ (58.629.424) \$	- \$ (60.329.678) \$	- \$ (62.079.238) \$	- \$ (63.879.536) \$	- \$ (65.732.043) \$	- \$ (67.638.272) \$	- \$ (69.599.782) \$	(71.618.175) \$	- \$ (73,695,103) \$	- \$ (75.832.261) \$	- \$ (78.031.396) \$
3 Total Avoided Costs	\$ (163,263,177) \$	(56,977,089) \$	(58,629,424) \$	(60,329,678) \$	(62,079,238) \$	(63,879,536) \$	(65,732,043) \$	(67,638,272) \$	(69,599,782) \$	(71,618,175) \$	(73,695,103) \$	(75,832,261) \$	(78,031,396) \$
4 Applied ORM Cont	\$ 3,680,546 \$	3,329,858 \$	3,426,424 \$	3,525,790 \$	3,628,038 \$	3,733,251 \$	3.841.516 S	3,952,919 \$	4,067,554 \$	4,185,513 \$	4,306,893 \$	4,431,793 \$	4,560,315 \$
4 Annual O&M Cost 5 Pigging to Occur	N/A	5,329,636 \$ FALSE	5,426,424 \$ FALSE	5,525,790 \$ FALSE	5,626,036 \$ FALSE	5,733,251 \$ FALSE	TRUE	5,952,919 \$ FALSE	FALSE 5	4,165,513 \$ FALSE	4,306,893 \$ FALSE	FALSE	4,560,315 \$ FALSE
6 TIMP Cost 7 Total O&M Costs	\$ 904,581 \$ \$ 4,585,126 \$	3,329,858 \$	3,426,424 \$	3,525,790 \$	3,628,038 \$	3,733,251 \$	8,003,157 \$ 11,844,673 \$	3,952,919 \$	4,067,554 \$	4,185,513 \$	4,306,893 \$	4,431,793 \$	4,560,315 \$
C7 Alternative Diameter Pipeline (42")													
	PV	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118
1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$ (100,285,483) \$ \$ (89,968,134) \$	- \$ (81,395,841) \$	- \$ (83,756,320) \$	- \$ (86,185,254) \$	- \$ (88 684 626) \$	- \$ (91,256,480) \$	- \$ (93,902,918) \$	- \$ (96.626.103) \$	- \$ (99.428.260) \$	- \$ (102,311,679) \$	- \$ (105,278,718) \$	- \$ (108,331,801) \$	- \$ (111,473,423) \$
3 Total Avoided Costs	\$ (190,253,617) \$	(81,395,841) \$	(83,756,320) \$	(86,185,254) \$	(88,684,626) \$	(91,256,480) \$	(93,902,918) \$	(96,626,103) \$	(99,428,260) \$	(102,311,679) \$	(105,278,718) \$	(108,331,801) \$	(111,473,423) \$
4 Annual O&M Cost	\$ 3,680,546 \$	3,329,858 \$	3,426,424 \$	3.525.790 \$	3,628,038 \$	3,733,251 \$	3.841.516 S	3,952,919 \$ FALSE	4,067,554 \$	4,185,513 \$	4,306,893 \$	4,431,793 \$ FALSE	4,560,315 \$
5 Pigging to Occur 6 TIMP Cost	N/A \$ 904.581 \$	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE 8.003.157 S	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
7 Total O&M Costs	\$ 4,585,126 \$	3,329,858 \$	3,426,424 \$	3,525,790 \$	3,628,038 \$	3,733,251 \$	11,844,673 \$	3,952,919 \$	4,067,554 \$	4,185,513 \$	4,306,893 \$	4,431,793 \$	4,560,315 \$
D Replace Line 1600 In-Place													
	PV	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118
1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$ (100,285,483) \$ \$ - \$	- \$	- \$	- S	- \$	- \$	- S	- S	- \$	- \$	- \$	- S	- \$
3 Total Avoided Costs	\$ (100,285,483) \$	- \$	- š	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$
4. Appual ORM Cost	e come-T-	4 400 000 T-	4 000 000 1 5	4 407 000 15	4 895 0 10 1 -	4000 004 12	4001001	404: 440 Te	E 00 C 110 T C	E 204 000 T 5	E 200 010 T-	F F00 744 T-	F 700 004 T 7
4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost	\$ 3,647,596 \$ N/A	4,162,323 \$ FALSE	4,283,030 \$ FALSE	4,407,238 \$ FALSE	4,535,048 \$ TRUE	4,666,564 \$ FALSE	4,801,894 \$ FALSE	4,941,149 \$ FALSE	5,084,443 \$ FALSE	5,231,892 \$ FALSE	5,383,616 \$ FALSE	5,539,741 \$ TRUE	5,700,394 \$ FALSE
6 TIMP Cost 7 Total O&M Costs	\$ 717,186 \$ \$ 4,364,782 \$	- \$ 4,162,323 \$	- S 4,283,030 \$	- \$ 4,407,238 \$	7,558,413 \$ 12,093,460 \$	- S 4,666,564 S	- S 4,801,894 \$	- \$ 4,941,149 \$	5,084,443 \$	- \$ 5,231,892 \$	- \$ 5,383,616 \$	9,232,902 \$ 14,772,643 \$	5,700,394 \$
E/F Otay Mesa Alternative					, ., .,								
-	PV	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118
1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost	\$ (100,285,483) \$	- \$	- \$	- S	- \$	- \$	- s	- s	- \$	- \$	- \$	- S	- S
3 Total Avoided Costs	\$ (100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$
4 Annual O&M Cost 5 Total O&M Costs	\$ - \$ \$ - \$	- \$ - \$	- S	- S	- \$	- S	- S	- \$ - \$	- \$ - \$	- \$ - \$	- S	- S	- S
G LNG Storage (Peak-Shaver)			1,2	1.4		1.*	1.4		1.2	,,,			
G LNG Storage (Feak-Shaver)	PV	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118
1 Future L1600 Replacement Cost	\$ (100,285,483) \$	- \$	- \$	- \$	- \$	- S	- \$	- \$	- \$	- \$	- S	- \$	- \$
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$ (100,285,483) \$	- \$	- \$	- \$	- \$	- S	- S	- S	- S	- \$	- S	- \$	- \$
		*	•	•	*	*			*	<u> </u>			
4 Annual O&M Cost 5 Total O&M Costs	\$ 15,283,747 \$ \$ 15,283,747 \$	16,649,290 \$ 16,649,290 \$	17,132,120 \$ 17,132,120 \$	17,628,951 \$ 17,628,951 \$	18,140,191 \$ 18,140,191 \$	18,666,256 \$ 18,666,256 \$	19,207,578 \$ 19,207,578 \$	19,764,597 \$ 19,764,597 \$	20,337,771 \$	20,927,566 \$	21,534,466 \$ 21,534,466 \$	22,158,965 \$ 22,158,965 \$	22,801,575 \$ 22,801,575 \$
H1 Alternative Energy (Grid-Scale Battery)	3 15,263,747 3	16,649,290 \$	17,132,120 \$	17,020,951 \$	18,140,191 \$	10,000,230 \$	19,207,576 \$	19,764,597 \$	20,337,771 \$	20,927,366 \$	21,534,466 \$	22,150,965 \$	22,801,375 \$
11 Alternative Energy (Grid-Scale Battery)	PV	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118
1 Future L1600 Replacement Cost	\$ (100,285,483) \$	- \$	- \$	- \$	- S	- S	- S	- \$	- s	- \$	- S	- S	- S
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$ - \$ \$ (100,285,483) \$	- \$ - \$	- S	- S	- S	- S	- S	- S	- S	- S	- S	- S	- S
			, .										
4 Annual O&M Cost 5 Total O&M Costs	\$ 15,283,747 \$ \$ 15,283,747 \$	16,649,290 \$ 16,649,290 \$	17,132,120 \$ 17,132,120 \$	17,628,951 \$ 17,628,951 \$	18,140,191 \$ 18,140,191 \$	18,666,256 \$ 18,666,256 \$	19,207,578 \$ 19,207,578 \$	19,764,597 \$ 19,764,597 \$	20,337,771 \$	20,927,566 \$	21,534,466 \$ 21,534,466 \$	22,158,965 \$ 22,158,965 \$	22,801,575 \$ 22,801,575 \$
	9 15,203,747 \$	10,049,290 \$	11,132,120 \$	17,020,931 \$	10,140,191 \$	10,000,230 \$	10,207,370 \$	10,104,391 \$	20,007,771 \$	20,021,000 \$	21,004,400 \$	22,130,303 \$	22,001,373
H2 Alternative Energy (Smaller-Scale Battery)	PV	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118
1 Future L1600 Replacement Cost	\$ (100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- S	- \$	- \$	- \$	- \$	- \$	- \$
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$ - \$ \$ (100,285,483) \$	- \$ - \$	- S	- \$	- S	- S	- S	- S	- \$ - \$	- S - S	- \$	- S	- S
			·					-		· ·			
4 Annual O&M Cost 5 Total O&M Costs	\$ 15,283,747 \$ \$ 15,283,747 \$	16,649,290 \$ 16,649,290 \$	17,132,120 \$ 17,132,120 \$	17,628,951 \$ 17,628,951 \$	18,140,191 \$ 18,140,191 \$	18,666,256 \$ 18,666,256 \$	19,207,578 \$ 19,207,578 \$	19,764,597 \$ 19,764,597 \$	20,337,771 \$	20,927,566 \$	21,534,466 \$	22,158,965 \$ 22,158,965 \$	22,801,575 \$ 22,801,575 \$
I Off-shore Route	- 10,200,747 0	10,040,200 0	11,102,120	11,020,001	10,140,101	10,000,200 9	10,201,010	10,104,001	20,001,111	20,021,000	11,004,400	22,100,000	22,001,010
	PV	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118
1 Future L1600 Replacement Cost	\$ (100,285,483) \$	- \$	- S	- S	- S	- S	- S	- S	- \$	- \$	- S	- \$	- S
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$ (59,240,789) \$ \$ (159,526,272) \$	(81,395,841) \$ (81,395,841) \$	(83,756,320) \$ (83,756,320) \$	(86,185,254) \$ (86,185,254) \$	(88,684,626) \$ (88,684,626) \$	(91,256,480) \$ (91,256,480) \$	(93,902,918) \$ (93,902,918) \$	(96,626,103) \$ (96,626,103) \$	(99,428,260) \$ (99,428,260) \$	(102,311,679) \$	(105,278,718) \$ (105,278,718) \$	(108,331,801) \$ (108,331,801) \$	(111,473,423) \$ (111,473,423) \$
4 Annual O&M Cost 5 Pigging to Occur	\$ 4,544,076 \$ N/A	6,243,484 \$	6,424,545 \$ FALSE	6,610,857 \$ FALSE	6,802,572 \$ FALSE	6,999,846 \$ FALSE	7,202,842 \$ FALSE	7,411,724 \$ FALSE	7,626,664 \$ TRUE	7,847,837 \$ FALSE	8,075,425 \$ FALSE	8,309,612 \$ FALSE	8,550,591 \$ FALSE
6 TIMP Cost	\$ 595,634 \$	6,937,204 \$	- \$	- \$	- \$	- \$	- \$	- \$	8,474,071 \$	- \$	- \$	- \$	- \$
7 Total O&M Costs	\$ 5,139,710 \$	13,180,688 \$	6,424,545 \$	6,610,857 \$	6,802,572 \$	6,999,846 \$	7,202,842 \$	7,411,724 \$	16,100,735 \$	7,847,837 \$	8,075,425 \$	8,309,612 \$	8,550,591 \$
J1 Blythe to Santee Alternative 1	PV	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118
1 Future L1600 Replacement Cost	\$ (100,285,483) \$	- \$	- Is	- 18	- 12	- 18	- 12	- 18	- 15	- Is	- 15	- 15	- 1s
2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$ (74,719,907) \$ \$ (175,005,390) \$	(81,395,841) \$ (81,395,841) \$	(83,756,320) \$ (83,756,320) \$	(86,185,254) \$ (86,185,254) \$	(88,684,626) \$ (88,684,626) \$	(91,256,480) \$ (91,256,480) \$	(93,902,918) \$ (93,902,918) \$	(96,626,103) \$ (96,626,103) \$	(99,428,260) \$ (99,428,260) \$	(102,311,679) \$ (102,311,679) \$	(105,278,718) \$ (105,278,718) \$	(108,331,801) \$ (108,331,801) \$	(111,473,423) \$ (111,473,423) \$
3 Iolai Avoided Costs	\$ (1/5,005,390) \$	(01,395,841)] \$	(03,/36,320) \$	(00,103,254) \$	(00,004,626) \$	(91,236,480)] \$	(33,302,918) \$	(90,020,103) \$	(33,426,260) \$	(102,311,679) \$	(105,276,718)] \$	(100,331,801) \$	(111,4/3,423) \$
					47 004 470 LO	17.703.093 S	10.010.100.10	18,744,761 \$	40.000.000.10	40.047.704.10		04.045.504.10	01 005 000 10
4 Annual O&M Cost 5 Pigging to Occur	\$ 14,495,118 \$	15,790,201 \$ FALSE	16,248,117 \$ FALSE	16,719,312 \$	17,204,172 \$ FALSE	FALSE	18,216,483 \$ FALSE	FALSE	19,288,359 \$ FALSE	19,847,721 \$ FALSE	20,423,305 \$	21,015,581 \$ FALSE	21,625,033 \$ FALSE

ANNUA	(PAPER TABLE - AVOIDED COST MODEL - COSTS AL COSTS BY PROJECT ALTERNATE, FOR AVOIDE 9-013 VOLUME III - COST-EFFECTIVENESS ANALY:	D COSTS AND O&M COSTS												
1 2 98 99	C6 Alternative Diameter Pipeline (30")	PV (X years after operational) 100 PV	105	106	107	108	109	2125	2126	112	113	2129	2130	116
100 101 102	Future L1600 Replacement Cost MCS O&M and Emissions Cost Total Avoided Costs	\$ (100,285,483) \$ \$ (62,977,694) \$ \$ (163,263,177) \$	- \$ (82,622,841) \$ (82,622,841) \$	- \$ (85,018,904) \$ (85,018,904) \$	- \$ (87,484,452) \$ (87,484,452) \$	- \$ (90,021,501) \$ (90,021,501) \$	- \$ (92,632,125) \$ (92,632,125) \$	(95,318,456) \$ (95,318,456) \$	- \$ (98,082,692) \$ (98,082,692) \$	- \$ (100,927,090) \$ (100,927,090) \$	- \$ (103,853,975) \$ (103,853,975) \$	- \$ (106,865,740) \$ (106,865,740) \$	- \$ (109,964,847) \$ (109,964,847) \$	(113,153,828) (113,153,828)
103 104 105 106 107 108	4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost	\$ 3,680,546 \$ N/A \$ 904,581 \$	4,828,648 \$ FALSE - \$	4,968,679 \$ FALSE - \$	5,112,771 \$ FALSE - \$	5,261,041 \$ FALSE - \$	5,413,612 \$ FALSE - \$	5,570,606 \$ FALSE - \$	5,732,154 \$ FALSE - \$	5,898,386 \$ FALSE - \$	6,069,440 \$ FALSE - \$	6,245,453 \$ FALSE - \$	6,426,571 \$ FALSE - \$	6,612,942 FALSE
109 110	7 Total O&M Costs C7 Alternative Diameter Pipeline (42")	\$ 4,585,126 \$	4,828,648 \$	4,968,679 \$	5,112,771 \$	5,261,041 \$	5,413,612 \$	5,570,606 \$	5,732,154 \$	5,898,386 \$	6,069,440 \$	6,245,453 \$	6,426,571 \$	6,612,942
111 112 113 114 115	1 Future L1600 Replacement Cost	PV (100,285,483) \$	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131
116	2 MCS 08M and Emissions Cost 3 Total Avoided Costs	\$ (100,265,463) \$ \$ (89,968,134) \$ \$ (190,253,617) \$	(118,032,631) \$ (118,032,631) \$	(121,455,577) \$ (121,455,577) \$	(124,977,789) \$ (124,977,789) \$	(128,602,145) \$ (128,602,145) \$	(132,331,607) \$ (132,331,607) \$	(136,169,223) \$ (136,169,223) \$	(140,118,131) \$ (140,118,131) \$	(144,181,557) \$ (144,181,557) \$	(148,362,822) \$ (148,362,822) \$	(152,665,344) \$ (152,665,344) \$	(157,092,638) \$ (157,092,638) \$	(161,648,325) (161,648,325)
118 119 120	4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost	\$ 3,680,546 \$ N/A	4,828,648 \$ FALSE	4,968,679 \$ FALSE	5,112,771 \$ FALSE	5,261,041 \$ FALSE	5,413,612 \$ FALSE	5,570,606 \$ FALSE	5,732,154 \$ FALSE	5,898,386 \$ FALSE	6,069,440 \$ FALSE	6,245,453 \$ FALSE	6,426,571 \$ FALSE	6,612,942 FALSE
121 122 123	7 Total O&M Costs	\$ 904,581 \$ \$ 4,585,126 \$	4,828,648 \$	4,968,679 \$	5,112,771 \$	5,261,041 \$	5,413,612 \$	5,570,606 \$	5,732,154 \$	5,898,386 \$	6,069,440 \$	6,245,453 \$	6,426,571 \$	6,612,942
124 125	D Replace Line 1600 In-Place	PV	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131
117 118 119 120 121 122 123 124 125 126 127 128 129 130	Future L1600 Replacement Cost MCS O&M and Emissions Cost Total Avoided Costs	\$ (100,285,483) \$ \$ - \$ \$ (100,285,483) \$	- \$ - \$ - \$	- \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	-
131 132	4 Annual O&M Cost 5 Pinging to Cogur	\$ 3,647,596 \$	6,035,811 \$ FALSE	6,210,849 \$ FALSE	6,390,964 \$ FALSE	6,576,302 \$ FALSE	6,767,014 \$	6,963,258 \$ FALSE	7,165,192 \$ FALSE	7,372,983 \$ FALSE	7,586,799 \$ FALSE	7,806,817 \$ FALSE	8,033,214 \$ FALSE	8,266,178 FALSE
134 135	5 Pigging to Occur 6 TIMP Cost 7 Total O&M Costs	\$ 717,186 \$ \$ 4,364,782 \$	- \$ 6,035,811 \$	- \$ 6,210,849 \$	- \$ 6,390,964 \$	- \$ 6,576,302 \$	11,278,357 \$ 18,045,372 \$	- \$ 6,963,258 \$	7,165,192 \$	7,372,983 \$	7,586,799 \$	7,806,817 \$	- \$ 8,033,214 \$	8,266,178
136 137 138	E/F Otay Mesa Alternative	PV	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131
130 131 132 133 134 135 136 137 138 139 140 141	Future L1600 Replacement Cost MCS O&M and Emissions Cost Total Avoided Costs	\$ (100,285,483) \$ \$ - \$ \$ (100,285,483) \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- S - S	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- - -
143 144 145	4 Annual O&M Cost	\$ - \$	- \$	- S	- \$	- \$	- S	- \$	- \$	- \$	- \$	- \$	- \$	-
146 147 148 149	5 Total O&M Costs G LNG Storage (Peak-Shaver)	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
149 150	1 Future L1600 Replacement Cost	PV (100,285,483) \$	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131
150 151 152 153 154	2 MCS O&M and Emissions Cost 3 Total Avoided Costs	\$ (100,285,483) \$	- \$ - \$	- \$ - \$	- \$ - \$	- \$ - \$	- S	- \$ - \$	- \$	- \$ - \$	- \$ - \$	- S - S	- \$ - \$	
154 155 156 157 158 159	4 Annual O&M Cost 5 Total O&M Costs	\$ 15,283,747 \$ \$ 15,283,747 \$	24,143,242 \$ 24,143,242 \$	24,843,397 \$ 24,843,397 \$	25,563,855 \$ 25,563,855 \$	26,305,207 \$ 26,305,207 \$	27,068,058 \$ 27,068,058 \$	27,853,031 \$ 27,853,031 \$	28,660,769 \$ 28,660,769 \$	29,491,932 \$ 29,491,932 \$	30,347,198 \$ 30,347,198 \$	31,227,266 \$ 31,227,266 \$	32,132,857 \$ 32,132,857 \$	33,064,710 33,064,710
159 160 161 162 163	H1 Alternative Energy (Grid-Scale Battery)	PV	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131
164	Future L1600 Replacement Cost MCS O&M and Emissions Cost Total Avoided Costs	\$ (100,285,483) \$ \$ - \$ \$ (100,285,483) \$	- \$ - \$	- \$ - \$ - \$	- \$ - \$	- \$ - \$	- \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$	- \$ - \$	- \$ - \$	- \$ - \$	
165 166 167 168	4 Annual O&M Cost 5 Total O&M Costs	\$ 15,283,747 \$ \$ 15,283,747 \$	24,143,242 \$ 24,143,242 \$	24,843,397 \$ 24,843,397 \$	25,563,855 \$ 25,563,855 \$	26,305,207 \$ 26,305,207 \$	27,068,058 \$ 27,068,058 \$	27,853,031 \$ 27,853,031 \$	28,660,769 \$ 28,660,769 \$	29,491,932 \$ 29,491,932 \$	30,347,198 \$ 30,347,198 \$	31,227,266 \$ 31,227,266 \$	32,132,857 \$ 32,132,857 \$	33,064,710 33,064,710
169 170 171	H2 Alternative Energy (Smaller-Scale Battery)	PV	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131
169 170 171 172 172 173 174 175 176 177 178 180 181 182 183 184	Future L1600 Replacement Cost MCS O&M and Emissions Cost Total Avoided Costs	\$ (100,285,483) \$ \$ - \$ \$ (100,285,483) \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$	- \$ - \$ - \$	- S - S	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	-
177 178 179	4 Annual O&M Cost 5 Total O&M Costs	\$ 15,283,747 \$ \$ 15,283,747 \$	24,143,242 \$ 24,143,242 \$	24,843,397 \$ 24,843,397 \$	25,563,855 \$ 25,563,855 \$	26,305,207 \$ 26,305,207 \$	27,068,058 \$ 27,068,058 \$	27,853,031 \$ 27,853,031 \$	28,660,769 \$ 28,660,769 \$	29,491,932 \$ 29,491,932 \$	30,347,198 \$ 30,347,198 \$	31,227,266 \$ 31,227,266 \$	32,132,857 \$ 32,132,857 \$	33,064,710 33,064,710
181 182	I Off-shore Route	PV	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131
186	Future L1600 Replacement Cost MCS O&M and Emissions Cost Total Avoided Costs	\$ (100,285,483) \$ \$ (59,240,789) \$ \$ (159,526,272) \$	- \$ (118,032,631) \$ (118,032,631) \$	- \$ (121,455,577) \$ (121,455,577) \$	- \$ (124,977,789) \$ (124,977,789) \$	- \$ (128,602,145) \$ (128,602,145) \$	- \$ (132,331,607) \$ (132,331,607) \$	- \$ (136,169,223) \$ (136,169,223) \$	- \$ (140,118,131) \$ (140,118,131) \$	- \$ (144,181,557) \$ (144,181,557) \$	- \$ (148,362,822) \$ (148,362,822) \$	- \$ (152,665,344) \$ (152,665,344) \$	- \$ (157,092,638) \$ (157,092,638) \$	(161,648,325) (161,648,325)
187 188 189 190 191	4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost	\$ 4,544,076 \$ N/A \$ 595,634 \$	9,053,716 \$ FALSE - \$	9,316,274 \$ TRUE 10,351,415 \$	9,586,446 \$ FALSE - \$	9,864,453 \$ FALSE - \$	10,150,522 \$ FALSE - \$	10,444,887 \$ FALSE - \$	10,747,789 \$ FALSE - \$	11,059,474 \$ FALSE - \$	11,380,199 \$ TRUE 12,644,666 \$	11,710,225 \$ FALSE - \$	12,049,821 \$ FALSE - \$	12,399,266 FALSE
192	7 Total O&M Costs J1 Blythe to Santee Alternative 1	\$ 5,139,710 \$	9,053,716 \$	19,667,689 \$	9,586,446 \$	9,864,453 \$	10,150,522 \$	10,444,887 \$	10,747,789 \$	11,059,474 \$	24,024,865 \$	11,710,225 \$	12,049,821 \$	12,399,266
193 194 195 196 197 198 199	Future L1600 Replacement Cost MCS O&M and Emissions Cost Total Avoided Costs	\$ (100,285,483) \$ \$ (74,719,907) \$ \$ (175,005,390) \$	2120 - \$ (118,032,631) \$ (118,032,631) \$	2121 - \$ (121,455,577) \$ (121,455,577) \$	- \$ (124,977,789) \$ (124,977,789) \$	2123 - \$ (128,602,145) \$ (128,602,145) \$	2124 - \$ (132,331,607) \$ (132,331,607) \$	2125 - \$ (136,169,223) \$ (136,169,223) \$	- \$ (140,118,131) \$ (140,118,131) \$	- \$ (144,181,557) \$ (144,181,557) \$	2128 - \$ (148,362,822) \$ (148,362,822) \$	2129 - \$ (152,665,344) \$ (152,665,344) \$	2130 - \$ (157,092,638) \$ (157,092,638) \$	2131 - (161,648,325) (161,648,325)
200 201 202 203 204		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,		, , , , , , , , , , , , , , , , , , , ,				, ,, ,, ,,			,	, ,	
205	4 Annual O&M Cost 5 Pigging to Occur 6 TiMP Cost 7 Total O&M Costs	\$ 14,495,118 \$ N/A \$ 2,253,804 \$ \$ 16,748,922 \$	22,897,471 \$ FALSE \$ 22,897,471 \$	23,561,498 \$ FALSE - \$ 23,561,498 \$	24,244,781 \$ FALSE \$ 24,244,781 \$	24,947,880 \$ TRUE 32,881,509 \$ 57,829,389 \$	25,671,369 \$ FALSE - \$ 25,671,369 \$	26,415,838 \$ FALSE - \$ 26,415,838 \$	27,181,898 \$ FALSE - \$ 27,181,898 \$	27,970,173 \$ FALSE \$ 27,970,173 \$	28,781,308 \$ FALSE	29,615,966 \$ FALSE \$ 29,615,966 \$	30,474,829 \$ FALSE - \$ 30,474,829 \$	31,358,599 FALSE - 31,358,599
206 207	J2 Blythe to Santee Alternative 2													

Future L1600 Replacement Cost
 MCS O&M and Emissions Cost
 Total Avoided Costs

J3 Cactus City to San Diego Alternative

Future L1600 Replacement Cost
 MCS O&M and Emissions Cost
 Total Avoided Costs

K Second Pipeline Along Line 3010

Future L1600 Replacement Cost
 MCS O&M and Emissions Cost
 Total Avoided Costs

4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost 7 Total O&M Costs

4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost 7 Total O&M Costs

4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost 7 Total O&M Costs

ANNUAL COSTS BY PROJECT ALTERNATE, FOR AVOIDED COSTS AND O&M COSTS

5-09-013 VOLUME III - COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 2017)

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Line	No.	
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PV (X yea	rs after operational)	0	1	2	3	4	5	6	7	8	9	10	11	12	13
	100 PV	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	202
		2010	2010	2017	2010	2010	2020	2021	LVLL	2020		perational Year	2020	2021	202
\$	(100,285,483) \$		s -	S -	s -	\$ -	\$ -	\$ -	s -	\$ -	s - s	- S	- S	- \$	
	(74,719,907) \$		\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ - \$	(7,808,030) \$	(8,034,463) \$	(8,267,462) \$	(8
	(175,005,390) \$	-	s -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ - \$	(7,808,030) \$	(8,034,463) \$	(8,267,462) \$	(8
<u> </u>	14,508,148 \$		\$ -	\$ -		\$ -	\$ -	\$ -	ş -	\$ -	s - s	1,516,063 \$	1,560,028 \$	1,605,269 \$	1
VA.	0.050.001	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALS
	2,253,804 \$		\$ -		s -	\$ -	\$ -	\$ -	S -	\$ -	\$ - \$ \$ - \$	- \$	- \$	- 2	
•	16,761,952 \$		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	5 -	\$ -	\$ - \$	1,516,063 \$	1,560,028 \$	1,605,269 \$	1
	PV	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025 Derational Year	2026	2027	202
	(100,285,483) \$		S -	10	Is -	Is -	٠.	s -	s -	s -	s - s	perational rear		. 19	
-	(74,719,907) \$		\$ -			\$ -	\$.	s -	\$ -	\$ -	\$ - \$	(7.808.030) \$	(8.034.463) S	(8.267.462) \$	(8)
	(175,005,390) \$				š -		š -	š -				(7,808,030) \$	(8,034,463) \$	(8.267.462) \$	(8
	(:::):::)		1.7		17	1.7	, ,	•			·	(*)===)===) +	(-))/-	(-))/	
	10.434.660 \$	-	s -	Is -	Is -	Is -	s -	s -	s - I	s -	s - s	1.090.394 \$	1.122.015 S	1,154,554 \$	1
V/A		FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALS
	2,253,804 \$		\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ - \$	- \$	- \$	- \$	
;	12,688,464 \$	•	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ - \$	1,090,394 \$	1,122,015 \$	1,154,554 \$	1
	PV	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	202
													Operational Year		
\$	(100,285,483) \$		\$ -		\$ -		\$ -	\$ -	S -	\$ -	S - S	- S	- S	- \$	
\$	(71,330,165) \$	-	\$ -			\$ -	\$ -	3	S -	,	s - s	- \$	(8,034,463) \$	(8,267,462) \$	(8
\$	(171,615,648) \$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$-	\$ -	\$ - \$	- \$	(8,034,463) \$	(8,267,462) \$	(8

ANNUAL COSTS BY PROJECT ALTERNATE, FOR AVOIDED COSTS AND O&M COSTS

Future L1600 Replacement Cost
 MCS O&M and Emissions Cost
 Total Avoided Costs

J3 Cactus City to San Diego Alternative

1 Future L1600 Replacement Cost
2 MCS O&M and Emissions Cost
3 Total Avoided Costs

4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost 7 Total O&M Costs

4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost 7 Total O&M Costs K Second Pipeline Along Line 3010 1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost 3 Total Avoided Costs

4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost 7 Total O&M Costs

15-09-013 VOLUME III - COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 20

Α.	1
No.	

PV (X yea	ars after operational)	14	15	16	17	18	19	20	21	22	23	24	25	26
	100 PV	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
	(100.285.483) \$. 9	- 19	- 19	. \$	- 9	. 19	. 9	. 19	. \$. 19	(334.683.589) \$	(344,389,413) \$	
ς	(74,719,907) \$	(8.753.928) \$	(9.007.792) S	(9.269.018) S	(9.537.820) \$	(9.814.416) S	(10.099.035) \$	(10.391.907) S	(10.693.272) \$	(11.003.377) \$	(11.322.475) \$	(11.650.826) \$	(11.988.700) \$	(12,336,3
\$	(175,005,390) \$	(8,753,928) \$	(9,007,792) \$	(9,269,018) \$	(9,537,820) \$	(9,814,416) \$	(10,099,035) \$	(10,391,907) \$	(10,693,272) \$	(11,003,377) \$	(11,322,475) \$	(346,334,415) \$	(356,378,113) \$	(12,336,3
	14.508.148 \$	1.699.725 \$	1.749.017 \$	1.799.738 S	1.851.931 \$	1.905.637 \$	1.960.900 S	2.017.766 \$	2.076.282 \$	2.136.494 \$	2.198.452 \$	2.262.207 \$	2.327.811 \$	2.395.
N/A	14,500,140 \$	FALSE \$	FALSE	FALSE	TRUE	FALSE	FALSE \$	FALSE 5	FALSE \$	2,130,494 \$ FALSE	7,196,452 \$	7,262,207 \$	FALSE	FALSE
\$	2,253,804 \$	- \$	- \$	- S	2,438,668 \$	- \$	- \$	- S	- \$	- \$	- \$	2,978,930 \$	- \$	
\$	16,761,952 \$	1,699,725 \$	1,749,017 \$	1,799,738 \$	4,290,598 \$	1,905,637 \$	1,960,900 \$	2,017,766 \$	2,076,282 \$	2,136,494 \$	2,198,452 \$	5,241,137 \$	2,327,811 \$	2,395,3
·	PV (400 205 402) C	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
\$	(100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	(334,683,589) \$	(344,389,413) \$	
\$	(74,719,907) \$	(8,753,928) \$	(9,007,792) \$	(9,269,018) \$	(9,537,820) \$	(9,814,416) \$	(10,099,035) \$	(10,391,907) \$	(10,693,272) \$	(11,003,377) \$	(11,322,475) \$	(11,650,826) \$	(11,988,700) \$	(12,336,3
\$	(175,005,390) \$	(8,753,928) \$	(9,007,792) \$	(9,269,018) \$	(9,537,820) \$	(9,814,416) \$	(10,099,035) \$	(10,391,907) \$	(10,693,272) \$	(11,003,377) \$	(11,322,475) \$	(346,334,415) \$	(356,378,113) \$	(12,336,
\$	10,434,660 \$	1,222,489 \$	1,257,941 \$	1,294,421 \$	1,331,960 \$	1,370,586 \$	1,410,334 \$	1,451,233 \$	1,493,319 \$	1,536,625 \$	1,581,187 \$	1,627,042 \$	1,674,226 \$	1,722,
N/A	0.050.004.0	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	2 978 930 S	FALSE	FALSE
\$	2,253,804 \$ 12,688,464 \$	1,222,489 \$	1,257,941 \$	1,294,421 \$	2,438,668 \$ 3,770,627 \$	1,370,586 \$	1,410,334 \$	1.451.233 \$	1,493,319 \$	1,536,625 \$	1.581.187 \$	4,605,971 \$	1.674.226 \$	1,722,7
•	12,000,404	1,222,405	1,237,841	1,254,421	3,770,027	1,370,300	1,410,334 \$	1,451,255	1,465,516 \$	1,530,025	1,301,107	4,003,571	1,074,220	1,722,
	PV	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
S	(100,285,483) \$	- S	- S	- S	- S	- S	- S	- S	- S	- S	- S	(334,683,589) \$	(344,389,413) \$	
\$	(71,330,165) \$	(8,753,928) \$	(9,007,792) \$	(9,269,018) \$	(9,537,820) \$	(9,814,416) \$	(10,099,035) \$	(10,391,907) \$	(10,693,272) \$	(11,003,377) \$	(11,322,475) \$	(11,650,826) \$	(11,988,700) \$	(12,336,
\$	(171,615,648) \$	(8,753,928) \$	(9,007,792) \$	(9,269,018) \$	(9,537,820) \$	(9,814,416) \$	(10,099,035) \$	(10,391,907) \$	(10,693,272) \$	(11,003,377) \$	(11,322,475) \$	(346,334,415) \$	(356,378,113) \$	(12,336,
								-						
	2 799 858 \$	343 610 \$	353.575 S	363.828 S	374.379 S	385.236 S	396 408 \$	407 904 S	419 733 \$	431 906 \$	444 431 \$	457 319 \$	470 582 \$	484

Page	21	of	29

Future L1600 Replacement Cost
 MCS O&M and Emissions Cost
 Total Avoided Costs

J3 Cactus City to San Diego Alternative

Future L1600 Replacement Cost
 MCS O&M and Emissions Cost
 Total Avoided Costs

Future L1600 Replacement Cost
 MCS O&M and Emissions Cost
 Total Avoided Costs

4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost 7 Total O&M Costs

Annual O&M Cost
 Pigging to Occur
 TIMP Cost
 Total O&M Costs

K Second Pipeline Along Line 3010

4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost 7 Total O&M Costs

ANNUAL COSTS BY PROJECT ALTERNATE, FOR AVOIDED COSTS AND O&M COSTS

15-09-013 VOLUME III - COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 20

	A.1
Line 1	No.
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PV (X years	s after operational)	27	28	29	30	31	32	33	34	35	36	37	38	39
	100													
	PV	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
	(100,285,483) \$. (0	- S	. (s	- Is			. 9		. (0	- S	. (s	- S	
Š	(74,719,907) \$	(12.694.127) \$	(13.062.257) S	(13.441.063) S	(13.830.853) \$	(14.231.948) \$	(14,644,675) \$	(15.069.370) \$	(15.506.382) \$	(15.956.067) \$	(16.418.793) S	(16,894,938) S	(17.384.891) S	(17.
\$	(175,005,390) \$	(12,694,127) \$	(13,062,257) \$	(13,441,063) \$	(13,830,853) \$	(14,231,948) \$	(14,644,675) \$	(15,069,370) \$	(15,506,382) \$	(15,956,067) \$	(16,418,793) \$	(16,894,938) \$	(17,384,891) \$	(17,
	14 508 148 \$	2.464.782 S	2.536.261 S	2.609.812 S	2.685.497 \$	2.763.376 \$	2.843.514 \$	2.925.976 \$	3.010.829 \$	3 098 143 \$	3.187.989 S	3.280.441 S	3.375.574 S	3.
N/A	,,	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE
\$	2,253,804 \$	- \$	- \$	- \$	- \$	3,638,881 \$	- \$	- \$	- \$	- \$	- \$	- \$	4,445,038 \$	
\$	16,761,952 \$	2,464,782 \$	2,536,261 \$	2,609,812 \$	2,685,497 \$	6,402,257 \$	2,843,514 \$	2,925,976 \$	3,010,829 \$	3,098,143 \$	3,187,989 \$	3,280,441 \$	7,820,612 \$	3,
	PV	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
	(100,285,483) \$. 19	T e	T e	Te.	l e	T e	- 19	l e	T e	l e	. 19	
Š	(74,719,907) \$	(12.694.127) \$	(13.062.257) S	(13.441.063) S	(13.830.853) \$	(14.231.948) \$	(14.644.675) \$	(15.069.370) \$	(15,506,382) \$	(15.956.067) \$	(16.418.793) S	(16.894.938) S	(17.384.891) S	(17.
Š	(175,005,390) \$	(12,694,127) \$	(13,062,257) \$	(13,441,063) \$	(13,830,853) \$	(14,231,948) \$	(14,644,675) \$	(15.069.370) \$	(15,506,382) \$	(15,956,067) \$	(16,418,793) \$	(16,894,938) S	(17,384,891) \$	(17.
3	10 434 660 \$	1 772 739 S	1 824 149 \$	1 877 049 \$	1 931 483 \$	1 987 496 \$	2 045 134 \$	2 104 443 \$	2 165 471 \$	2.228.270 S	2 292 890 \$	2.359.384 S	2.427.806 S	2
N/A	1011001000	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	FALS
\$	2,253,804 \$	- \$	- S	- S	- \$	3,638,881 \$	- \$	- \$	- \$	- S	- S	- S	4,445,038 \$	
\$	12,688,464 \$	1,772,739 \$	1,824,149 \$	1,877,049 \$	1,931,483 \$	5,626,377 \$	2,045,134 \$	2,104,443 \$	2,165,471 \$	2,228,270 \$	2,292,890 \$	2,359,384 \$	6,872,844 \$	2
	PV	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
:	(100 285 483) \$. 19	. 9	l e	l e	l e	. 9	. 19	. 9	l e	l e	l e	. 9	
Š.	(71 330 165) \$	(12.694.127) \$	(13.062.257) S	(13.441.063) S	(13.830.853) \$	(14.231.948) \$	(14.644.675) \$	(15.069.370) S	(15.506.382) \$	(15.956.067) \$	(16.418.793) S	(16.894.938) \$	(17.384.891) S	(17.
Š	(171,615,648) \$	(12,694,127) \$	(13,062,257) \$	(13,441,063) S	(13,830,853) \$	(14,231,948) \$	(14,644,675) \$	(15,069,370) \$	(15,506,382) \$	(15,956,067) \$	(16,418,793) \$	(16,894,938) \$	(17,384,891) S	(17,
•	(,010,040) \$	(.=,:54,121)	(,.52,257)	(, . //,000)] \$	(,,000)	(,251,040)	(: :,: 14,010) \$	(,,)	(,:00,002)	(,)	(,	(11,134,000)	(,==4,001) 0	
	2 799 858 \$	498 271 S	512.721 S	527 590 S	542.890 S	558 634 \$	574 834 S	591 504 S	608 658 S	626 309 S	644 472 S	663 162 S	682 393 S	

Page	22	of	29

	A.1
Line I	No.
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1	Future L1600 Replacement Cost
2	MCS O&M and Emissions Cost
3	Total Avoided Costs

- 4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost 7 Total O&M Costs
- J3 Cactus City to San Diego Alternative
- Future L1600 Replacement Cost
 MCS O&M and Emissions Cost
 Total Avoided Costs
- 4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost 7 Total O&M Costs
- K Second Pipeline Along Line 3010
- Future L1600 Replacement Cost
 MCS O&M and Emissions Cost
 Total Avoided Costs
- 4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost 7 Total O&M Costs

BV (Y year	ars after operational)	40	41	42	42	44	46	AG.	47	40	40	60	51	52
FV (A yea	100	40	41	42	45	44	45	40	4/	40	43	30	Ji	JŁ
	PV	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067
\$	(100,285,483) \$	- \$	- \$	- S	- S	- S	- S	- \$	- \$	- \$	- S	- \$	- \$	
\$	(74,719,907) \$	(18,407,836) \$	(18,941,663) \$	(19,490,971) \$	(20,056,209) \$	(20,637,839) \$	(21,236,337) \$	(21,852,190) \$	(22,485,904) \$	(23,137,995) \$	(23,808,997) \$	(24,499,458) \$	(25,209,942) \$	(25,941,030)
\$	(175,005,390) \$	(18,407,836) \$	(18,941,663) \$	(19,490,971) \$	(20,056,209) \$	(20,637,839) \$	(21,236,337) \$	(21,852,190) \$	(22,485,904) \$	(23,137,995) \$	(23,808,997) \$	(24,499,458) \$	(25,209,942) \$	(25,941,030)
\$	14,508,148 \$	3,574,196 \$	3,677,848 \$	3,784,505 \$	3,894,256 \$	4,007,189 \$	4,123,398 \$	4,242,976 \$	4,366,023 \$	4,492,637 \$	4,622,924 \$	4,756,989 \$	4,894,941 \$	5,036,895
N/A		FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE
\$	2,253,804 \$	- \$	- \$	- \$	- \$	- \$	5,429,791 \$	- \$	- \$	- \$	- \$	- \$	- \$	6,632,706
\$	16,761,952 \$	3,574,196 \$	3,677,848 \$	3,784,505 \$	3,894,256 \$	4,007,189 \$	9,553,189 \$	4,242,976 \$	4,366,023 \$	4,492,637 \$	4,622,924 \$	4,756,989 \$	4.894.941 S	11,669,601

	PV	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067
\$	(100,285,483)	- \$		-	\$ -	\$ - \$		\$ -	\$ - \$		\$ - \$		- \$	
\$	(74,719,907)	(18,407,836) \$	(18,941,663)	(19,490,971)	\$ (20,056,209)	\$ (20,637,839) \$	(21,236,337)	\$ (21,852,190)	\$ (22,485,904) \$	(23,137,995)	\$ (23,808,997) \$	(24,499,458)	\$ (25,209,942) \$	(25,941,030)
\$	(175,005,390)	(18,407,836) \$	(18,941,663) \$	(19,490,971)	\$ (20,056,209)	\$ (20,637,839) \$	(21,236,337)	\$ (21,852,190)	\$ (22,485,904) \$	(23,137,995)	\$ (23,808,997) \$	(24,499,458)	\$ (25,209,942) \$	(25,941,030)
		•		•							-			
\$	10,434,660	2,570,660 \$	2,645,209	2,721,921	\$ 2,800,856	\$ 2,882,081 \$	2,965,661	\$ 3,051,666	\$ 3,140,164 \$	3,231,229	\$ 3,324,934 \$	3,421,357	\$ 3,520,577 \$	3,622,673
N/A		FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE
\$	2,253,804	- \$	-	-	s -	s - s	5,429,791	S -	s - s		s - s		s - s	6,632,706
	12,688,464	2.570.660 \$	2.645,209	2,721,921	\$ 2.800.856	\$ 2.882.081 S	8,395,453	\$ 3,051,666	S 3.140.164 S	3,231,229	\$ 3,324,934 \$	3,421,357	\$ 3.520.577 \$	10,255,379

	PV	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067
\$	(100,285,483) \$	- \$	- S	-	s -	s - s		s - !	- \$	-	s - s	- 1	s - s	-
\$	(71,330,165) \$	(18,407,836) \$	(18,941,663) \$	(19,490,971)	\$ (20,056,209)	\$ (20,637,839) \$	(21,236,337)	\$ (21,852,190)	(22,485,904) \$	(23,137,995)	\$ (23,808,997) \$	(24,499,458)	\$ (25,209,942) \$	(25,941,030)
\$	(171,615,648) \$	(18,407,836) \$	(18,941,663) \$	(19,490,971)	\$ (20,056,209)	\$ (20,637,839) \$	(21,236,337)	\$ (21,852,190)	(22,485,904) \$	(23,137,995)	\$ (23,808,997) \$	(24,499,458)	\$ (25,209,942) \$	(25,941,030)
\$	2,799,858 \$	722,546 \$	743,500 \$	765,061	\$ 787,248	\$ 810,078 \$	833,571	\$ 857,744 \$	882,619 \$	908,215	\$ 934,553 \$	961,655	\$ 989,543 \$	1,018,240
N/A		FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
\$	717,186 \$	- \$	- S		\$ -	s - s		\$ 1,862,418 \$	- \$	-	s - s	- 5	- \$	
S	3.517.044 \$	722,546 \$	743.500 \$	765.061	\$ 787.248	S 810.078 S	833,571	\$ 2,720,163	882,619 \$	908.215	\$ 934.553 \$	961.655	\$ 989.543 \$	1.018.240

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1	Future L1600 Replacement Cost
2	MCS O&M and Emissions Cost
3	Total Avoided Costs
4	Annual O&M Cost
5	Pigging to Occur
6	TIMP Cost
7	Total O&M Costs

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1 2 3	Future L1600 Replacement Cost MCS O&M and Emissions Cost Total Avoided Costs

- 4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost 7 Total O&M Costs K Second Pipeline Along Line 3010
- Future L1600 Replacement Cost
 MCS O&M and Emissions Cost
 Total Avoided Costs
- 4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost 7 Total O&M Costs

PV (X years after operational)	53	54	55	56	57	58	59	60	61	62	63	64	65
100									-				
PV	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080
\$ (100,285,483) \$	- \$	- \$	- S	- S	- S	- S	- \$	- \$	- \$	- S	- \$	- \$	-
\$ (74,719,907) \$	(26,693,320) \$	(27,467,427) \$	(28,263,982) \$	(29,083,638) \$	(29,927,063) \$	(30,794,948) \$	(31,688,001) \$	(32,606,953) \$	(33,552,555) \$	(34,525,579) \$	(35,526,821) \$	(36,557,099) \$	(37,617,255)
\$ (175,005,390) \$	(26,693,320) \$	(27,467,427) \$	(28,263,982) \$	(29,083,638) \$	(29,927,063) \$	(30,794,948) \$	(31,688,001) \$	(32,606,953) \$	(33,552,555) \$	(34,525,579) \$	(35,526,821) \$	(36,557,099) \$	(37,617,255)
\$ 14,508,148 \$	5,182,965 \$	5,333,271 \$	5,487,935 \$	5,647,086 \$	5,810,851 \$	5,979,366 \$	6,152,767 \$	6,331,198 \$	6,514,802 \$	6,703,732 \$	6,898,140 \$	7,098,186 \$	7,304,033
N/A	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
\$ 2,253,804 \$	- \$	- \$	- \$	- \$	- \$	- \$	8,102,114 \$	- \$	- \$	- \$	- \$	- \$	
\$ 16,761,952 \$	5.182.965 \$	5.333.271 \$	5.487.935 S	5.647.086 S	5.810.851 S	5.979.366 S	14.254.882 S	6.331.198 \$	6.514.802 \$	6.703.732 \$	6,898,140 \$	7,098,186 \$	7,304,033

	PV	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080
\$	(100,285,483) \$	- \$	- S	- \$	- 8	\$ - !	-	\$ -	s - s	-	\$ -	s - s	- \$	-
\$	(74,719,907) \$	(26,693,320) \$	(27,467,427) \$	(28,263,982) \$	(29,083,638) \$	\$ (29,927,063)	(30,794,948)			(33,552,555)	\$ (34,525,579)		(36,557,099) \$	(37,617,255)
\$	(175,005,390) \$	(26,693,320) \$	(27,467,427) \$	(28,263,982) \$	(29,083,638)	\$ (29,927,063)	(30,794,948)	\$ (31,688,001)	\$ (32,606,953) \$	(33,552,555)	\$ (34,525,579)	\$ (35,526,821) \$	(36,557,099) \$	(37,617,255)
	•	•	•						•			•	•	
\$	10,434,660 \$	3,727,731 \$	3,835,835 \$	3,947,074 \$	4,061,540	\$ 4,179,324	4,300,525	\$ 4,425,240		4,685,625			5,105,211 \$	5,253,262
N/A		FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
\$	2,253,804 \$	- \$	- \$	- \$	- 5	3 - 5	-	\$ 8,102,114	s - s		\$ -	s - s	- S	
\$	12.688.464 \$	3,727,731 \$	3,835,835 \$	3,947,074 S	4,061,540	\$ 4,179,324	4,300,525	\$ 12.527.354	\$ 4,553,572 \$	4,685,625	\$ 4,821,509	\$ 4,961,332 \$	5,105,211 \$	5,253,262

	PV	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080
\$	(100,285,483) \$	- \$	- \$	- 1		s - s	- 1	s - s	- \$	- 1	s - \$	- S	- \$	-
\$	(71,330,165) \$	(26,693,320) \$	(27,467,427) \$	(28,263,982) \$	(29,083,638)	\$ (29,927,063) \$	(30,794,948)	\$ (31,688,001) \$	(32,606,953) \$	(33,552,555)	(34,525,579) \$	(35,526,821) \$	(36,557,099) \$	(37,617,255)
\$	(171,615,648) \$	(26,693,320) \$	(27,467,427) \$	(28,263,982)	\$ (29,083,638)	\$ (29,927,063) \$	(30,794,948)	\$ (31,688,001) \$	(32,606,953) \$	(33,552,555)	(34,525,579) \$	(35,526,821) \$	(36,557,099) \$	(37,617,255)
\$	2,799,858 \$	1,047,769 \$	1,078,154 \$	1,109,420	1,141,594	\$ 1,174,700 \$	1,208,766	\$ 1,243,820 \$	1,279,891 \$	1,317,008	1,355,201 \$	1,394,502 \$	1,434,943 \$	1,476,556
N/A		TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE
\$	717,186 \$	2,275,018 \$	- \$	- 9	- 5	s - s	- ;	S - S	2,779,025 \$		- S	- S	- \$	
•	3 517 044 \$	3.322.787 \$	1 078 154 \$	1 109 420 5	1 141 594	1 174 700 \$	1 208 766	\$ 1 243 820 \$	4.058.916 \$	1 317 008	1 355 201 \$	1 394 502 \$	1 434 943 \$	1 476 556

K Second Pipeline Along Line 3010 Future L1600 Replacement Cost
 MCS O&M and Emissions Cost
 Total Avoided Costs

4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost 7 Total O&M Costs

	A.1
Line 1	No.
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	PV (X years after operational)	66	67	68	69	70	71	72	73	74	75	76	77	78
	100													
	PV	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093
1 Future L1600 Replacement Cost	\$ (100,285,483) \$	- \$	- S	- \$	- S	- S	- S	- \$	- \$	- \$	- \$	- \$	- \$	-
2 MCS O&M and Emissions Cost	\$ (74,719,907) \$	(38,708,155) \$	(39,830,691) \$	(40,985,781) \$	(42,174,369) \$	(43,397,426) \$	(44,655,951) \$	(45,950,974) \$	(47,283,552) \$	(48,654,775) \$	(50,065,764) \$	(51,517,671) \$	(53,011,683) \$	(54,549,022)
3 Total Avoided Costs	\$ (175,005,390) \$	(38,708,155) \$	(39,830,691) \$	(40,985,781) \$	(42,174,369) \$	(43,397,426) \$	(44,655,951) \$	(45,950,974) \$	(47,283,552) \$	(48,654,775) \$	(50,065,764) \$	(51,517,671) \$	(53,011,683) \$	(54,549,022)
									· · · · · · · · · · · · · · · · · · ·					
4 Annual O&M Cost	\$ 14,508,148 \$	7,515,850 \$	7,733,810 \$	7,958,090 \$	8,188,875 \$	8,426,352 \$	8,670,716 \$	8,922,167 \$	9,180,910 \$	9,447,156 \$	9,721,124 \$	10,003,037 \$	10,293,125 \$	10,591,625
5 Pigging to Occur	N/A	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE
6 TIMP Cost	\$ 2,253,804 \$	9,897,055 \$	- \$	- \$	- \$	- S	- \$	- \$	12,089,647 \$	- \$	- \$	- \$	- \$	-
7 Total O&M Costs	\$ 16,761,952 \$	17,412,905 \$	7,733,810 \$	7,958,090 \$	8,188,875 \$	8,426,352 \$	8,670,716 \$	8,922,167 \$	21,270,557 \$	9,447,156 \$	9,721,124 \$	10,003,037 \$	10,293,125 \$	10,591,625
J3 Cactus City to San Diego Alternative														
	PV	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093
1 Future L1600 Replacement Cost	\$ (100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
2 MCS O&M and Emissions Cost	\$ (74,719,907) \$	(38,708,155) \$	(39,830,691) \$	(40,985,781) \$	(42,174,369) \$	(43,397,426) \$	(44,655,951) \$	(45,950,974) \$	(47,283,552) \$	(48,654,775) \$	(50,065,764) \$	(51,517,671) \$	(53,011,683) \$	(54,549,022)
3 Total Avoided Costs	\$ (175,005,390) \$	(38,708,155) \$	(39,830,691) \$	(40,985,781) \$	(42,174,369) \$	(43,397,426) \$	(44,655,951) \$	(45,950,974) \$	(47,283,552) \$	(48,654,775) \$	(50,065,764) \$	(51,517,671) \$	(53,011,683) \$	(54,549,022)
	·											•		
4 Annual O&M Cost	\$ 10,434,660 \$	5,405,607 \$	5,562,369 \$	5,723,678 \$	5,889,665 \$	6,060,465 \$	6,236,218 \$	6,417,069 \$	6,603,164 \$	6,794,655 \$	6,991,700 \$	7,194,460 \$	7,403,099 \$	7,617,789
5 Pigging to Occur	N/A	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE
6 TIMP Cost	\$ 2,253,804 \$	9,897,055 \$	- \$	- \$	- \$	- \$	- S	- \$	12,089,647 \$	- \$	- \$	- \$	- \$	
7 Total O&M Costs	\$ 12,688,464 \$	15,302,662 \$	5,562,369 \$	5,723,678 \$	5,889,665 \$	6,060,465 \$	6,236,218 \$	6,417,069 \$	18,692,811 \$	6,794,655 \$	6,991,700 \$	7,194,460 \$	7,403,099 \$	7,617,789

	PV	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093
\$	(100,285,483) \$	- \$	- \$	-	s -		s -	s - s	- \$		s - s	- \$	- S	
\$	(71,330,165) \$	(38,708,155) \$	(39,830,691) \$	(40,985,781)	\$ (42,174,369)	\$ (43,397,426)	\$ (44,655,951)	\$ (45,950,974) \$	(47,283,552) \$	(48,654,775)	\$ (50,065,764) \$	(51,517,671) \$	(53,011,683) \$	(54,549,022)
\$	(171,615,648) \$	(38,708,155) \$	(39,830,691) \$	(40,985,781)	\$ (42,174,369)	\$ (43,397,426)	\$ (44,655,951)	\$ (45,950,974) \$	(47,283,552) \$	(48,654,775)	\$ (50,065,764) \$	(51,517,671) \$	(53,011,683) \$	(54,549,022)
\$	2,799,858 \$	1,519,376 \$	1,563,438 \$	1,608,778	\$ 1,655,432	\$ 1,703,440	\$ 1,752,840	\$ 1,803,672 \$	1,855,978 \$	1,909,802	\$ 1,965,186 \$	2,022,176 \$	2,080,820 \$	2,141,163
N/A		FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE
\$	717,186 \$	- \$	3,394,690 \$	-	\$ -	\$ -	\$ -	s - s	- \$	4,146,749	\$ - \$	- \$	- \$	
\$	3,517,044 \$	1,519,376 \$	4,958,128 \$	1,608,778	\$ 1,655,432	\$ 1,703,440	\$ 1,752,840	\$ 1,803,672 \$	1,855,978 \$	6,056,551	\$ 1,965,186 \$	2,022,176 \$	2,080,820 \$	2,141,163

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	PV (X years after operational)	79	80	81	82	83	84	85	86	87	88	89	90	91
	100 PV	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106
1 Future L1600 Replacement Cost	\$ (100.285.483) \$		- 10	- 10	1.0				- 1		- 10	- 10	1.0	
2 MCS O&M and Emissions Cost	\$ (100,285,483) \$ \$ (74,719,907) \$	(56.130.944) \$	(57.758.741) \$	(59 433 744) \$	(61.157.323) \$	(62.930.885) S	(64 755 881) S	(66 633 802) \$	(68.566.182) \$	(70.554.601) \$	(72.600.685) \$	(74.706.104) S	(76.872.581) S	(79.101.886)
3 Total Avoided Costs	\$ (175,005,390) \$	(56,130,944) \$	(57,758,741) \$	(59,433,744) \$	(61,157,323) \$	(62,930,885) \$	(64,755,881) \$	(66,633,802) \$	(68,566,182) \$	(70,554,601) \$	(72,600,685) \$	(74,706,104) \$	(76,872,581) \$	(79,101,886)
		•	•		•	•			•			•	•	
4 Annual O&M Cost	\$ 14.508.148 \$	10.898.782 \$	11.214.847 S	11.540.078 S	11.874.740 S	12.219.107 S	12.573.462 S	12.938.092 \$	13.313.297 \$	13.699.382 \$	14.096.664 S	14.505.468 S	14.926.126 S	15.358.984
5 Pigging to Occur	N/A	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE
6 TIMP Cost	\$ 2,253,804 \$	- \$	14,767,985 \$	- \$	- \$	- \$	- \$	- \$	- \$	18,039,681 \$	- \$	- \$	- \$	
7 Total O&M Costs	\$ 16,761,952 \$	10,898,782 \$	25,982,832 \$	11,540,078 \$	11,874,740 \$	12,219,107 \$	12,573,462 \$	12,938,092 \$	13,313,297 \$	31,739,064 \$	14,096,664 \$	14,505,468 \$	14,926,126 \$	15,358,984
J3 Cactus City to San Diego Alternative														
	PV	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106
1 Future L1600 Replacement Cost	\$ (100.285.483) \$	- IS	- IS	- IS	- IS	- Is	- IS	- Is	- IS	- IS	- IS	- Is	- IS	-
2 MCS O&M and Emissions Cost	\$ (74,719,907) \$	(56,130,944) \$	(57,758,741) \$	(59,433,744) \$	(61,157,323) \$	(62,930,885) \$	(64,755,881) \$	(66,633,802) \$	(68,566,182) \$	(70,554,601) \$	(72,600,685) \$	(74,706,104) \$	(76,872,581) \$	(79,101,886)
3 Total Avoided Costs	\$ (175,005,390) \$	(56,130,944) \$	(57,758,741) \$	(59,433,744) \$	(61,157,323) \$	(62,930,885) \$	(64,755,881) \$	(66,633,802) \$	(68,566,182) \$	(70,554,601) \$	(72,600,685) \$	(74,706,104) \$	(76,872,581) \$	(79,101,886)
4 Annual O&M Cost	\$ 10,434,660 \$	7,838,705 \$	8,066,027 \$	8,299,942 \$	8,540,640 \$	8,788,319 \$	9,043,180 \$	9,305,432 \$	9,575,290 \$	9,852,973 \$	10,138,710 \$	10,432,732 \$	10,735,281 \$	11,046,605
5 Pigging to Occur 6 TIMP Cost	N/A	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE
6 TIMP Cost 7 Total O&M Costs	\$ 2,253,804 \$ \$ 12,688,464 \$	7.838.705 \$	14,767,985 \$ 22,834,012 \$	8.299.942 S	8.540.640 \$	8.788.319 \$	9.043.180 \$	9.305.432 \$	9.575.290 \$	18,039,681 \$ 27,892,655 \$	- \$ 10.138.710 \$	10.432.732 \$	10.735.281 \$	11.046.605
1 Total Gain Costs	\$ 12,000,404 \$	7,030,705 \$	22,034,012 \$	0,299,942 \$	0,340,040 \$	0,700,319 \$	9,043,100 \$	9,305,432 \$	9,575,290 \$	21,092,035 \$	10,136,710 \$	10,432,732 \$	10,735,261 \$	11,040,005
K Second Pipeline Along Line 3010														
	PV	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106
1 Future L1600 Replacement Cost	\$ (100,285,483) \$. (0	. (- Is	. (. 9	. (s	. (. (. (9	. (- S	
2 MCS O&M and Emissions Cost	\$ (71,330,165) \$	(56.130.944) \$	(57.758.741) \$	(59.433.744) \$	(61.157.323) \$	(62.930.885) \$	(64,755,881) S	(66,633,802) \$	(68.566.182) \$	(70.554.601) \$	(72,600,685) \$	(74,706,104) \$	(76.872.581) \$	(79.101.886)
3 Total Avoided Costs	\$ (171,615,648) \$	(56,130,944) \$	(57,758,741) \$	(59,433,744) \$	(61,157,323) \$	(62,930,885) \$	(64,755,881) \$	(66,633,802) \$	(68,566,182) \$	(70,554,601) \$	(72,600,685) \$	(74,706,104) \$	(76,872,581) \$	(79,101,886)
4 Annual O&M Cost	S 2 799 858 S	2.203.257 \$	2.267.152 S	2 332 899 \$	2 400 553 S	2 470 169 S	2 541 804 S	2 615 516 \$	2 691 366 \$	2.769.416 \$	2 849 729 S	2 932 371 \$	3 017 410 S	3.104.915
5 Pigging to Occur	N/A	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE
6 TIMP Cost	\$ 717,186 \$	- \$	- \$	5,065,419 \$	- \$	- S	- S	- \$	- \$	- \$	6,187,611 \$	- \$	- \$	
7 Total O&M Costs	\$ 3,517,044 \$	2,203,257 \$	2,267,152 \$	7,398,318 \$	2,400,553 \$	2,470,169 \$	2,541,804 \$	2,615,516 \$	2,691,366 \$	2,769,416 \$	9,037,340 \$	2,932,371 \$	3,017,410 \$	3,104,915

K Second Pipeline Along Line 3010 Future L1600 Replacement Cost
 MCS O&M and Emissions Cost
 Total Avoided Costs

4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost 7 Total O&M Costs

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Line 1	No.
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	PV (X years after operational)	92	93	94	95	96	97	98	99	100	101	102	103	
	100													
	PV	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	
														_
1 Future L1600 Replacement Cost	\$ (100,285,483) \$	- \$	- S	- \$	- 5	s - s	- S	- \$	- \$	-	S - S	- :		\$
2 MCS O&M and Emissions Cost	\$ (74,719,907) \$	(81,395,841) \$	(83,756,320) \$	(86,185,254) \$	(88,684,626)	\$ (91,256,480) \$	(93,902,918) \$	(96,626,103) \$	(99,428,260) \$	(102,311,679)	\$ (105,278,718) \$	(108,331,801)		
3 Total Avoided Costs	\$ (175,005,390) \$	(81,395,841) \$	(83,756,320) \$	(86,185,254) \$	(88,684,626)	\$ (91,256,480) \$	(93,902,918) \$	(96,626,103)	(99,428,260) \$	(102,311,679)	\$ (105,278,718) \$	(108,331,801)	(111,473,423)	\$
4 Annual O&M Cost	\$ 14,508,148 \$	15,804,394 \$	16,262,722 \$	16,734,341 \$	17,219,636		18,232,857 \$	18,761,610 \$		19,865,562		21,034,471		\$
5 Pigging to Occur	N/A	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	
6 TIMP Cost	\$ 2,253,804 \$	- \$	- \$	22,036,189 \$	- 3	s - \$	- \$	- 3	- \$	-	\$ 26,918,082 \$	- :	-	\$
7 Total O&M Costs	\$ 16,761,952 \$	15,804,394 \$	16,262,722 \$	38,770,530 \$	17,219,636	\$ 17,719,006 \$	18,232,857 \$	18,761,610	19,305,697 \$	19,865,562	\$ 47,359,745 \$	21,034,471	21,644,471	\$
J3 Cactus City to San Diego Alternative														
	PV	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	
4 5				- 10										^
1 Future L1600 Replacement Cost 2 MCS Q&M and Emissions Cost	\$ (100,285,483) \$	- 3	- 3	- 3	- 3	- 3	- 3	- 3	- 3	(400.044.070)	5 - 5	(400,004,004)		3
	\$ (74,719,907) \$	(81,395,841) \$	(83,756,320) \$	(86,185,254) \$	(88,684,626)	\$ (91,256,480) \$	(93,902,918) \$	(96,626,103)		(102,311,679)	\$ (105,278,718) \$	(108,331,801)		
3 Total Avoided Costs	\$ (175,005,390) \$	(81,395,841) \$	(83,756,320) \$	(86,185,254) \$	(88,684,626)	\$ (91,256,480) \$	(93,902,918) \$	(96,626,103)	(99,428,260) \$	(102,311,679)	\$ (105,278,718) \$	(108,331,801)	(111,473,423)	\$
4 4 100110 1														
4 Annual O&M Cost	\$ 10,434,660 \$	11,366,956 \$	11,696,598 \$	12,035,799 \$	12,384,837		13,113,573 \$	13,493,867		14,287,860		15,128,572		\$
5 Pigging to Occur	N/A	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	_
6 TIMP Cost	\$ 2,253,804 \$	- S	- S	22,036,189 \$		s - \$	- S		- \$		\$ 26,918,082 \$		-	Ş
7 Total O&M Costs	\$ 12,688,464 \$	11,366,956 \$	11,696,598 \$	34,071,988 \$	12,384,837	\$ 12.743.998 \$	13,113,573 \$	13,493,867	13,885,189 \$	14.287.860	\$ 41,620,290 \$	15,128,572	15,567,300	S

	PV	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119
\$	(100,285,483) \$	- S	- :		s - s	- S	- S		S -	\$ - :	s - s	- \$	- \$	
\$	(71,330,165) \$	(81,395,841) \$	(83,756,320)	\$ (86,185,254)	\$ (88,684,626) \$	(91,256,480) \$	(93,902,918) \$	(96,626,103)	\$ (99,428,260)	\$ (102,311,679)	\$ (105,278,718) \$	(108,331,801) \$	(111,473,423) \$	(114,706,152)
\$	(171,615,648) \$	(81,395,841) \$	(83,756,320)	\$ (86,185,254)	\$ (88,684,626) \$	(91,256,480) \$	(93,902,918) \$	(96,626,103)	\$ (99,428,260)	\$ (102,311,679)	\$ (105,278,718) \$	(108,331,801) \$	(111,473,423) \$	(114,706,152)
\$	2,799,858 \$	3,194,957	3,287,611		\$ 3,481,057 \$	3,582,008 \$	3,685,886 \$	3,792,777		\$ 4,015,948	\$ 4,132,410 \$		4,375,565 \$	4,502,457
N/A		FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE
\$	717,186 \$	- \$	- 1		\$ 7,558,413 \$	- \$	- S		\$ -	\$ -	s - s	9,232,902 \$	- \$	-
	3,517,044 \$	3,194,957	3.287.611	3.382.952	S 11.039.470 S	3.582.008 \$	3,685,886 \$	3,792,777	\$ 3,902,767	\$ 4.015.948	\$ 4,132,410 S	13.485.152 \$	4,375,565 \$	4,502,457

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ANNUAL COSTS BY PROJECT ALTERNATE, FOR AVOIDED COSTS AND O&M COSTS

Future L1600 Replacement Cost
 MCS O&M and Emissions Cost
 Total Avoided Costs

J3 Cactus City to San Diego Alternative

1 Future L1600 Replacement Cost
2 MCS O&M and Emissions Cost
3 Total Avoided Costs

4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost 7 Total O&M Costs

4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost 5 TIMP Cost 7 Total O&M Costs K Second Pipeline Along Line 3010 1 Future L1600 Replacement Cost 2 MCS O&M and Emissions Cost 3 Total Avoided Costs

4 Annual O&M Cost 5 Pigging to Occur 6 TIMP Cost 7 Total O&M Costs

15-09-013 VOLUME III – COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 20

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Line I	No.
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PV (X year	rs after operational)	105	106	107	108	109	110	111	112	113	114	115	116
	100												
	PV	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131
e	(100,285,483) S	- e	. (0	. (. (s	. (s	e		. (c		. 9	
3	(74,719,907) \$	(118.032.631) \$	(121.455.577) \$	(124,977,789) \$	(128.602.145) \$	(132,331,607) S	(136.169.223) S	(140.118.131) \$	(144.181.557) \$	(148.362.822) \$	(152.665.344) \$	(157.092.638) \$	(161,6
\$	(175,005,390) \$	(118,032,631) \$	(121,455,577) \$	(124,977,789) \$	(128,602,145) \$	(132,331,607) \$	(136,169,223) \$	(140,118,131) \$	(144,181,557) \$	(148,362,822) \$	(152,665,344) \$	(157,092,638) \$	(161,
\$	14,508,148 \$	22,918,053 \$	23,582,677 \$	24,266,575 \$	24,970,305 \$	25,694,444 \$	26,439,583 \$	27,206,331 \$	27,995,314 \$	28,807,179 \$	29,642,587 \$	30,502,222 \$	31,
N/A		FALSE	FALSE	FALSE	TRUE	FALSE							
\$	2,253,804 \$	- \$	- \$	- \$	32,881,509 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	
\$	16,761,952 \$	22,918,053 \$	23,582,677 \$	24,266,575 \$	57,851,814 \$	25,694,444 \$	26,439,583 \$	27,206,331 \$	27,995,314 \$	28,807,179 \$	29,642,587 \$	30,502,222 \$	31
	PV	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	213 ⁻
\$	(100,285,483) \$	- \$	- \$	- \$	- \$	- \$	- S	- S	- \$	- \$	- \$	- \$	
\$	(74,719,907) \$	(118,032,631) \$	(121,455,577) \$	(124,977,789) \$	(128,602,145) \$	(132,331,607) \$	(136,169,223) \$	(140,118,131) \$	(144,181,557) \$	(148,362,822) \$	(152,665,344) \$	(157,092,638) \$	(161
\$	(175,005,390) \$	(118,032,631) \$	(121,455,577) \$	(124,977,789) \$	(128,602,145) \$	(132,331,607) \$	(136,169,223) \$	(140,118,131) \$	(144,181,557) \$	(148,362,822) \$	(152,665,344) \$	(157,092,638) \$	(16
S	10.434.660 \$	16.483.296 \$	16.961.311 S	17.453.189 S	17.959.332 \$	18.480.153 S	19.016.077 S	19.567.543 \$	20.135.002 \$	20.718.917 \$	21.319.766 \$	21.938.039 \$	22
N/A		FALSE	FALSE	FALSE	TRUE	FALSE	FALS						
\$	2,253,804 \$	- \$	- S	- \$	32,881,509 \$	- S	- S	- \$	- \$	- S	- S	- S	
\$	12,688,464 \$	16,483,296 \$	16,961,311 \$	17,453,189 \$	50,840,840 \$	18,480,153 \$	19,016,077 \$	19,567,543 \$	20,135,002 \$	20,718,917 \$	21,319,766 \$	21,938,039 \$	22
	PV	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131
			•										
\$	(100,285,483) \$	- \$	- \$	- \$	- \$	- S	- S	- S	- \$	- \$	- \$	- \$	
\$	(71,330,165) \$	(118,032,631) \$	(121,455,577) \$	(124,977,789) \$	(128,602,145) \$	(132,331,607) \$	(136,169,223) \$	(140,118,131) \$	(144,181,557) \$	(148,362,822) \$	(152,665,344) \$	(157,092,638) \$	(161
S	(171,615,648) \$	(118,032,631) \$	(121,455,577) \$	(124,977,789) \$	(128,602,145) \$	(132,331,607) \$	(136,169,223) \$	(140,118,131) \$	(144,181,557) \$	(148,362,822) \$	(152,665,344) \$	(157,092,638) \$	(161

WORK PAPER TABLE - AVOIDED COST MODEL OUTPUTS (AC 1.3)

TOTAL O&M COSTS, TOTAL AVOIDED COSTS, AND NET COSTS BY PROJECT ALTERNATE OVER 100 YRS
APPLICATION 15-09-013 VOLUME III — COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 2017)

Line 1	lo.																	
1										A	В	С	D	E = (B+C+D)	F	G	H = (F+G)	I = (A+E+H)
2																		
3					Total O&M		Avoid	led Cost				Total	O&M (\$M)			Avoided Cost (\$M)		i .
4	Alt No.	Project Name	Fixed Cost	Gas	O&M	TIMP	L1600	MCS O&M and	Net Cost	1		O&M	TIMP	Total O&M	L1600	MCS O&M and	Total Avoided	Net Cost (\$M)
	Alt No.	Project Name	Fixed Cost	Import	Ualvi	TIMP	Replacement	Emissions	Net Cost	Fixed Cost (\$M) ¹	Gas Import	Uaw		Cost (\$M)	Replacement	Emissions	Cost (\$M)	
5	A	Proposed Project (Line 3602	\$441.9 M	\$.0 M	\$3.7 M	\$.9 M	-\$100.3 M	-\$90.0 M	\$256.2 M	\$441.9	\$0.0	\$3.7	\$0.9	\$4.6	(\$100.3)	(\$90.0)	(\$190.3)	\$256.2
6	В	Hydrotest Alternative (Line 1600	\$112.9 M	\$.0 M	\$4.2 M	\$1.6 M	\$.0 M	\$.0 M	\$118.7 M	\$112.9	\$0.0	\$4.2	\$1.6	\$5.8	\$0.0	\$0.0	\$0.0	\$118.7
7	C1	Alt Diameter Pipeline 10	\$297.6 M	\$100.8 M	\$3.7 M	\$.9 M	-\$100.3 M	\$.0 M	\$302.7 M	\$297.6	\$100.8	\$3.7	\$0.9	\$105.3	(\$100.3)	\$0.0	(\$100.3)	\$302.7
8	C2	Alt Diameter Pipeline 12	\$320.1 M	\$67.2 M	\$3.7 M	\$.9 M	-\$100.3 M	\$.0 M	\$291.6 M	\$320.1	\$67.2	\$3.7	\$0.9	\$71.8	(\$100.3)	\$0.0	(\$100.3)	\$291.6
9	C3	Alt Diameter Pipeline 16	\$337.1 M	\$.0 M	\$3.7 M	\$.9 M	-\$100.3 M	\$.0 M	\$241.4 M	\$337.1	\$0.0	\$3.7	\$0.9	\$4.6	(\$100.3)	\$0.0	(\$100.3)	\$241.4
10	C4	Alt Diameter Pipeline 20	\$352.9 M	\$.0 M	\$3.7 M	\$.9 M	-\$100.3 M	-\$18.0 M	\$239.2 M	\$352.9	\$0.0	\$3.7	\$0.9	\$4.6	(\$100.3)	(\$18.0)	(\$118.3)	\$239.2
11	C5	Alt Diameter Pipeline 24	\$361.2 M	\$.0 M	\$3.7 M	\$.9 M	-\$100.3 M	-\$36.0 M	\$229.6 M	\$361.2	\$0.0	\$3.7	\$0.9	\$4.6	(\$100.3)	(\$36.0)	(\$136.3)	\$229.6
12	C6	Alt Diameter Pipeline 30	\$392.2 M	\$.0 M	\$3.7 M	\$.9 M	-\$100.3 M	-\$63.0 M	\$233.5 M	\$392.2	\$0.0	\$3.7	\$0.9	\$4.6	(\$100.3)	(\$63.0)	(\$163.3)	\$233.5
13	C7	Alt Diameter Pipeline 42	\$527.5 M	\$.0 M	\$3.7 M	\$.9 M	-\$100.3 M	-\$90.0 M	\$341.9 M	\$527.5	\$0.0	\$3.7	\$0.9	\$4.6	(\$100.3)	(\$90.0)	(\$190.3)	\$341.9
14	D	Replace Line 1600 In-Place	\$556.1 M	\$.0 M	\$3.6 M	\$.7 M	-\$100.3 M	\$.0 M	\$460.1 M	\$556.1	\$0.0	\$3.6	\$0.7	\$4.4	(\$100.3)	\$0.0	(\$100.3)	\$460.1
15	E/F	Otay Mesa Alternative	\$977.1 M	\$.0 M	\$.0 M	\$.0 M	-\$100.3 M	\$.0 M	\$876.8 M	\$977.1	\$0.0	\$0.0	\$0.0	\$0.0	(\$100.3)	\$0.0	(\$100.3)	\$876.8
16	G	LNG Storage (Peak-Shaver) Alternative	\$2669.7 M	\$.0 M	\$15.3 M	\$.0 M	-\$100.3 M	\$.0 M	\$2584.7 M	\$2,669.7	\$0.0	\$15.3	\$0.0	\$15.3	(\$100.3)	\$0.0	(\$100.3)	\$2,584.7
17	H1	Alternate Energy Alternative: Grid-Scale Batterie	\$8415.1 M	\$.0 M	\$15.3 M	\$.0 M	-\$100.3 M	\$.0 M	\$8330.1 M	\$8,415.1	\$0.0	\$15.3	\$0.0	\$15.3	(\$100.3)	\$0.0	(\$100.3)	\$8,330.1
18	H2	Alternate Energy Alternative: Small-Scale Batterie	\$10095.1 M	\$.0 M	\$15.3 M	\$.0 M	-\$100.3 M	\$.0 M	\$10010.1 M	\$10,095.1	\$0.0	\$15.3	\$0.0	\$15.3	(\$100.3)	\$0.0	(\$100.3)	\$10,010.1
19	- 1	Offshore Route Alternative	\$1449.9 M	\$.0 M	\$4.5 M	\$.6 M	-\$100.3 M	-\$59.2 M	\$1295.5 M	\$1,449.9	\$0.0	\$4.5	\$0.6	\$5.1	(\$100.3)	(\$59.2)	(\$159.5)	\$1,295.5
20	J1	Blythe to Santee Alternative 1	\$1377.5 M	\$.0 M	\$14.5 M	\$2.3 M	-\$100.3 M	-\$74.7 M	\$1219.3 M	\$1,377.5	\$0.0	\$14.5	\$2.3	\$16.7	(\$100.3)	(\$74.7)	(\$175.0)	\$1,219.3
21	J2	Blythe to Santee Alternative 2	\$1315.5 M	\$.0 M	\$14.5 M	\$2.3 M	-\$100.3 M	-\$74.7 M	\$1157.3 M	\$1,315.5	\$0.0	\$14.5	\$2.3	\$16.8	(\$100.3)	(\$74.7)	(\$175.0)	\$1,157.3
22	J3	Cactus City to San Diego Alternative	\$1143.4 M	\$.0 M	\$10.4 M	\$2.3 M	-\$100.3 M	-\$74.7 M	\$981.1 M	\$1,143.4	\$0.0	\$10.4	\$2.3	\$12.7	(\$100.3)	(\$74.7)	(\$175.0)	\$981.1
22	K	Second Dineline Along Line 2010 Alternative	\$505.2 M	MOS	828 M	\$ 7 M	-\$100.3 M	-\$71.3 M	\$427.1 M	\$505.2	\$0.0	\$2.8	\$0.7	63.5	(\$100.3)	(\$71.3)	(\$171.6)	\$427.1

| 33 | Cacus Cuty of Saft Diagon Aretinative | 31145-74 m | 3.0 m | 3104 m | 32.3 m | 3100.0 m | 3714.7 m | 3.2 m | 3100.0 m | 3714.7 m | 3.2 m | 3100.0 m | 3714.7 m | 3.2 m | 3.0 m | 3100.0 m | 3714.7 m | 3.2 m | 3.0 m | 3100.0 m | 3714.7 m | 3.2 m | 3.0 m | 3100.0 m | 3714.7 m | 3.2 m | 3.0 m | 3100.0 m | 3714.7 m | 3.2 m | 3.0 m | 3100.0 m | 3714.7 m | 3.2 m | 3.0 m |

A.15-09-013 Cost-Effectiveness Analysis Workpaper - Scenario Analysis corrected February 2017

WORK PAPER TABLE - SCENARIO ANALYSIS GAS DEMAND AND SUPPLY (SA 1.1

EXAMPLE DAY OF GAS DEMAND AND SUPPLY FOR CUSTOMER CLASSES DURING SEASONAL VARIATIONS FOR ANALYSIS OF CURTAILMENT AND CUSTOMERS AFFECTED FOR EACH PROJECT ALTERNATE

APPLICATION 15-09-013 VOLUME III - COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 2017)

Line No.

		1. Example Summer Low- EG Day MMcfd	2. Example Summer High EG Day MMcfd	3. Example Winter Day		-1 5 .,	6. Example Fall Day MMcfd
Α	В	С	D	E	F	G	Н

Model Inputs

Natural Gas Demand (MMcfd)								
Core Demand	100	100	310	350	170	180		
Electric Generation (EG) Demand	100	300	165	165	220	270		
Non-Core, Non-EG Demand	75	75	62	62	75	75		
Total Demand	275	475	537	577	465	525		

Natural Gas Supply Combinations (MMcfd)								
Project Alternatives Capacity (MMcfd)								
Line 1600 (Pre/Post Hydrotesting)	150	150	150	150	150	150		
Line 1600 (During Hydrotesting)	0	0	0	0	0	0		
Line 3602 (Proposed Project)	680	680	680	680	680	680		
Alternate Diameter Pipeline 10"	50	50	50	50	50	50		
Alternate Diameter Pipeline 12"	70	70	70	70	70	70		
Alternate Diameter Pipeline 16"	160	160	160	160	160	160		
Alternate Diameter Pipeline 20"	250	250	250	250	250	250		
Alternate Diameter Pipeline 24"	400	400	400	400	400	400		
Alternate Diameter Pipeline 30"	600	600	600	600	600	600		
Alternate Diameter Pipeline 42"	710	710	710	710	710	710		
L1600 In-Kind Replacement	160	160	160	160	160	160		
Otay Mesa Alternate	0	0	0	0	0	0		
LNG Storage Alternate	0	0	0	0	0	0		
Alt Energy Alternate (Grid-Scale)	0	0	0	0	0	0		
Alt Energy Alternate (Smaller-Scale)	0	0	0	0	0	0		
Offshore Route	680	680	680	680	680	680		
Blythe to Santee Alternate 1	680	680	680	680	680	680		
Blythe to Santee Alternate 2	680	680	680	680	680	680		
Cactus City to San Diego Alternate	680	680	680	680	680	680		
Second Pipeline Along L3010 Alternate	680	680	680	680	680	680		
Line 3010 Parameters (MMcfd)								
Line 3010 Complete Outage	0	0	0	0	0	0		
Line 3010 at 80% Supply	380	380	380	380	380	380		
Otay Mesa Supply Variables (MMcfd)								
Otay Mesa Full Supply	295	86	313	313	329	324		
Otay Mesa Medium Supply	156	60	230	230	244	247		
Otay Mesa Low Supply	33	33	148	148	130	168		
Otay Mesa No Supply	0	0	0	0	0	0		

1. Conversion rate from MMcfd NG to MWh Electric (consistent with LNG Storage Facility Alternative Cost Analysis prepared by SDG&E/SoCalGas): Using approx. 7,600 btu/kWh and 1,025,000 btu per 1,000 cubic feet of natural gas, 1 MW = 7,415 cf of natural gas per hour Heat rate of approx. 7,600 btu/kWh is based on data obtained from the U.S. Energy Information Administration website (https://www.eia.gov/tools/faqs/faq.cfm?id=667&t=6).

MMcfd	1
MMBTU	1025
MWh	135

CF	7,415	1,000,000
BTU	7,600,375	1,025,000,000
MWh	1.00	134.87

2. Count of Total SDG&E Gas Core Customers (source: SDG&E Gas Engineering Department) 868,838 Count (#)

- 3. NG demand provided by customer class, and pipeline capacities provided for operation during outage on L3010 (source: SoCalGas / SDG&E Gas Transmission Planning Department)
- 4. Otay Mesa supply provided over various seasonal conditions (source: SoCalGas / SDG&E Gas Transmission Planning Department)
- 5. Curtailment sequences are based on SDG&E's Rule 14, as defined in the Prepare Direct Testimony of Ms. Gwen Marelli (March 21, 2016), page 2 First to be curtailed: Non-Core, Non-EG (Referenced as Customer Class Non-Core in SDG&E Rule 14, 2007) Second to be curtailed: Electric Generation (EG) (Referenced as Customer Class P2-A in SDG&E Rule 14, 2007)

Last to be curtailed: Core Customers (Referenced as Customer Class P1 in SDG&E Rule 14, 2007)

6. Line 25

The Otay Mesa Alternate strives to achieve a firm supply of 400 MMcfd, but for the purposes of this analysis, the supply is assumed to be variable as is consistent with the Prepared Direct Testimony of Ms. Gwen Marelli (March 21, 2016)

7. Line 26

LNG Storage Alternate supply is zero (0) as it will provide gas supply to electric generation sites only and not into the gas network

8. Line 27

Alt Energy Alternate (Grid-Scale) supply is zero (0) as will not provide additional supply to the gas network **9.** Line 28

Alt Energy Alternate (Small-Scale) supply is zero (0) as will not provide additional supply to the gas network

10. Line 38 - Column D

Otay Mesa Full Supply determined as Summer minimum OAC on Gasoducto Rosarito + 1 Standard Deviation of data set

11. Line 40 - Column D

Otay Mesa Low Supply determined as Summer minimum OAC on Gasoducto Rosarito

Line No.

1

2

92

		1. Example Summer Low- EG Day MMcfd	2. Example Summer High EG Day MMcfd	3. Example Winter Day		-1 5 .,	6. Example Fall Day MMcfd
Α	В	С	D	E	F	G	Н

Dynamic Model Outputs (For Use in Working Model Only)

Select Parame	eters Below						
	/Post Hydrotesting)	150	150	150	150	150	150
Line 3010 Com	plete Outage	0	0	0	0	0	0
Otay Mesa Full	Supply	295	86	313	313	329	324
Total Supply		445	236	463	463	479	474
Total MMcfd S	hortfall	0	239	74	114	0	51
Immediate Cu	rtailment to EG Stations?	No	Yes	Yes	Yes	No	No
Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
	Gas EG [%]	0%	55%	7%	32%	0%	0%
(%)	Gas Non-Core Non-EG [%]	0%	100%	100%	100%	0%	68%
	Gas Core [MMcfd]	0	0	0	0	0	0
Curtailment	Gas EG [MWh/d]	0	22,091	1,647	7,042	0	0
(Capacity)	Gas EG [MW]	0	920	69	293	0	0
	Gas Non-Core Non-EG [MMcfd]	0	75	62	62	0	51
Number of	Gas Core [# Affected]	0	0	0	0	0	0
Customers	Gas EG [# Affected]	0	N/A	N/A	N/A	0	0
Affected	Gas Non-Core Non-EG [# Affected]	0	N/A	N/A	N/A	0	N/A

1			1. Example Summer Low- EG Day MMcfd	2. Example Summer High EG Day MMcfd	3. Example Winter Day MMcfd	4. Winter 1- in-10 Year Day MMcfd	5. Example Spring Day MMcfd	6. Example Fall Day MMcfd
2	A	В	С	D	Е	F	G	Н
93 94 95	Line 1600 (Pre	Post Hydrotesting)						
96		Full / L3010 80%	1.1.1.1	1.1.1.2	1.1.1.3	1.1.1.4	1.1.1.5	1.1.1.6
97 98	Line 1600 (Pre.	/Post Hydrotesting)	150 380	150 380	150 380	150 380	150 380	150 380
99	Otay Mesa Full		295	86	313	313	329	324
100	Total Supply		825	616	843	843	859	854
101 102	Total MMcfd S Immediate Cu	rtailment to EG Stations?	0 No	0 No	0 No	0 No	0 No	0 No
103	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
104	(%)	Gas EG [%]	0% 0%	0%	0%	0% 0%	0% 0%	0%
105 106	. ,	Gas Non-Core Non-EG [%] Gas Core [MMcfd]	0%	0%	0% 0	0%	0%	0%
107	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
108	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
109 110	Number of	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0	0	0	0	0	0
111	Customers	Gas EG [# Affected]	0	0	0	0	0	0
112	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
113 114	1 1600 / Otave F	Full / L3010 Out	1.2.1.1	1.2.1.2	1.2.1.3	1.2.1.4	1.2.1.5	1.2.1.6
114		Post Hydrotesting)	150	150	150	1.2.1.4	150	150
116	Line 3010 Com	plete Outage	0	0	0	0	0	0
117	Otay Mesa Full	Supply	295	86	313	313	329	324
118 119	Total Supply Total MMcfd S	hortfall	445 0	236 239	463 74	463 114	479 0	474 51
120		rtailment to EG Stations?	No	Yes	Yes	Yes	No	No
121	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
122	(%)	Gas EG [%]	0%	55%	7%	32%	0%	0%
123 124		Gas Non-Core Non-EG [%] Gas Core [MMcfd]	0%	100%	100% 0	100%	<u>0%</u> 0	68%
125	Curtailment	Gas EG [MWh/d]	0	22,091	1,647	7,042	0	0
126	(Capacity)	Gas EG [MW]	0	920	69	293	0	0
127	Number of	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0	75 0	62 0	62 0	0	51 0
128 129	Customers	Gas EG [# Affected]	0	N/A	N/A	N/A	0	0
130	Affected	Gas Non-Core Non-EG [# Affected]	0	N/A	N/A	N/A	0	N/A
131 132	1 1600 / Otay I	Medium / L3010 80%	1.1.2.1	1.1.2.2	1.1.2.3	1.1.2.4	1.1.2.5	1.1.2.6
133		/Post Hydrotesting)	150	150	150	150	150	150
134	Line 3010 at 80							
135	Otay Masa Mar		380	380	380	380	380	380
		dium Supply	156	60	230	230	244	247
136	Total Supply	dium Supply	156 686	60 590	230 760	230 760	244 774	247 777
136 137 138	Total Supply Total MMcfd S	dium Supply	156	60	230	230	244	247
137 138 139	Total Supply Total MMcfd S Immediate Cu	dium Supply Shortfall rtailment to EG Stations? [Gas Core [%]	156 686 0 No 0%	60 590 0 No 0%	230 760 0 No 0%	230 760 0 No 0%	244 774 0 No 0%	247 777 0 No 0%
137 138 139 140	Total Supply Total MMcfd S	dium Supply Chortfall rtailment to EG Stations? Gas Core [%] Gas EG [%]	156 686 0 No 0%	60 590 0 No 0%	230 760 0 No 0%	230 760 0 No 0%	244 774 0 No 0% 0%	247 777 0 No 0%
137 138 139 140 141	Total Supply Total MMcfd S Immediate Cu Curtailment	dium Supply Shortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%]	156 686 0 No 0% 0% 0%	60 590 0 No 0% 0%	230 760 0 No 0% 0%	230 760 0 No 0% 0% 0%	244 774 0 No 0% 0% 0%	247 777 0 No 0% 0% 0%
137 138 139 140 141 142 143	Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment	dium Supply shortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d]	156 686 0 No 0% 0% 0% 0 0	60 590 0 No 0% 0% 00% 0 000	230 760 0 No 0% 0% 0 0	230 760 0 No 0% 0% 0% 0% 0 0 0 0	244 774 0 No 0% 0% 0% 0 0	247 777 0 No 0% 0% 0% 0 0
137 138 139 140 141 142 143 144	Total Supply Total MMcfd S Immediate Cu Curtailment (%)	dium Supply Chortfall Intailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW]	156 686 0 No 0% 0% 0% 0 0	60 590 0 No 0% 0% 0 0 0	230 760 0 No 0% 0% 0% 0 0	230 760 0 No 0% 0% 0% 0% 0 0 0 0 0	244 774 0 No 0% 0% 0% 0 0 0	247 777 0 No 0% 0% 0% 0 0
137 138 139 140 141 142 143 144 145	Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity)	dium Supply Chortfall Intrailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	156 686 0 No 0% 0% 0% 0 0 0	60 590 0 No 0% 0% 0% 0 0 0	230 760 0 No 0% 0% 0% 0 0 0	230 760 0 No 0% 0% 0% 0% 0 0 0 0 0 0	244 774 0 No 0% 0% 0% 0 0 0	247 777 0 No 0% 0% 0% 0 0
137 138 139 140 141 142 143 144	Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment	dium Supply Chortfall Intailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW]	156 686 0 No 0% 0% 0% 0 0	60 590 0 No 0% 0% 0 0 0	230 760 0 No 0% 0% 0% 0 0	230 760 0 No 0% 0% 0% 0% 0 0 0 0 0	244 774 0 No 0% 0% 0% 0 0 0	247 777 0 No 0% 0% 0% 0 0
137 138 139 140 141 142 143 144 145 146 147	Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of	dium Supply ihortfall rtailment to EG Stations? [Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	156 686 0 No 0% 0% 0% 0 0 0	60 590 0 No 0% 0% 0 0 0 0 0	230 760 0 No 0% 0% 0 0 0 0	230 760 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0	244 774 0 No 0% 0% 0% 0 0 0 0	247 777 0 No 0% 0% 0% 0 0 0 0 0 0
137 138 139 140 141 142 143 144 145 146 147 148	Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected	dium Supply Chortfall Intailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected]	156 686 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0	60 590 0 No 0% 0% 0% 0 0 0 0 0 0	230 760 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0	230 760 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	244 774 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0	247 777 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0
137 138 139 140 141 142 143 144 145 146 147 148 149 150	Total Supply Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected	dium Supply Intraliment to EG Stations? [Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MW] Gas RG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG # Affected] Gas EG # Affected] Gas Non-Core Non-EG [# Affected]	156 686 0 No 0% 0% 0% 0% 0 0 0 0 0 1.2.2.1	60 590 0 No 0% 0% 0 0 0 0 0 0 0	230 760 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0	230 760 0 No 0% 0% 0% 0 0 0 0 0 0 0 1.2.2.4	244 774 0 No 0% 0% 0% 0 0 0 0 0 0	247 777 0 No 0% 0% 0% 0 0 0 0 0 1.2.2.6
137 138 139 140 141 142 143 144 145 146 147 148 149 150 151	Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected L1600 / Otay I Line 1600 (Pre. Line 3010 Com	dium Supply chortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Core [# Affected] Gas Core Non-EG [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected]	156 686 0 No 0% 0% 0% 0% 0 0 0 0 0 0 1.2.2.1 150 0	60 590 0 No 0% 0% 0 0 0 0 0 0 0 0 1.2.2.2 150 0	230 760 0 No 0% 0% 0% 0 0 0 0 0 0 0 1.2.2.3	230 760 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 1.2.2.4	244 774 0 No 0% 0% 0% 0 0 0 0 0 0 0 1.2.2.5	247 777 0 No 0% 0% 0% 0 0 0 0 0 0 0 1.2.2.6
137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153	Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Line 1600 / Otay I Line 1600 Com Otay Mesa Mesa	dium Supply chortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Core [# Affected] Gas Core Non-EG [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected]	156 686 0 No 0% 0% 0% 0 0 0 0 0 0 0 1.2.2.1 150 0 156	60 590 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	230 760 0 No 0% 0% 0% 0 0 0 0 0 0 0 1.2.2.3 150 0 230	230 760 0 No 0% 0% 0% 0 0 0 0 0 0 0 1.2.2.4 150 0 230	244 774 0 No 0% 0% 0% 0 0 0 0 0 0 1.2.2.5 150 0 244	247 777 0 No 0% 0% 0% 0 0 0 0 0 0 1.2.2.6
137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154	Total Supply Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Line 1600 (Pte. Line 3010 Com Otay Mesa Mee Total Supply	dium Supply Chortfall Intailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Hon-Core Non-EG [# Affected] Gas Hon-Core Non-EG [# Affected] Medium / L3010 Out Post Hydrotesting) plete Outage dium Supply	156 686 0 No 0% 0% 0% 0% 0 0 0 0 0 1.2.2.1 150 0 156 306	60 590 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	230 760 0 No 0% 0% 0% 0 0 0 0 0 0 0 1.2.2.3 150 0 230 380	230 760 0 No 0% 0% 0% 0 0 0 0 0 0 0 1.2.2.4 150 0 230 380	244 774 0 No 0% 0% 0% 0% 0 0 0 0 0 0 1.2.2.5 150 0 244 394	247 777 0 No 0% 0% 0% 0 0 0 0 0 0 1.2.2.6 150 0 247 397
137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153	Total Supply Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected L1600 / Otay M Line 1600 (Pre. Line 3010 Com Otay Mesa Med Total Supply Total MMcfd S	dium Supply Chortfall Intailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Hon-Core Non-EG [# Affected] Gas Hon-Core Non-EG [# Affected] Medium / L3010 Out Post Hydrotesting) plete Outage dium Supply	156 686 0 No 0% 0% 0% 0 0 0 0 0 0 0 1.2.2.1 150 0 156	60 590 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	230 760 0 No 0% 0% 0% 0 0 0 0 0 0 0 1.2.2.3 150 0 230	230 760 0 No 0% 0% 0% 0 0 0 0 0 0 0 1.2.2.4 150 0 230	244 774 0 No 0% 0% 0% 0 0 0 0 0 0 1.2.2.5 150 0 244	247 777 0 No 0% 0% 0% 0 0 0 0 0 0 1.2.2.6
137 138 139 140 141 142 143 144 145 146 147 148 150 151 152 153 154 155	Total Supply Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected L1600 / Otay II Line 1600 (Pre. Line 3010 Com Otay Mesa Mer Total Supply Total MMcfd S Immediate Cur	dium Supply Chortfall Intailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Won-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Intailment L3010 Out Chortfall Intailment to EG Stations? Gas Core [%]	156 686 0 No 0% 0% 0% 0 0 0 0 0 0 0 1.2.2.1 150 0 156 306 0 No	60 590 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 1.2.2.2 150 0 60 210 265 Yes 0%	230 760 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 1.2.2.3 150 0 230 380 157 Yes 0%	230 760 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 1.2.2.4 150 0 230 380 197 Yes 0%	244 774 0 No 0% 0% 0% 0% 0 0 0 0 0 0 1.2.2.5 150 0 244 394 71 No	247 777 0 No 0% 0% 0% 0 0 0 0 0 0 0 1.2.2.6 150 247 397 128 Yes 0%
137 138 139 140 141 142 143 144 145 146 147 148 150 151 152 153 154 155 156 157 158	Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected L1600 / Otay II Line 1600 (Pre. Line 3010 Com Otay Mesa Med Total Supply Total MMcfd S Immediate Cu Curtailment	dium Supply Chortfall Intailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWhod] Gas EG [MWhod] Gas EG [MWhod] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Haffected] Gas Non-Core Non-EG [# Affected] Medium / L3010 Out Post Hydrotesting) plete Outage dium Supply Chortfall Intailment to EG Stations? Gas Core [%] Gas EG [%]	156 686 0 No 0% 0% 0% 0 0 0 0 0 0 0 1.2.2.1 156 306 0 No 0% 0%	60 590 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 1.2,2,2 150 0 60 210 265 Yes 0% 63%	230 760 0 No 0% 0% 0% 0 0 0 0 0 0 0 1.2.2.3 150 230 380 157 Yes 0% 58%	230 760 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 1.2,2,4 150 0 230 230 380 197 Yes 0% 82%	244 774 0 No 0% 0% 0% 0% 0 0 0 0 0 0 1.2.2.5 150 0 244 394 71 No 0% 0%	247 777 0 No 0% 0% 0% 0 0 0 0 0 0 1.2.2.6 150 0 247 397 128 Yes 0% 20%
137 138 139 140 141 142 143 144 145 146 147 148 150 151 152 153 154 155 156 157 158 159	Total Supply Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected L1600 / Otay II Line 1600 (Pre. Line 3010 Com Otay Mesa Mer Total Supply Total MMcfd S Immediate Cur	dium Supply Intrailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Won-Core Non-EG [# Affected] Medium / L3010 Out Post Hydrotesting) plete Outage dium Supply Shortfall Trailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%]	156 686 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 1.2.2.1 150 0 156 306 0 No 0% 0%	60 590 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 1.2.2.2 150 0 60 210 265 Yes 0% 63% 100%	230 760 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 1.2.2.3 150 0 230 380 157 Yes 0% 58% 100%	230 760 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 1.2.2.4 150 0 230 380 197 Yes 0% 82% 100%	244 774 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 1.2.2.5 150 0 244 394 71 No 0% 0% 94%	247 777 0 No 0% 0% 0% 0 0 0 0 0 0 0 1.2.2.6 150 0 247 397 128 Yes 0% 20%
137 138 139 140 141 142 143 144 145 146 147 148 150 151 152 153 154 155 156 157 158	Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected L1600 / Otay II Line 1600 (Pre. Line 3010 Com Otay Mesa Med Total Supply Total MMcfd S Immediate Cu Curtailment	dium Supply Chortfall Intailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWhod] Gas EG [MWhod] Gas EG [MWhod] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Haffected] Gas Non-Core Non-EG [# Affected] Medium / L3010 Out Post Hydrotesting) plete Outage dium Supply Chortfall Intailment to EG Stations? Gas Core [%] Gas EG [%]	156 686 0 No 0% 0% 0% 0 0 0 0 0 0 0 1.2.2.1 156 306 0 No 0% 0%	60 590 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 1.2,2,2 150 0 60 210 265 Yes 0% 63%	230 760 0 No 0% 0% 0% 0 0 0 0 0 0 0 1.2.2.3 150 230 380 157 Yes 0% 58%	230 760 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 1.2,2,4 150 0 230 230 380 197 Yes 0% 82%	244 774 0 No 0% 0% 0% 0% 0 0 0 0 0 0 1.2.2.5 150 0 244 394 71 No 0% 0%	247 777 0 No 0% 0% 0% 0 0 0 0 0 0 1.2.2.6 150 0 247 397 128 Yes 0% 20%
137 138 139 140 141 142 143 144 145 146 147 148 150 151 152 153 154 155 156 157 158 159 160 161 162	Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected L1600 / Otay II Line 1600 (Pre, Line 3010 Com Otay Mesa Mey Total Supply Total Supply Total MMcfd S Immediate Cu Curtailment (%)	dium Supply Chortfall Intailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Intailment to EG Stations? Gas Core [%] Gas Core [%] Gas Core [MMcfd] Gas EG [MWh/d]	156 686 0 No 0% 0% 0% 0% 0 0 0 0 0 0 1.2.2.1 156 306 0 No 0% 0% 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0	60 590 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 1.2.2.2 150 0 60 210 265 Yes 0% 63% 100% 0 25,658 1,069	230 760 0 No 0% 0% 0% 0 0 0 0 0 0 0 1.2.2.3 150 230 380 157 Yes 0% 58% 100% 0 12,824	230 760 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 1.2.2.4 150 0 230 380 197 248 0% 82% 100% 0 18,219	244 774 0 No 0% 0% 0% 0% 0 0 0 0 0 0 1.2,2,5 150 0 244 394 71 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	247 777 0 No 0% 0% 0% 0 0 0 0 0 0 0 1.2.2.6 150 247 397 128 Yes 0% 20% 100% 0 7,125
137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163	Total Supply Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected L1600 / Otay II Line 1600 (Pre. Line 3010 Com Otay Mesa Mer Total Supply Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity)	dium Supply Chortfall Intailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Medium / L3010 Out Post Hydrotesting) plete Outage dium Supply Shortfall Intailment to EG Stations? Gas Core [%] Gas Core [%] Gas EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd]	156 686 0 No 0% 0% 0% 0% 0 0 0 0 0 0 1.2.2.1 150 0 156 306 0 No 0% 0% 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0	60 590 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 1.2.2.2 150 60 210 265 Yes 0% 63% 100% 0 25,658 1,069 75	230 760 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 230 380 157 Yes 0% 58% 100% 0 12,824 534 62	230 760 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1.2.2.4 150 0 230 380 197 Yes 0% 82% 100% 0 18,219 759 62	244 774 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 1.2,2,5 150 0 244 394 71 No 0% 0% 94% 0 0 0 0 0 71	247 777 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 1.2.2.6 150 0 247 397 128 Yes 0% 20% 100% 0 7,125 297
137 138 139 140 141 142 143 144 145 146 147 148 150 151 152 153 154 155 156 157 158 159 160 161 162	Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Line 1600 (Pre. Line 3010 Com Otay Mesa Med Total Supply Total Supply Total MMcfd S Immediate Cu Curtailment (%)	dium Supply Chortfall Intailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Intailment to EG Stations? Gas Core [%] Gas Core [%] Gas Core [MMcfd] Gas EG [MWh/d]	156 686 0 No 0% 0% 0% 0% 0 0 0 0 0 0 1.2.2.1 156 306 0 No 0% 0% 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0	60 590 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 1.2.2.2 150 0 60 210 265 Yes 0% 63% 100% 0 25,658 1,069	230 760 0 No 0% 0% 0% 0 0 0 0 0 0 0 1.2.2.3 150 230 380 157 Yes 0% 58% 100% 0 12,824 534	230 760 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 1.2.2.4 150 0 230 380 197 248 0% 82% 100% 0 18,219	244 774 0 No 0% 0% 0% 0% 0 0 0 0 0 0 1.2,2,5 150 0 244 394 71 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	247 777 0 No 0% 0% 0% 0 0 0 0 0 0 0 1.2.2.6 150 247 397 128 Yes 0% 20% 100% 0 7,125

Line No.								
			1. Example	2. Example	3. Example	4. Winter 1-	5. Example	6. Example
1			Summer Low-		Winter Day	in-10 Year	Spring Day	Fall Day
•			EG Day	EG Day	MMcfd	Day MMcfd	MMcfd	MMcfd
			MMcfd	MMcfd				
2	Α	В	С	D	Е	F	G	Н
167								
168		ow / L3010 80%	1.1.3.1	1.1.3.2	1.1.3.3	1.1.3.4	1.1.3.5	1.1.3.6
169		(Post Hydrotesting)	150	150	150	150	150	150
170	Line 3010 at 80 Otay Mesa Low		380	380 33	380 148	380 148	380 130	380 168
171		7 Зирріу						
172 173	Total Supply Total MMcfd S	hortfall	563 0	563 0	678 0	678 0	660 0	698
173		rtailment to EG Stations?	No	No	No	No	No	No
175		Gas Core [%]	0%	0%	0%	0%	0%	0%
176	Curtailment	Gas EG [%]	0%	0%	0%	0%	0%	0%
177	(%)	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
178		Gas Core [MMcfd]	0	0	0	0	0	0
179	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
180	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
181		Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
182	Number of	Gas Core [# Affected]	0	0	0	0	0	0
183	Customers	Gas EG [# Affected]	0	0	0	0	0	0
184	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
185								
186		ow / L3010 Out	1.2.3.1	1.2.3.2	1.2.3.3	1.2.3.4	1.2.3.5	1.2.3.6
187		(Post Hydrotesting)	150	150	150	150	150	150
188	Line 3010 Com		0	0	0	0	0	0
189	Otay Mesa Low	и эирріу	33	33	148	148	130	168
190	Total Supply	h a midall	183	183	298	298	280	318
191	Total MMcfd S	nortrail rtailment to EG Stations?	92 Yes	292 Yes	239 Yes	279 Yes	185 Yes	207 Yes
192 193	immediate Cui	Gas Core [%]	0%	0%	4%	15%	0%	0%
193	Curtailment	Gas EG [%]	17%	72%	100%	100%	50%	49%
195	(%)	Gas Non-Core Non-EG [%]	100%	100%	100%	100%	100%	100%
196		Gas Core [MMcfd]	0	0	12	52	0	0
197	Curtailment	Gas EG [MWh/d]	2,251	29,225	22,253	22,253	14,822	17,864
198	(Capacity)	Gas EG [MW]	94	1,218	927	927	618	744
199	(,	Gas Non-Core Non-EG [MMcfd]	75	75	62	62	75	75
200	Number of	Gas Core [# Affected]	0	0	33,352	128,836	0	0
201	Customers	Gas EG [# Affected]	N/A	N/A	N/A	N/A	N/A	N/A
202	Affected	Gas Non-Core Non-EG [# Affected]	N/A	N/A	N/A	N/A	N/A	N/A
203								
204		Out / L3010 80%	1.1.4.1	1.1.4.2	1.1.4.3	1.1.4.4	1.1.4.5	1.1.4.6
205		Post Hydrotesting)	150	150	150	150	150	150
206	Line 3010 at 80		380	380	380	380	380	380
207	Otay Mesa No	Supply	0	0	0	0	0	0
208	Total Supply		530	530	530	530	530	530
209	Total MMcfd S		0	0	7	47	0	0
210	immediate Cui	rtailment to EG Stations?			NI.		N -	
211	Curtailment	C C [0/]	No	No	No oo/	No	No oo/	No
212 213		Gas Core [%]	0%	0%	0%	0%	0%	No 0%
-13	(%)	Gas EG [%]	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%	No 0% 0%
214	(%)	Gas EG [%] Gas Non-Core Non-EG [%]	0% 0% 0%	0% 0% 0%	0% 0% 11%	0% 0% 76%	0% 0% 0%	No 0% 0% 0%
214 215	(%) Curtailment	Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd]	0% 0%	0% 0%	0% 0%	0% 0% 76% 0	0% 0% 0% 0	No 0% 0% 0%
214 215 216	Curtailment	Gas EG [%] Gas Non-Core Non-EG [%]	0% 0% 0%	0% 0% 0% 0	0% 0% 11% 0	0% 0% 76%	0% 0% 0%	No 0% 0% 0%
215		Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d]	0% 0% 0% 0	0% 0% 0% 0	0% 0% 11% 0	0% 0% 76% 0	0% 0% 0% 0	No 0% 0% 0% 0 0
215 216	Curtailment	Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW]	0% 0% 0% 0 0 0	0% 0% 0% 0 0 0	0% 0% 11% 0 0 7	0% 0% 76% 0 0	0% 0% 0% 0 0	No 0% 0% 0% 0 0
215 216 217	Curtailment (Capacity)	Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected]	0% 0% 0% 0 0 0	0% 0% 0% 0 0	0% 0% 11% 0 0 0 7	0% 0% 76% 0 0 0 47 0	0% 0% 0% 0 0 0	No 0% 0% 0% 0 0 0
215 216 217 218 219 220	Curtailment (Capacity) Number of	Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0% 0% 0% 0 0 0	0% 0% 0% 0 0 0	0% 0% 11% 0 0 7	0% 0% 76% 0 0 0 47	0% 0% 0% 0 0 0 0	No 0% 0% 0% 0 0 0 0
215 216 217 218 219 220 221	Curtailment (Capacity) Number of Customers Affected	Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected]	0% 0% 0% 0 0 0 0 0 0	0% 0% 0% 0 0 0 0 0	0% 0% 11% 0 0 0 7 0 0 N/A	0% 0% 76% 0 0 0 47 0 0 N/A	0% 0% 0% 0 0 0 0 0	No 0% 0% 0% 0 0 0 0 0 0
215 216 217 218 219 220 221 222	Curtailment (Capacity) Number of Customers Affected	Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected]	0% 0% 0% 0 0 0 0 0 0	0% 0% 0% 0 0 0 0 0 0	0% 0% 11% 0 0 7 0 0 N/A	0% 0% 76% 0 0 0 47 0 N/A	0% 0% 0% 0 0 0 0 0 0	No 0% 0% 0% 0 0 0 0 0 0 0
215 216 217 218 219 220 221 222 223	Curtailment (Capacity) Number of Customers Affected L1600 / Otay C Line 1600 (Pre/	Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected]	0% 0% 0% 0 0 0 0 0 0 0 0	0% 0% 0% 0% 0 0 0 0 0 0 0 1.2.4.2	0% 0% 0% 11% 0 0 0 0 N/A	0% 0% 76% 0 0 0 47 0 0 N/A	0% 0% 0% 0% 0 0 0 0 0 0 0 1.2.4.5	No 0% 0% 0% 0 0 0 0 0 0 0 0
215 216 217 218 219 220 221 222 223 224	Curtailment (Capacity) Number of Customers Affected L1600 / Otay C Line 1600 (Pre- Line 3010 Com	Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] With L3010 Out Post Hydrotesting) plete Outage	0% 0% 0% 0 0 0 0 0 0 0 0 0	0% 0% 0% 0 0 0 0 0 0 0 0 1.2.4.2 150 0	0% 0% 11% 0 0 0 7 0 0 N/A	0% 0% 76% 0 0 0 47 0 0 N/A	0% 0% 0% 0% 0 0 0 0 0 0 0 1.2.4.5	No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
215 216 217 218 219 220 221 222 223 224 225	Curtailment (Capacity) Number of Customers Affected L1600 / Otay C Line 1600 (Pre. Line 3010 Com Otay Mesa No	Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] With L3010 Out Post Hydrotesting) plete Outage	0% 0% 0% 0 0 0 0 0 0 0 0 0 0	0% 0% 0% 0 0 0 0 0 0 0 0 1.2.4.2 150 0 0	0% 0% 11% 0 0 0 7 0 0 N/A 1.2.4.3 150 0 0	0% 0% 76% 0 0 0 47 0 0 N/A	0% 0% 0% 0 0 0 0 0 0 0 0 1.2.4.5 150 0 0	No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
215 216 217 218 219 220 221 222 223 224 225 226	Curtailment (Capacity) Number of Customers Affected Line 1600 / Otay C Line 3010 Com Otay Mesa No Total Supply	Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Dut / L3010 Out Post Hydrotesting) plete Outage Supply	0% 0% 0% 0 0 0 0 0 0 0 0 1.2.4.1 150 0	0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0	0% 0% 11% 0 0 0 7 0 N/A 1.2.4.3 150 0	0% 0% 76% 0 0 0 47 0 0 N/A	0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	No 0% 0% 0 0 0 0 0 0 0 0 0 1.2.4.6 150
215 216 217 218 219 220 221 222 223 224 225 226 227	Curtailment (Capacity) Number of Customers Affected Line 1600 (Pre. Line 3010 Com Otay Mesa No Total Supply Total MMcfd S	Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Hydrotesting) plete Outage Supply hortfall	0% 0% 0% 0 0 0 0 0 0 0 0 1.2.4.1 150 0 0	0% 0% 0% 0 0 0 0 0 0 0 0 1.2.4.2 150 0 0	0% 0% 11% 0 0 0 7 0 N/A 1.2.4.3 150 0 0	0% 0% 76% 0 0 0 47 0 0 N/A 150 0 0 150	0% 0% 0% 0 0 0 0 0 0 0 0 0 1.2.4.5 150 0 0	No 0% 0% 0% 0 0 0 0 0 0 0 0 0 1.2.4.6 150 0 0 150 375
215 216 217 218 219 220 221 222 223 224 225 226 227 228	Curtailment (Capacity) Number of Customers Affected Line 1600 / Otay C Line 3010 Com Otay Mesa No Total Supply Total MMcfd S Immediate Cur	Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Out / L3010 Out Post Hydrotesting) plete Outage Supply hortfall rtailment to EG Stations?	0% 0% 0% 0% 0 0 0 0 0 0 0 0 1.2.4.1 150 0 0 125 Yes	0% 0% 0% 0% 0 0 0 0 0 0 0 0 1.2.4.2 150 0 150 325 Yes	0% 0% 0% 11% 0 0 0 0 0 N/A 1.2.4.3 150 0 150 387	0% 0% 76% 0 0 0 0 0 0 N/A 1.2.4.4 150 0 0 150 427 Yes	0% 0% 0% 0% 0 0 0 0 0 0 0 0 1.2.4.5 150 0 150 315 Yes	No 0% 0% 0% 0 0 0 0 0 0 0 0 0 1.2.4.6 150 0 0 150 375 Yes
215 216 217 218 219 220 221 222 223 224 225 226 227 228 229	Curtailment (Capacity) Number of Customers Affected Line 1600 / Otay C Line 3010 Com Otay Mesa No Total Supply Total MMcfd S Immediate Curtailment	Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] With Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] With County Core Non-EG [# Affected] With Core Non-EG [# Affected]	0% 0% 0% 0% 0 0 0 0 0 0 0 0 1.2.4.1 150 0 150 125 Yes 0%	0% 0% 0% 0 0 0 0 0 0 0 0 0 1.2.4.2 150 0 150 325 Yes 0%	0% 0% 11% 0 0 0 0 7 0 0 N/A 1.2.4.3 150 0 0 150 387 Yes 52%	0% 0% 76% 0 0 0 0 0 N/A 1.2.4.4 150 0 0 150 427 Yes 57%	0% 0% 0% 0% 0 0 0 0 0 0 0 0 1.2.4.5 150 0 150 315 Yes 12%	No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230	Curtailment (Capacity) Number of Customers Affected Line 1600 / Otay C Line 3010 Com Otay Mesa No Total Supply Total MMcfd S Immediate Cur	Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Dut / L3010 Out Post Hydrotesting) plete Outage Supply hortfall trailment to EG Stations? Gas EG [%]	0% 0% 0% 0 0 0 0 0 0 0 1.2.4.1 150 0 150 125 Yes 0% 50%	0% 0% 0% 0 0 0 0 0 0 0 0 1.2.4.2 150 0 0 150 325 Yes 0% 83%	0% 0% 11% 0 0 0 0 0 N/A 1.2.4.3 150 0 0 150 387 Yes 52% 100%	0% 0% 76% 0 0 0 0 0 1 47 0 0 N/A 1.2.4.4 150 0 150 427 Yes 57% 100%	0% 0% 0% 0 0 0 0 0 0 0 1.2.4.5 0 0 150 315 Yes 12% 100%	No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 1.2.4.6 0 0 150 0 150 375 Yes 17% 100%
215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231	Curtailment (Capacity) Number of Customers Affected Line 1600 / Otay C Line 3010 Com Otay Mesa No Total Supply Total MMcfd S Immediate Curtailment	Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Dut / L3010 Out Post Hydrotesting) plete Outage Supply hortfall ttailment to EG Stations? Gas Core [%] Gas Non-Core Non-EG [%]	0% 0% 0% 0% 0 0 0 0 0 0 0 0 1.2.4.1 150 0 150 125 Yes 0%	0% 0% 0% 0 0 0 0 0 0 0 0 0 1.2.4.2 150 0 150 325 Yes 0%	0% 0% 0% 11% 0 0 0 0 0 N/A 1.2.4.3 150 0 150 387 Yes 52% 100% 100%	0% 0% 76% 0 0 0 0 1 47 0 0 N/A 1.2.4.4 150 0 150 427 Yes 57% 100%	0% 0% 0% 00 0 0 0 0 0 0 0 0 1.2.4.5 150 0 150 315 Yes 12% 100%	No 0% 0% 0% 0 0 0 0 0 0 0 0 0 1.2.4.6 150 0 150 375 Yes 17% 100% 100%
215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232	Curtailment (Capacity) Number of Customers Affected Line 1600 / Otay C Line 3010 Com Otay Mesa No Total Supply Total MMcfd S Immediate Curtailment	Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Dut / L3010 Out Post Hydrotesting) plete Outage Supply hortfall trailment to EG Stations? Gas EG [%]	0% 0% 0% 0% 0 0 0 0 0 0 0 0 1.2.4.1 150 0 0 125 Yes 0% 50% 100% 0	0% 0% 0% 0% 0 0 0 0 0 0 0 0 1.2.4.2 150 0 0 150 325 Yes 0% 83% 100% 0	0% 0% 0% 11% 0 0 0 0 7 0 0 N/A 1.2.4.3 150 0 150 387 Yes 52% 100% 160	0% 0% 76% 0 0 0 0 47 0 0 N/A 1.2.4.4 150 0 0 150 427 Yes 57% 100% 200	0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 1.2.4.5 150 0 150 315 Yes 12% 100% 100%	No 0% 0% 0% 0 0 0 0 0 0 0 0 0 1.2.4.6 150 0 0 150 375 Yes 17% 100% 30
215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231	Curtailment (Capacity) Number of Customers Affected Line 1600 (Pre. Line 3010 Com Total Supply Total MMcfd S Immediate Curcuit (%)	Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Out / L3010 Out Post Hydrotesting) plete Outage Supply hortfall rtailment to EG Stations? Gas Core [%] Gas Hon-Core Non-EG [%] Gas Core [MMcfd]	0% 0% 0% 0% 0 0 0 0 0 0 0 0 1.2.4.1 150 0 0 150 125 Yes 0% 50%	0% 0% 0% 0 0 0 0 0 0 0 0 0 1.2.4.2 150 0 150 325 Yes 0% 83% 100%	0% 0% 0% 11% 0 0 0 0 0 N/A 1.2.4.3 150 0 150 387 Yes 52% 100% 100%	0% 0% 76% 0 0 0 0 1 47 0 0 N/A 1.2.4.4 150 0 150 427 Yes 57% 100%	0% 0% 0% 00 0 0 0 0 0 0 0 0 1.2.4.5 150 0 150 315 Yes 12% 100%	No 0% 0% 0% 0 0 0 0 0 0 0 0 0 1.2.4.6 150 0 150 375 Yes 17% 100% 100%
215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233	Curtailment (Capacity) Number of Customers Affected L1600 / Otay C Line 1600 (Pre. Line 3010 Com Otay Mesa No Total Supply Total MMcfd S Immediate Curtailment (%) Curtailment	Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] With Lao10 Out Post Hydrotesting) plete Outage Supply hortfall rtailment to EG Stations? Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [%] Gas Core [MMcfd] Gas EG [MWh/d]	0% 0% 0% 0% 0 0 0 0 0 0 0 0 1.2.4.1 150 0 0 150 125 Yes 0% 50% 100% 0 6,743	0% 0% 0% 0% 0 0 0 0 0 0 0 0 1.2.4.2 150 0 150 325 Yes 0% 83% 100% 0 33,717	0% 0% 11% 0 0 0 0 7 0 0 N/A 1.2.4.3 150 0 0 150 387 Yes 52% 100% 160 22,253	0% 0% 76% 0 0 0 0 0 1 0 0 N/A 1.2.4.4 150 0 0 150 427 Yes 57% 100% 200 22,253	0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 1.2.4.5 150 0 150 315 Yes 12% 100% 20 29,671	No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 1.2.4.6 150 0 150 375 Yes 17% 100% 30 36,414
215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234	Curtailment (Capacity) Number of Customers Affected L1600 / Otay C Line 1600 (Pre. Line 3010 Com Otay Mesa No Total Supply Total MMcfd S Immediate Curtailment (%) Curtailment	Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Out / L3010 Out (*Post Hydrotesting) plete Outage Supply hortfall rtailment to EG Stations? [Gas Core [%] Gas Sore [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW]	0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 1.2.4.1 150 0 0 155 Yes 0% 50% 100% 0 6,743 281	0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 1.2.4.2 150 0 0 150 325 Yes 0% 83% 100% 0 33,717	0% 0% 11% 0 0 0 0 7 0 0 N/A 1.2.4.3 150 0 0 150 150 100% 100% 160 22,253	0% 0% 76% 0 0 0 0 0 0 147 0 0 N/A 1.2.4.4 150 0 150 427 Yes 57% 100% 100% 20,2553 927	0% 0% 0% 0% 0 0 0 0 0 0 0 0 1.2.4.5 0 0 150 0 150 150 0 150 150 20 100% 100% 100% 100% 1,236	No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 1.2.4.6 150 0 0 150 375 Yes 17% 100% 100% 30 36,414 1,517
215 216 217 218 219 220 221 222 223 224 225 226 227 228 230 231 232 233 234 235	Curtailment (Capacity) Number of Customers Affected L1600 / Otay C Line 3010 Com Otay Mesa No Total Supply Total MMcfd S Immediate Curcurtailment (%) Curtailment (Capacity)	Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Dut / L3010 Out Post Hydrotesting) plete Outage Supply hortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh-Core Non-EG [MMcfd] Gas EG [MWh-Core Non-EG [MMcfd] Gas EG [MWh-Core Non-EG [MMcfd]	0% 0% 0% 0% 0 0 0 0 0 0 0 0 1.2.4.1 150 0 150 125 Yes 0% 50% 100% 0 6,743 281 75	0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 1.2.4.2 150 0 0 150 325 Yes 0% 83% 100% 0 33,717 1,405 75	0% 0% 11% 0 0 0 0 0 7 0 0 N/A 1.2.4.3 150 0 0 150 387 Yes 52% 100% 100% 160 22,253 927 62	0% 0% 76% 0 0 0 0 1 47 0 0 N/A 1.2.4.4 150 0 150 427 Yes 57% 100% 200 22,253 927 62	0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 1.2.4.5 150 0 0 150 315 Yes 12% 100% 20 29,671 1,236 75	No 0% 0% 0% 0% 0 0 0 0 0 0 0 1.2.4.6 150 0 150 375 Yes 17% 100% 30 36,414 1,517 75

		EG Day MMcfd	2. Example Summer High EG Day MMcfd	3. Example Winter Day MMcfd	4. Winter 1- in-10 Year Day MMcfd	5. Example Spring Day MMcfd	6. Example Fall Day MMcfd
Α	В	С	D	Е	F	G	Н
Line 3602 (Pr	oposed Project)						
	Full / L3010 80%	2.1.1.1	2.1.1.2	2.1.1.3	2.1.1.4	2.1.1.5	2.1.1.6
	oposed Project)	680	680	680	680	680	680
Line 3010 at 8 Otay Mesa Fu		380 295	380 86	380 313	380 313	380 329	380 324
Total Supply	п одругу	1355	1146	1373	1373	1389	1384
Total MMcfd	Shortfall	0	0	0	0	0	0
Immediate Cu	urtailment to EG Stations?	No	No	No	No	No	No
Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
(%)	Gas EG [%] Gas Non-Core Non-EG [%]	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%
	Gas Non-Core Non-EG [//s] Gas Core [MMcfd]	0	0	0 / 8	0	0	0
Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
(Capacity)	Gas EG [MW]	0	0	0	0	0	0
	Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
Number of	Gas Core [# Affected]	0	0	0	0	0	0
Customers	Gas EG [# Affected] Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
Affected	IGGS NOTI-COTE NOTI-EG [# ATTECTED]	U	U	U	U	U	U
L3602 / Otay	Full / L3010 Out	2.2.1.1	2.2.1.2	2.2.1.3	2.2.1.4	2.2.1.5	2.2.1.6
Line 3602 (Pro	pposed Project)	680	680	680	680	680	680
Line 3010 Cor		0	0	0	0	0	0
Otay Mesa Fu	il Supply	295	86	313	313	329	324
Total Supply	Shortfall	975	766	993	993	1009	1004
Total MMcfd S	snortrail urtailment to EG Stations?	0 No	0 No	0 No	0 No	0 No	0 No
	Gas Core [%]	0%	0%	0%	0%	0%	0%
Curtailment	Gas EG [%]	0%	0%	0%	0%	0%	0%
(%)	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
	Gas Core [MMcfd]	0	0	0	0	0	0
Curtailment	Gas EG [MWh/d] Gas EG [MW]	0	0	0	0	0	0
(Capacity)	Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
Number of	Gas Core [# Affected]	0	0	0	0	0	0
Customers	Gas EG [# Affected]	0	0	0	0	0	0
Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
1.2602 / Otov	Medium / L3010 80%	2.1.2.1	2.1.2.2	2.1.2.3	2.1.2.4	2.1.2.5	2.1.2.6
	oposed Project)	680	680	680	680	680	680
Line 3010 at 8				000			
	0% Supply	380		380	380	380	380
Otay Mesa Me	edium Supply	380 156	380 60	380 230	380 230	380 244	380 247
Total Supply	edium Supply		380				
Total Supply Total MMcfd	edium Supply Shortfall	156 1216 0	380 60 1120 0	230 1290 0	230 1290 0	244 1304 0	247 1307 0
Total Supply Total MMcfd	edium Supply Shortfall urtailment to EG Stations?	156 1216 0 No	380 60 1120 0 No	230 1290 0 No	230 1290 0 No	244 1304 0 No	247 1307 0 No
Total Supply Total MMcfd 3 Immediate Cu Curtailment	Shortfall urtailment to EG Stations? [Gas Core [%]	156 1216 0 No 0%	380 60 1120 0 No 0%	230 1290 0 No 0%	230 1290 0 No 0%	244 1304 0 No 0%	247 1307 0 No 0%
Total Supply Total MMcfd S Immediate Cu	edium Supply Shortfall urtailment to EG Stations?	156 1216 0 No	380 60 1120 0 No	230 1290 0 No	230 1290 0 No	244 1304 0 No	247 1307 0 No
Total Supply Total MMcfd ! Immediate Cu Curtailment (%)	Shortfall Irtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd]	156 1216 0 No 0% 0% 0%	380 60 1120 0 No 0% 0% 0%	230 1290 0 No 0% 0% 0%	230 1290 0 No 0% 0% 0% 0%	244 1304 0 No 0% 0% 0% 0%	247 1307 0 No 0% 0% 0% 0%
Total Supply Total MMcfd ! Immediate Cu Curtailment (%) Curtailment	Shortfall Irtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d]	156 1216 0 No 0% 0% 0% 0%	380 60 1120 0 No 0% 0% 0% 0%	230 1290 0 No 0% 0% 0% 0 0	230 1290 0 No 0% 0% 0% 0 0	244 1304 0 No 0% 0% 0% 0 0	247 1307 0 No 0% 0% 0% 0 000 0
Total Supply Total MMcfd ! Immediate Cu Curtailment (%)	Gas Core [%] Gas Core [%] Gas Core [%] Gas EG [%] Gas Core [MMcfd] Gas EG [MWI/d] Gas EG [MW]	156 1216 0 No 0% 0% 0% 0% 0 0 0 0	380 60 1120 0 No 0% 0% 0% 0 0	230 1290 0 No 0% 0% 0% 0 0	230 1290 0 No 0% 0% 0% 0 0 0	244 1304 0 No 0% 0% 0% 0 0	247 1307 0 No 0% 0% 0% 0 0 0
Total Supply Total MMcfd: Immediate Cu Curtailment (%) Curtailment (Curtailment (Capacity)	Gas Core [MMcfd] Gas EG [MW] Gas EG [MW] Gas EG [MW] Gas EG [MW] Gas EG [MW/d] Gas EG [MW/d] Gas EG [MW/d] Gas Non-Core Non-EG [MMcfd]	156 1216 0 No 0% 0% 0% 0 0 0 0 0 0	380 60 1120 0 No 0% 0% 0% 0 0 0	230 1290 0 No 0% 0% 0% 0 0	230 1290 0 No 0% 0% 0% 0 0 0	244 1304 0 No 0% 0% 0% 0 0 0	247 1307 0 No 0% 0% 0% 0 0 0
Total Supply Total MMcfd ! Immediate Cu Curtailment (%) Curtailment (Capacity) Number of	Bedium Supply Shortfall Intailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	156 1216 0 No 0% 0% 0% 0 0 0 0 0 0 0 0	380 60 1120 0 No 0% 0% 0% 0 0 0	230 1290 0 No 0% 0% 0% 0 0 0	230 1290 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0	244 1304 0 No 0% 0% 0% 0 0 0 0	247 1307 0 No 0% 0% 0% 0 0 0 0
Total Supply Total MMcfd: Immediate Cu Curtailment (%) Curtailment (Capacity)	Gas Core [MMcfd] Gas EG [MW] Gas EG [MW] Gas EG [MW] Gas EG [MW] Gas EG [MW/d] Gas EG [MW/d] Gas EG [MW/d] Gas Non-Core Non-EG [MMcfd]	156 1216 0 No 0% 0% 0% 0 0 0 0 0 0	380 60 1120 0 No 0% 0% 0% 0 0 0	230 1290 0 No 0% 0% 0% 0 0	230 1290 0 No 0% 0% 0% 0 0 0	244 1304 0 No 0% 0% 0% 0 0 0	247 1307 0 No 0% 0% 0% 0 0 0
Total Supply Total MMcfd : Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected	Gas Core [MW/d] Gas Core [MW/d] Gas Core [MW/d] Gas EG [MW/d] Gas EG [MW/d] Gas Non-Core Non-EG [MMcfd] Gas EG [MW/d] Gas EG [MW/d] Gas Core [MFfected] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected]	156 1216 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0	380 60 1120 0 No 0% 0% 0 0 0 0 0	230 1290 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0	230 1290 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0	244 1304 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0	247 1307 0 0 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0
Total Supply Total MMcfd s Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected L3602 / Otay	Bedium Supply Shortfall Intrailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Medium / L3010 Out	156 1216 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	380 60 1120 0 No 0% 0% 0 0 0 0 0 0 0	230 1290 0 No 0% 0% 0% 0 0 0 0 0 0 0 2.2.2.3	230 1290 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	244 1304 0 No 0% 0% 0% 0% 0 0 0 0 0 0 2.2.2.5	247 1307 0 No 0% 0% 0% 0% 0 0 0 0 0 0 2.2.2.6
Total Supply Total MMcfd ! Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected L3602 / Otay Line 3602 (Pro	Bedium Supply Shortfall Intrailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected]	156 1216 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 2.2.2.1	380 60 1120 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	230 1290 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 2.2.2.3	230 1290 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	244 1304 0 No 0% 0% 0% 0% 0 0 0 0 0 0 2.2.2.5 680	247 1307 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 2.2.2.6
Total Supply Total MMcfd ! Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected L3602 / Otay Line 3602 (Pro	Bedium Supply Shortfall Intailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWr/d] Gas EG [MWr/d] Gas EG [MWr] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Medium / L3010 Out Deposed Project) Implete Outage	156 1216 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	380 60 1120 0 No 0% 0% 0 0 0 0 0 0 0 0 0	230 1290 0 No 0% 0% 0% 0 0 0 0 0 0 0 2.2.2.3 680 0	230 1290 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 2.2.2.4 680 0	244 1304 0 No 0% 0% 0% 0% 0 0 0 0 0 0 2.2.2.5 6880 0	247 1307 0 No 0% 0% 0% 0% 0 0 0 0 0 0 2.2.2.6 680 0
Total Supply Total MMcfd: Immediate Ct Curtailment (%) Curtailment (Capacity) Number of Customers Affected L3602 / Otay Line 3602 (Pro Line 3010 Cor Otay Mesa Mes	Bedium Supply Shortfall Intailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWr/d] Gas EG [MWr/d] Gas EG [MWr] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Medium / L3010 Out Deposed Project) Implete Outage	156 1216 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 156	380 60 1120 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	230 1290 0 No 0% 0% 0% 0 0 0 0 0 0 0 2.2.2.3 680 0 230	230 1290 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 2.2.2.4 680 0 230	244 1304 0 No 0% 0% 0% 0% 0 0 0 0 0 2.2.2.5 680 0 244	247 1307 0 No 0% 0% 0% 0 0 0 0 0 0 0 2.2.2.6 680 0 247
Total Supply Total MMcfd ! Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected L3602 / Otay Line 3602 (Pro	Bedium Supply Shortfall Intailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Medium / L3010 Out Supposed Project) Implete Outage Indiadian Supply	156 1216 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	380 60 1120 0 No 0% 0% 0 0 0 0 0 0 0 0 0	230 1290 0 No 0% 0% 0% 0 0 0 0 0 0 0 2.2.2.3 680 0	230 1290 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 2.2.2.4 680 0	244 1304 0 No 0% 0% 0% 0% 0 0 0 0 0 0 2.2.2.5 6880 0	247 1307 0 No 0% 0% 0% 0% 0 0 0 0 0 0 2.2.2.6 680 0
Total Supply Total MMcfd : Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected L3602 / Otay Line 3602 (Pro Line 3010 Cor Otay Mesa Me Total Supply Total MMcfd :	Bedium Supply Shortfall Intailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Medium / L3010 Out Doposed Project) Implete Outage Intailment to EG Stations?	156 1216 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 156 836 0 No	380 60 1120 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	230 1290 0 No 0% 0% 0% 0 0 0 0 0 0 0 2.2.2.3 680 0 230 910 0 No	230 1290 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 222.2.4 680 0 230 910 No	244 1304 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 2.2.2.5 680 0 244 924 0 No	247 1307 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 2.2.2.6 680 0 247 927 0 No
Total Supply Total MMcfd : Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected L3602 / Otay Line 3602 (Pro Line 3010 Cor Otay Mesa Me Total Supply Total MMcfd :	Bedium Supply Shortfall Intailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Core [# Affected] San Non-Core Non-EG [# Affected] Soposed Project) Soposed Project) Soposed Project Soposed Project Soposed Project Soposed Project Soposed Project Gas Core [%]	156 1216 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 156 836 0 No 0%	380 60 1120 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	230 1290 0 No 0% 0% 0% 0 0 0 0 0 0 0 2.2.2.3 680 0 230 910 0 No	230 1290 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 2.2.2.4 680 0 230 910 0 No	244 1304 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 2.2.2.5 680 0 2444 924 0 No	247 1307 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 2.2.2.6 680 60 247 927 0 No
Total Supply Total MMcfd: Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Line 3602 (Pro Line 3010 Cor Otay Mesa Me Total Supply Total MMcfd: Immediate Cu	Bedium Supply Shortfall Intailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Core [# Affected] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Hon-Core Non-EG [# Affected] Medium / L3010 Out Deposed Project) Implete Outage Indicated Shortfall Intrailment to EG Stations? Gas Core [%] Gas EG [%]	156 1216 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 156 836 0 No 0% 0%	380 60 1120 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	230 1290 0 No 0% 0% 0% 0 0 0 0 0 0 0 2.2.2.3 680 0 230 910 0 No 0% 0%	230 1290 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 2.2.2.4 680 0 230 910 0 No 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	244 1304 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 2.2.2.5 680 0 244 924 0 No 0% 0%	247 1307 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 2.2.2.6 680 0 247 927 0 No 0% 0%
Total Supply Total MMcfd: Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Line 3602 (Pro Line 3010 Cor Otay Mesa Me Total Supply Total MMcfd: Immediate Cu Curtailment	Bedium Supply Shortfall Intailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MW/d] Gas EG [MW/d] Gas EG [MW/d] Gas Non-Core Non-EG [MMcfd] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Medium / L3010 Out Doosed Project) Implete Outage Indialiment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%]	156 1216 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 156 836 0 No 0% 0% 0%	380 60 1120 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	230 1290 0 No 0% 0% 0% 0 0 0 0 0 0 0 2.2.2.3 680 0 230 910 0 No 0% 0%	230 1290 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 22.2.4 680 0 230 910 0 No 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	244 1304 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 2.2.2.5 680 0 244 924 0 No 0% 0% 0%	247 1307 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 2.2.2.6 680 0 247 927 0 No 0% 0% 0%
Total Supply Total MMcfd : Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Line 3602 (Pro Line 3010 Cor Otay Mesa Me Total Supply Total MMcfd : Immediate Cu Curtailment	Bedium Supply Shortfall Intailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Core [# Affected] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Hon-Core Non-EG [# Affected] Medium / L3010 Out Deposed Project) Implete Outage Indicated Shortfall Intrailment to EG Stations? Gas Core [%] Gas EG [%]	156 1216 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 156 836 0 No 0% 0%	380 60 1120 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	230 1290 0 No 0% 0% 0% 0 0 0 0 0 0 0 2.2.2.3 680 0 230 910 0 No 0% 0%	230 1290 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 2.2.2.4 680 0 230 910 0 No 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	244 1304 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 2.2.2.5 680 0 244 924 0 No 0% 0%	247 1307 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 2.2.2.6 680 0 247 927 0 No 0% 0%
Total Supply Total MMcfd : Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Line 3602 / Otay Line 3602 (Pro Line 3010 Cor Otay Mesa Mro Total Supply Total MMcfd : Immediate Cu Curtailment (%)	Bedium Supply Shortfall Intailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Medium / L3010 Out Diposed Project) Implete Outage Edium Supply Shortfall Intailment to EG Stations? Gas Core [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd]	156 1216 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 156 836 0 No 0% 0% 0% 0%	380 60 1120 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	230 1290 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 2.2.2.3 680 0 230 910 0 No 0% 0% 0% 0%	230 1290 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	244 1304 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 2.2.2.5 680 0 244 924 0 No 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%	247 1307 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 2.2.2.6 680 0 247 927 0 No 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%
Total Supply Total MMcfd: Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Line 3602 (Pta Line 3010 Cor Otay Mesa Me Total Supply Total MMcfd: Immediate Cu Curtailment (%) Curtailment (%)	Shortfall Gas Core [%] Gas EG [%] Gas Core [MMcfd] Gas EG [MWINd] Gas Core [# Affected] Gas EG [# Affected] Gas EG [# Affected] Gas EG [# Affected] Gas EG [# Affected] Soposed Project) Inplete Outage Indicated Stations? Gas Core [%] Gas EG [%] Gas Core [MMcfd] Gas EG [MWINd] Gas EG [MWINd] Gas EG [MWINd] Gas EG [MWINd] Gas EG [MWING] Gas EG [MWING] Gas Non-Core Non-EG [MMcfd]	156 1216 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 156 836 0 No 0% 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0	380 60 1120 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	230 1290 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 2.2.2.3 680 0 230 910 0 No 0% 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0	230 1290 0 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 22.2.2.4 680 0 230 910 0 No 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	244 1304 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 2.2.2.5 680 0 244 924 0 No 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%	247 1307 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 2.2.2.6 680 0 247 927 0 No 0% 0% 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0
Total Supply Total MMcfd: Immediate Ct Curtailment (%) Curtailment (Capacity) Number of Customers Affected L3602 / Otay Line 3602 (Pro Line 3010 Cor Otay Mesa Me Total Supply Total MMcfd: Immediate Ct Curtailment (%) Curtailment	Shortfall Irrailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Shortfall Irrailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MW/d] Gas EG [MW/d] Gas EG [MW]	156 1216 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 156 836 0 No 0% 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0	380 60 1120 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	230 1290 0 No 0% 0% 0% 0 0 0 0 0 0 0 2.2.2.3 680 0 230 910 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	230 1290 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	244 1304 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 2.2.2.5 680 0 244 924 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	247 1307 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 2.2.2.6 680 0 247 927 0 0 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0

Line No.		APPLICATION 15-09-013 VOLUME II	I - COST-EFFEC	IIVENESS AW	ALTOIS (CORR	ECTED FEBR	(UAR 1 2017)	
1			EG Day	2. Example Summer High EG Day	3. Example Winter Day MMcfd	4. Winter 1- in-10 Year Day MMcfd	5. Example Spring Day MMcfd	6. Example Fall Day MMcfd
2	A	В	MMcfd C	MMcfd D	E	F	G	Н
313	1 2222 / 2/	.ow / L3010 80%	0.4.0.4	0.4.0.0	0.4.0.0	0.4.0.4	0.4.0.5	0.4.0.0
314 315	Line 3602 (Pro		2.1.3.1 680	2.1.3.2 680	2.1.3.3 680	2.1.3.4 680	2.1.3.5 680	2.1.3.6 680
316	Line 3010 at 80		380	380	380	380	380	380
317	Otay Mesa Low	v Supply	33	33	148	148	130	168
318 319	Total Supply Total MMcfd S	المكامط	1093	1093 0	1208 0	1208 0	1190 0	1228 0
320		rtailment to EG Stations?	No	No	No	No	No	No
321	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
322	(%)	Gas EG [%]	0%	0%	0%	0%	0%	0%
323 324		Gas Non-Core Non-EG [%] Gas Core [MMcfd]	0%	0% 0	0% 0	0%	0% 0	0%
325	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
326	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
327 328	Number of	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0	0	0	0	0	0
329	Customers	Gas EG [# Affected]	0	0	0	0	0	0
330	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
331	1 2602 / 040-1	Ow / L2010 Out	2224	2222	2222	2224	2225	2226
332 333	Line 3602 (Pro	ow / L3010 Out	2.2.3.1 680	2.2.3.2 680	2.2.3.3 680	2.2.3.4 680	2.2.3.5 680	2.2.3.6 680
334	Line 3010 Com	plete Outage	0	0	0	0	0	0
335	Otay Mesa Low	Supply	33	33	148	148	130	168
336	Total Supply	D. and all	713	713	828	828	810	848
337 338	Total MMcfd S	nortrail rtailment to EG Stations?	0 No	0 No	0 No	0 No	0 No	0 No
339	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
340	(%)	Gas EG [%]	0%	0%	0%	0%	0%	0%
341 342	(75)	Gas Non-Core Non-EG [%] Gas Core [MMcfd]	0%	0% 0	0% 0	0%	0% 0	0% 0
342	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
344	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
345		Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
346 347	Number of Customers	Gas Core [# Affected] Gas EG [# Affected]	0	0	0	0	0	0
348	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
349			-					
350 351	L3602 / Otay C Line 3602 (Pro	Out / L3010 80%	2.1.4.1 680	2.1.4.2 680	2.1.4.3 680	2.1.4.4 680	2.1.4.5 680	2.1.4.6 680
352	Line 3010 at 80		380	380	380	380	380	380
353	Otay Mesa No		0	0	0	0	0	0
354	Total Supply		1060	1060	1060	1060	1060	1060
355	Total MMcfd S	hortfall rtailment to EG Stations?	0 No	0 No	0 No	0 No	0 No	0 No
356 357		Gas Core [%]	0%	0%	0%	0%	0%	0%
358	Curtailment (%)	Gas EG [%]	0%	0%	0%	0%	0%	0%
359	(70)	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
360 361	Curtailment	Gas Core [MMcfd] Gas EG [MWh/d]	0	0	0	0	0	0
362	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
363		Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
364	Number of Customers	Gas Core [# Affected] Gas EG [# Affected]	0	0	0	0	0	0
365 366	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
367								
368		Out / L3010 Out	2.2.4.1	2.2.4.2	2.2.4.3	2.2.4.4	2.2.4.5	2.2.4.6
369 370	Line 3602 (Prop Line 3010 Com		680	680 0	680 0	680 0	680 0	680 0
370	Otay Mesa No		0	0	0	0	0	0
372	Total Supply		680	680	680	680	680	680
373	Total MMcfd S		0	0	0	0	0	0
374 375		rtailment to EG Stations? Gas Core [%]	No 0%	No 0%	No 0%	No 0%	No 0%	No 0%
375 376	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
377	(%)	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
378	Cumtoil	Gas Core [MMcfd]	0	0	0	0	0	0
379 380	Curtailment (Capacity)	Gas EG [MWh/d] Gas EG [MW]	0	0	0	0	0	0
381	(Gapacity)	Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
382	Number of	Gas Core [# Affected]	0	0	0	0	0	0
383	Customers	Gas EG [# Affected]	0	0	0	0	0	0
384	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0

		1. Example	2. Example				
			Summer High	3. Example	4. Winter 1-	5. Example	6. Exam
		EG Dav	EG Day	Winter Day	in-10 Year	Spring Day	Fall D
		MMcfd	MMcfd	MMcfd	Day MMcfd	MMcfd	MMcf
Α	В	C	D	Е	F	G	н
		, ,	J				
	ring Hydrotesting)						
	/ Otay Full / L3010 80% ring Hydrotesting)	3.1.1.1 0	3.1.1.2 0	3.1.1.3 0	3.1.1.4 0	3.1.1.5 0	3.1.1. 0
Line 3010 at 80		380	380	380	380	380	380
Otay Mesa Full		295	86	313	313	329	324
Total Supply	Сарріу	675	466	693	693	709	704
Total MMcfd S	Shortfall	0	9	0	0	0	0
	rtailment to EG Stations?	No	No	No	No	No	No
Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
(%)	Gas EG [%]	0%	0%	0%	0%	0%	0%
(70)	Gas Non-Core Non-EG [%]	0%	12%	0%	0%	0%	0%
	Gas Core [MMcfd]	0	0	0	0	0	0
Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
(Capacity)	Gas EG [MW]	0	0	0	0	0	0
	Gas Non-Core Non-EG [MMcfd]	0	9	0	0	0	0
Number of	Gas Core [# Affected]	0	0	0	0	0	0
Customers	Gas EG [# Affected]	0	0	0	0	0	0
Affected	Gas Non-Core Non-EG [# Affected]	0	N/A	0	0	0	0
	/ Otay Full / L3010 Out	3.2.1.1	3.2.1.2	3.2.1.3	3.2.1.4	3.2.1.5	3.2.1
	ing Hydrotesting)	0	0	0	0	0	0
Line 3010 Com		0	0	0	0	0	0
Otay Mesa Full	Supply	295	86	313	313	329	324
Total Supply		295	86	313	313	329	324
Total MMcfd S		0	389	224	264	136	201
immediate Cu	rtailment to EG Stations? Gas Core [%]	No 0%	Yes 14%	Yes 0%	Yes	Yes 0%	Yes
Curtailment	Gas EG [%]	0%	100%	98%	11% 100%	28%	0% 47%
(%)	Gas Non-Core Non-EG [%]	0%	100%	100%	100%	100%	1009
	Gas Core [MMcfd]	0	14	0	37	0	0
Curtailment	Gas EG [MWh/d]	0	40,461	21,877	22,253	8,240	17,0
	Gas EG [MW]	0	1,686	912	927	343	710
(Capacity)							
(Capacity)		0			62	75	
(Capacity) Number of	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]		75 119,839	62 0	62 92,375	75 0	
,	Gas Non-Core Non-EG [MMcfd]	0 0	75	62			75 0
Number of	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0	75 119,839	62 0	92,375	0	75 0 N/A
Number of Customers Affected	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] / Otay Medium / L3010 80%	0 0 0 0	75 119,839 N/A N/A	62 0 N/A N/A 3.1.2.3	92,375 N/A N/A 3.1.2.4	0 N/A N/A 3.1.2.5	75 0 N/A N/A
Number of Customers Affected Hydrotesting / Line 1600 (Dur	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] / Otay Medium / L3010 80% ing Hydrotesting)	0 0 0 0	75 119,839 N/A N/A 3.1.2.2	62 0 N/A N/A 3.1.2.3	92,375 N/A N/A 3.1.2.4	0 N/A N/A 3.1.2.5	75 0 N/A N/A 3.1.2
Number of Customers Affected Hydrotesting / Line 1600 (Dur Line 3010 at 80	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] / Otay Medium / L3010 80% ing Hydrotesting) % Supply	0 0 0 0 3.1.2.1 0 380	75 119,839 N/A N/A 3.1.2.2 0 380	62 0 N/A N/A 3.1.2.3 0 380	92,375 N/A N/A 3.1.2.4 0 380	0 N/A N/A 3.1.2.5 0 380	75 0 N/A N/A 3.1.2 0 380
Number of Customers Affected Hydrotesting, Line 1600 (Dur Line 3010 at 80 Otay Mesa Mes	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] / Otay Medium / L3010 80% ing Hydrotesting) % Supply	0 0 0 0 3.1.2.1 0 380 156	75 119,839 N/A N/A 3.1.2.2 0 380 60	62 0 N/A N/A 3.1.2.3 0 380 230	92,375 N/A N/A 3.1.2.4 0 380 230	0 N/A N/A 3.1.2.5 0 380 244	75 0 N/A N/A 3.1.2 0 380 247
Number of Customers Affected Hydrotesting J Line 1600 (Dur Line 3010 at 80 Otay Mesa Mes Total Supply	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] / Otay Medium / L3010 80% ing Hydrotesting) % Supply dium Supply	0 0 0 0 3.1.2.1 0 380 156 536	75 119,839 N/A N/A 3.1.2.2 0 380 60 440	62 0 N/A N/A 3.1.2.3 0 380 230 610	92,375 N/A N/A 3.1.2.4 0 380 230 610	0 N/A N/A 3.1.2.5 0 380 244 624	75 0 N/A N/A 3.1.2 0 380 247 627
Number of Customers Affected Hydrotesting J Line 1600 (Dur Line 3010 at 80 Otay Mesa Mee Total Supply Total MMcfd S	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] / Otay Medium / L3010 80% ing Hydrotesting) % Supply dium Supply Shortfall	0 0 0 0 3.1.2.1 0 380 156 536	75 119,839 N/A N/A 3.1.2.2 0 380 60 440 35	62 0 N/A N/A 3.1.2.3 0 380 230 610 0	92,375 N/A N/A 3.1.2.4 0 380 230 610 0	0 N/A N/A 3.1.2.5 0 380 244 624 0	75 0 N/A N/A 3.1.2 0 380 247 627
Number of Customers Affected Hydrotesting J Line 1600 (Dur Line 3010 at 80 Otay Mesa Mee Total Supply Total MMcfd S	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] / Otay Medium / L3010 80% ing Hydrotesting) % Supply dium Supply Shortfall rtailment to EG Stations?	0 0 0 3.1.2.1 0 380 156 536 0 No	75 119,839 N/A N/A 3.1.2.2 0 380 60 440 35 No	62 0 N/A N/A 3.1.2.3 0 380 230 610 0 No	92,375 N/A N/A 3.1.2.4 0 380 230 610 0 No	0 N/A N/A 3.1.2.5 0 380 244 624 0 No	75 0 N/A N/A 3.1.2 0 380 247 627 0 No
Number of Customers Affected Hydrotesting J Line 1600 (Dur Line 3010 at 80 Otay Mesa Mee Total Supply Total MMcfd S	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] / Otay Medium / L3010 80% ing Hydrotesting) 2% Supply dium Supply Ghortfall rtailment to EG Stations? [Gas Core [%]	0 0 0 0 3.1.2.1 0 380 156 536 0 No	75 119,839 N/A N/A 3.1.2.2 0 380 60 440 35 No 0%	62 0 N/A N/A 3.1.2.3 0 380 230 610 0 No 0%	92,375 N/A N/A 3.1.2.4 0 380 230 610 0 No	0 N/A N/A 3.1.2.5 0 380 244 624 0 No	75 0 N/A N/A 3.1.2 0 380 247 627 0 No
Number of Customers Affected Hydrotesting J Line 1600 (Dur Line 3010 at 80 Otay Mesa Mer Total Supply Total MMcfd S Immediate Cu	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Otay Medium / L3010 80% ing Hydrotesting) % Supply dium Supply dium Supply Shortfall rtailment to EG Stations? Gas Core [%] Gas EG [%]	0 0 0 0 3.1.2.1 0 380 156 536 0 No 0%	75 119,839 N/A N/A 3.1.2.2 0 380 60 440 35 No 0%	62 0 N/A N/A 3.1.2.3 0 380 230 610 0 No 0%	92,375 N/A N/A 3.1.2.4 0 380 230 610 0 No 0% 0%	0 N/A N/A 3.1.2.5 0 380 244 624 0 No 0%	75 0 N/A N/A 3.1.2 2 0 380 247 627 0 0 No No No No No No No No No No No No No
Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Otay Medium / L3010 80% ing Hydrotesting) O% Supply dium Supply Shortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%]	0 0 0 0 3.1.2.1 0 380 156 536 0 No 0% 0%	75 119,839 N/A N/A 3.1.2.2 0 380 60 440 35 No 0% 47%	62 0 N/A N/A 3.1.2.3 0 380 230 610 0 No 0% 0%	92,375 N/A N/A 3.1.2.4 0 380 230 610 0 No 0% 0% 0%	0 N/A N/A 3.1.2.5 0 380 244 624 0 No 0% 0%	75 0 N/// N/// 3.1.2 0 380 247 627 0 No 0% 0%
Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%)	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] / Otay Medium / L3010 80% ing Hydrotesting) % Supply dium Supply Shortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Core [MMcfd]	0 0 0 0 3.1.2.1 0 380 156 536 0 No 0% 0%	75 119,839 N/A N/A 3.1.2.2 0 380 60 440 35 No 0% 47% 0	62 0 N/A N/A 3.1.2.3 0 380 230 610 0 No 0% 0% 0%	92,375 N/A N/A 3.1.2.4 0 380 230 610 0 No 0% 0% 0% 0%	0 N/A N/A 3.1.2.5 0 380 244 624 0 No 0% 0% 0% 0%	75 0 N/A N/A 3.1.2 0 380 247 6222 0 0 No 0% 0% 0%
Number of Customers Affected Hydrotesting J Line 1600 (Dur Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%)	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] / Otay Medium / L3010 80% ing Hydrotesting) % Supply dium Supply Shortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d]	0 0 0 0 3.1.2.1 0 380 156 536 0 No 0% 0% 0%	75 119,839 N/A N/A 3.1.2.2 0 380 60 440 35 No 0% 47% 0	62 0 N/A N/A 3.1.2.3 0 380 230 610 0 No 0% 0% 0% 0 0	92,375 N/A N/A 3.1.2.4 0 380 230 610 0 No 0% 0% 0% 0% 0	0 N/A N/A 3.1.2.5 0 380 244 624 0 No 0% 0% 0% 0%	75 0 N/// N// 3.1.2 0 386 247 627 0 0 Nd 0% 0% 0% 0%
Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%)	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Otay Medium / L3010 80% ing Hydrotesting) % Supply dium Supply dium Supply Shortfall retailment to EG Stations? Gas Core [%] Gas EG [%] Gas Ron-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW]	0 0 0 0 3.1.2.1 0 380 156 536 0 No 0% 0%	75 119,839 N/A N/A 3.1.2.2 0 380 60 440 35 No 0% 47% 0 0	62 0 N/A N/A 3.1.2.3 0 380 230 610 0 No 0% 0% 0% 0 0	92,375 N/A N/A 3.1.2.4 0 380 230 610 0 No 0% 0% 0% 0 0 0	0 N/A N/A 3.1.2.5 0 380 244 624 0 No 0% 0% 0% 0 0 0	75 0 N/A/ N/A/ 3.1.2 3.8 2.44 6.22 0 0 0 0 0 0 0 0 0 0 0 0
Number of Customers Affected Hydrotesting J Line 1600 (Dur Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%)	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] / Otay Medium / L3010 80% ing Hydrotesting) % Supply dium Supply Shortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d]	0 0 0 0 3.1.2.1 0 380 156 536 0 No 0% 0% 0%	75 119,839 N/A N/A 3.1.2.2 0 380 60 440 35 No 0% 47% 0	62 0 N/A N/A 3.1.2.3 0 380 230 610 0 No 0% 0% 0% 0 0	92,375 N/A N/A 3.1.2.4 0 380 230 610 0 No 0% 0% 0% 0% 0	0 N/A N/A 3.1.2.5 0 380 244 624 0 No 0% 0% 0% 0%	75 0 N/// N// 3.1.2 0 386 247 627 0 0 Nd 0% 0% 0% 0%
Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity)	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Otay Medium / L3010 80% ing Hydrotesting) O% Supply dium Supply Shortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MMcfd] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	0 0 0 0 3.1.2.1 0 380 156 536 0 No 0% 0% 0%	75 119,839 N/A N/A 3.1.2.2 0 380 60 440 35 No 0% 47% 0 0 0 35	62 0 N/A N/A 3.1.2.3 0 380 230 610 0 No 0% 0% 0% 0 0 0	92,375 N/A N/A 3.1.2.4 0 380 230 610 0 No 0% 0% 0% 0 0 0 0 0 0	0 N/A N/A 3.1.2.5 0 380 244 624 0 No 0% 0% 0% 0 0 0	75 0 N/A N/A 3.1.2 0 38 38 38 627 0 0 0% 0% 0% 0 0% 0 0 0 0 0 0 0 0 0 0
Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] / Otay Medium / L3010 80% ing Hydrotesting) 0% Supply dium Supply Shortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWH/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0 0 0 0 3.1.2.1 0 380 156 536 0 No 0% 0% 0 0	75 119,839 N/A N/A 3.1.2.2 0 380 60 440 35 No 0% 47% 0 0 0 35 0	62 0 N/A N/A 3.1.2.3 0 380 230 610 0 No 0% 0% 0 0 0 0 0 0 0	92,375 N/A N/A 3.1.2.4 0 380 230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 0	0 N/A N/A 3.1.2.5 0 380 244 624 0 No 0% 0% 0 0 0 0 0	75 0 N/A N/A 3.1.2 0 380 247 627 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] / Otay Medium / L3010 80% ing Hydrotesting) 0% Supply dium Supply Shortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected]	0 0 0 0 3.1.2.1 0 380 156 536 0 No 0% 0% 0% 0 0	75 119,839 N/A N/A 3.1.2.2 0 380 60 440 35 No 0% 47% 0 0 0 0 35 No No N/A	62 0 N/A N/A N/A 3.1.2.3 0 380 230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	92,375 N/A N/A 3.1.2.4 0 380 230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 N/A N/A N/A 3.1.2.5 0 380 2444 624 0 No 0% 0% 0% 0 0 0 0 0 0	75 0 N/A N/A 3.1.2 0 38C 247 627 0 0 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 at 80 Otay Mesa Mer Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Hydrotesting	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Otay Medium / L3010 80% ing Hydrotesting) Ow Supply dium Supply Shortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Otay Medium / L3010 Out	0 0 0 0 3.1.2.1 0 380 156 536 0 No 0% 0% 0 0 0 0	75 119,839 N/A N/A 3.1.2.2 0 380 60 440 35 No 0% 0% 47% 0 0 0 35 0 No N/A	62 0 N/A N/A N/A 3.1.2.3 0 380 230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	92,375 N/A N/A 3.1.2.4 0 380 230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 3.2.2.4	0 N/A N/A 3.1.2.5 0 380 244 624 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	75 0 N/A N/A 3.1.2 0 3.1.2 0 0 3.0 247 627 0 0 0% 0% 0% 0 0 0 0 0 0 0 3.2.2
Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Hydrotesting Line 1600 (Dur	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Otay Medium / L3010 80% ing Hydrotesting) We Supply dium Supply Shortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas EG [[%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Core [# Affected] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Otay Medium / L3010 Out ing Hydrotesting)	0 0 0 0 3.1.2.1 0 380 156 536 0 No 0% 0% 0 0 0 0 0 0 0	75 119,839 N/A N/A 3.1.2.2 0 380 60 440 35 No 0% 47% 0 0 0 0 0 N/A 3.2.2.2 0	62 0 N/A N/A N/A 3.1.2.3 0 380 230 610 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	92,375 N/A N/A 3.1.2.4 0 380 230 610 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 N/A N/A 3.1.2.5 0 380 244 624 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	75 0 N/A N/A 3.1.2 0 380 247 627 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 at 8(Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 Corr	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Otay Medium / L3010 80% ing Hydrotesting) ing Hydrotesting) ing Hydrotesting) ing Hydrotesting Gas Core [%] Gas Core [%] Gas EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Hydrotesting) ing Hydrotesting) ing Hydrotesting) inplete Outage	0 0 0 0 3.1.2.1 0 380 156 536 0 No 0% 0% 0 0 0 0	75 119,839 N/A N/A 3.1.2.2 0 380 60 440 35 No 0% 47% 0 0 0 0 N/A 35 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	62 0 N/A N/A N/A 3.1.2.3 0 380 230 610 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	92,375 N/A N/A 3.1.2.4 0 380 230 610 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 N/A N/A N/A 3.1.2.5 0 380 244 624 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	75 0 N/A N/A 3.1.2 3 3 3 247 627 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 Com Otay Mesa Me	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Otay Medium / L3010 80% ing Hydrotesting) ing Hydrotesting) ing Hydrotesting) ing Hydrotesting Gas Core [%] Gas Core [%] Gas EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Hydrotesting) ing Hydrotesting) ing Hydrotesting) inplete Outage	0 0 0 0 3.1.2.1 0 380 156 536 0 No 0% 0% 0 0 0 0 0 0	75 119,839 N/A N/A 3.1.2.2 0 380 60 440 35 No 0% 47% 0 0 0 0 0 35 0 N/A 3.2.2.2 0 0 60	62 0 N/A N/A N/A 3.1.2.3 0 380 230 610 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	92,375 N/A N/A 3.1.2.4 0 380 230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 230 3.2.2.4	0 N/A N/A N/A 3.1.2.5 0 380 2444 624 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	75 0 N/A N/A 3.1.2 0 0 3.38 244 627 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 Com Otay Mesa Me Total Supply	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] / Otay Medium / L3010 80% ing Hydrotesting) 0% Supply dium Supply Shortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWhdd] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Otay Medium / L3010 Out ing Hydrotesting) inplete Outage dium Supply	0 0 0 0 3.1.2.1 0 380 156 536 0 No 0% 0% 0% 0 0 0 0 0 0 0	75 119,839 N/A N/A N/A 3.1.2.2 0 380 60 440 35 No 0% 0% 47% 0 0 0 35 0 N/A 3.2.2.2 0 0 60 60	62 0 N/A N/A N/A 3.1.2.3 0 380 230 610 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	92,375 N/A N/A 3.1.2.4 0 380 230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 N/A N/A N/A 3.1.2.5 0 380 2444 624 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 244 244	75 0 N/A N/A 3.1.2 0 38C 247 627 0 0 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 Com Otay Mesa Me Total Supply Total MMcfd S	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] / Otay Medium / L3010 80% ing Hydrotesting) 0% Supply dium Supply Shortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWhdd] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Otay Medium / L3010 Out ing Hydrotesting) inplete Outage dium Supply	0 0 0 0 3.1.2.1 0 380 156 536 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	75 119,839 N/A N/A 3.1.2.2 0 380 60 440 35 No 0% 47% 0 0 0 35 0 0 N/A 3.2.2.2 0 0 60 60 60	62 0 N/A N/A N/A 3.1.2.3 0 380 230 610 0 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	92,375 N/A N/A 3.1.2.4 0 380 230 610 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 N/A N/A N/A 3.1.2.5 0 380 244 624 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 244 244 244	75 0 N/A N/A 3.1.2 0 3.1.2 0 0 3.247 627 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2 247 247 247
Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 Com Otay Mesa Me Total Supply Total MMcfd S Immediate Cu	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Otay Medium / L3010 80% ing Hydrotesting) Ow Supply dium Supply Shortfall Ttailment to EG Stations? Gas Core [%] Gas EG [%] Gas ROn-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Core [# Affected] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Otay Medium / L3010 Out ing Hydrotesting) iplete Outage dium Supply Shortfall	0 0 0 0 3.1.2.1 0 380 156 536 0 No 0% 0% 0% 0 0 0 0 0 0 0	75 119,839 N/A N/A N/A 3.1.2.2 0 380 60 440 35 No 0% 0% 47% 0 0 0 35 0 N/A 3.2.2.2 0 0 60 60	62 0 N/A N/A N/A 3.1.2.3 0 380 230 610 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	92,375 N/A N/A 3.1.2.4 0 380 230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 N/A N/A N/A 3.1.2.5 0 380 2444 624 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 244 244	75 0 N/A N/I 3.1.2 3 0 3 247 627 0 0 0 0 0 0 0 0 0 0 0 0 0 247 247 277e
Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 Com Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Otay Medium / L3010 80% ing Hydrotesting) ing Hydrotesting) ing Hydrotesting) ing Hydrotesting) ing Hydrotesting Gas Core [%] Gas Core [%] Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [# Affected] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Hydrotesting) inplete Outage dium Supply Shortfall rtailment to EG Stations?	0 0 0 0 3.1.2.1 0 380 156 536 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	75 119,839 N/A N/A 3.1.2.2 0 380 60 440 35 No 0% 47% 0 0 0 0 0 N/A 35 0 0 0 47% 0 0 0 47% 0 0 0 47% 0 0 0 47% 0 0 0 0 47% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	62 0 N/A N/A N/A 3.1.2.3 0 380 230 610 0 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	92,375 N/A N/A 3.1.2.4 0 380 230 610 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 N/A N/A N/A 3.1.2.5 0 380 244 624 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 244 244 244 221 Yes	75 0 N/A N/A 3.1.2 3 3 3 247 627 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 Com Otay Mesa Me Total Supply Total MMcfd S Immediate Cu	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Otay Medium / L3010 80% ing Hydrotesting) % Supply dium Supply Shortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [# Affected] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Otay Medium / L3010 Out ing Hydrotesting) iplete Outage dium Supply Shortfall rtailment to EG Stations? Gas Core [%]	0 0 0 0 3.1.2.1 0 380 156 536 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 156	75 119,839 N/A N/A 3.1.2.2 0 380 60 440 35 No 0% 47% 0 0 0 0 0 N/A 3.2.2.2 0 0 60 60 415 Yes 40%	62 0 N/A N/A N/A 3.1.2.3 0 380 230 610 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	92,375 N/A N/A 3.1.2.4 0 380 230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 230 230 230 230 230 230 347 Yes 34%	0 N/A N/A N/A 3.1.2.5 0 380 2444 624 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 244 244 244 221 Yes 0%	75 0 N/A N/A 3.1.2 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 Com Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Otay Medium / L3010 80% ing Hydrotesting) % Supply dium Supply Shortfall retailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Core [# Affected]	0 0 0 0 3.1.2.1 0 380 156 536 0 0% 0% 0% 0 0 0 0 0 0 0 0 156 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	75 119,839 N/A N/A N/A 3.1.2.2 0 380 60 440 35 No 0% 47% 0 0 0 35 0 N/A 3.2.2.2 0 0 60 60 60 415 Yes 40% 100%	62 0 N/A N/A N/A 3.1.2.3 0 380 230 610 0 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	92,375 N/A N/A 3.1.2.4 0 380 230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 230 230 230 230 230 347 Yes 34% 100%	0 N/A N/A N/A 3.1.2.5 0 380 2444 624 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 244 244 221 Yes 0% 666%	75 0 N/A N/A 3.1.2 0 0 3.2.2 627 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 Com Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] O'tay Medium / L3010 80% ing Hydrotesting) ''y Supply dium Supply Gas Core [%] Gas Core [%] Gas EG [%] Gas EG [%] Gas EG [MMrdd] Gas EG [MWrld] Gas EG [MWrld] Gas EG [MWrld] Gas EG [# Affected] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] O'tay Medium / L3010 Out ing Hydrotesting) inplete Outage dium Supply Shortfall rtailment to EG Stations? Gas Core [%] Gas Core [%] Gas Core [MMrdd] Gas EG [MWrld] Gas EG [MWrld]	0 0 0 0 3.1.2.1 0 380 156 536 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	75 119,839 N/A N/A 3.1.2.2 0 380 60 440 35 No 0% 47% 0 0 0 0 0 35 0 N/A 3.2.2.2 0 60 60 415 Yes 40% 100% 40 40,461	62 0 N/A N/A N/A 3.1.2.3 0 380 230 610 0 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	92,375 N/A N/A 3.1.2.4 0 380 230 610 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 N/A N/A N/A 3.1.2.5 0 380 2444 624 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 244 244 244 221 Yes 0% 66% 100% 0 19,672	75 0 N/A N/A 3.1.2 0 0 3.38(2 247 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 at 8(Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 Com Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%)	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Otay Medium / L3010 80% ing Hydrotesting) % Supply dium Supply dium Supply Shortfall retailment to EG Stations? Gas Core [%] Gas EG [%] Gas EG [MW] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [# Affected] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas EG [# Affected] Gas Core [MMcfd] Gas EG [MWh/d]	0 0 0 0 3.1.2.1 0 380 156 536 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0	75 119,839 N/A N/A N/A 3.1.2.2 0 380 60 440 35 No 0% 47% 0 0 0 35 0 N/A 3.2.2.2 0 60 60 60 60 415 40% 100% 40,461 1,686	62 0 N/A N/A N/A 3.1.2.3 0 380 230 610 0 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	92,375 N/A N/A 3.1.2.4 0 380 230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 230 230 230 230 347 Yes 34% 100% 120 22,253 927	0 N/A N/A N/A 3.1.2.5 0 380 2444 624 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 244 244 221 Yes 0% 666% 100% 0 19,672	75 0 N/A N/A 3.1.2 0 0 3.1.2 627 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 Com Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (%) Curtailment (%) Curtailment (%)	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] / Otay Medium / L3010 80% ing Hydrotesting) 0% Supply dium Supply Shortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWhd] Gas EG [MWhd] Gas EG [MWhd] Gas EG [# Affected] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] / Otay Medium / L3010 Out ing Hydrotesting) inplete Outage dium Supply Shortfall rtailment to EG Stations? Gas Core [%] Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [%] Gas EG [%] Gas EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd]	0 0 0 0 3.1,2.1 0 380 156 536 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	75 119,839 N/A N/A N/A 3.1.2.2 0 380 60 440 35 No 0% 0% 47% 0 0 0 35 0 N/A 3.2.2.2 0 0 60 60 415 Yes 40% 100% 40,461 1,686 75	62 0 N/A N/A N/A 0 3.1.2.3 0 380 230 610 0 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	92,375 N/A N/A 3.1.2.4 0 380 230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 N/A N/A N/A N/A 3.1.2.5 0 380 2444 624 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 244 244 221 Yes 0% 66% 100% 0 0 19,672	75 0 N/A N/A 3.1.2 0 0 3.40 247 0 0 0 0 0 0 0 0 0 3.2.2 75 100 0 0 27,3,3 1,1,4
Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 at 8(Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Hydrotesting Line 1600 (Dur Line 3010 Corr Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment Cup Corr Otay Mesa Me Total Supply Cup Curtailment (%) Curtailment	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Otay Medium / L3010 80% ing Hydrotesting) % Supply dium Supply dium Supply Shortfall retailment to EG Stations? Gas Core [%] Gas EG [%] Gas EG [MW] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [# Affected] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas EG [# Affected] Gas Core [MMcfd] Gas EG [MWh/d]	0 0 0 0 3.1.2.1 0 380 156 536 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0	75 119,839 N/A N/A N/A 3.1.2.2 0 380 60 440 35 No 0% 47% 0 0 0 35 0 N/A 3.2.2.2 0 60 60 60 60 415 40% 100% 40,461 1,686	62 0 N/A N/A N/A 3.1.2.3 0 380 230 610 0 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	92,375 N/A N/A 3.1.2.4 0 380 230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 230 230 230 230 347 Yes 34% 100% 120 22,253 927	0 N/A N/A N/A 3.1.2.5 0 380 2444 624 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 244 244 221 Yes 0% 666% 100% 0 19,672	75 0 N/A N/A 3.1.2 0 0 3.38(2 247 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Line No.		APPLICATION 15-09-013 VOLUME III	- 0031-211 20	TIVENESS AN	4E1010 (00111)	LOTEDTEDI	OAKT 2017)	
			1. Example	2. Example	3. Example	4. Winter 1-	5. Example	6. Example
1			Summer Low-	•	Winter Day	in-10 Year	Spring Day	Fall Day
			EG Day MMcfd	EG Day MMcfd	MMcfd	Day MMcfd	MMcfd	MMcfd
2	Α	В	C	D	E	F	G	н
459			U	U	_			
460	Hydrotesting /	Otay Low / L3010 80%	3.1.3.1	3.1.3.2	3.1.3.3	3.1.3.4	3.1.3.5	3.1.3.6
461	Line 1600 (Duri	ng Hydrotesting)	0	0	0	0	0	0
462	Line 3010 at 80		380	380	380	380	380	380
463	Otay Mesa Low	Supply	33	33	148	148	130	168
464	Total Supply Total MMcfd S	houtfall	413 0	413 62	528 9	528 49	510 0	548 0
465 466		rtailment to EG Stations?	No	No No	No	No No	No	No
467		Gas Core [%]	0%	0%	0%	0%	0%	0%
468	Curtailment	Gas EG [%]	0%	0%	0%	0%	0%	0%
469	(%)	Gas Non-Core Non-EG [%]	0%	82%	14%	79%	0%	0%
470		Gas Core [MMcfd]	0	0	0	0	0	0
471	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
472 473	(Capacity)	Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	0	0 62	9	0 49	0	0
473 474	Number of	Gas Core [# Affected]	0	0	0	0	0	0
475	Customers	Gas EG [# Affected]	0	0	0	0	0	0
476	Affected	Gas Non-Core Non-EG [# Affected]	0	N/A	N/A	N/A	0	0
477								
478		Otay Low / L3010 Out	3.2.3.1	3.2.3.2	3.2.3.3	3.2.3.4	3.2.3.5	3.2.3.6
479		ng Hydrotesting)	0	0	0	0	0	0
480 481	Line 3010 Com Otay Mesa Low		33	33	0 148	0 148	130	0 168
482	Total Supply	Зирріу	33	33	148	148	130	168
482 483	Total MMcfd S	hortfall	242	442	389	429	335	357
484		tailment to EG Stations?	Yes	Yes	Yes	Yes	Yes	Yes
485	Curtailment	Gas Core [%]	67%	67%	52%	58%	23%	7%
486	(%)	Gas EG [%]	100%	100%	100%	100%	100%	100%
487	(70)	Gas Non-Core Non-EG [%]	100%	100%	100%	100%	100%	100%
488	0	Gas Core [MMcfd]	67	67	162	202	40	12
489	Curtailment	Gas EG [MWh/d]	13,487 562	40,461	22,253	22,253	29,671	36,414
490 491	(Capacity)	Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	75	1,686 75	927 62	927 62	1,236 75	1,517 75
492	Number of	Gas Core [# Affected]	579,437	579,437	453,758	501,195	203,921	60,119
493	Customers	Gas EG [# Affected]	N/A	N/A	N/A	N/A	N/A	N/A
494	Affected	Gas Non-Core Non-EG [# Affected]	N/A	N/A	N/A	N/A	N/A	N/A
495								
496 407		Otay Out / L3010 80%	3.1.4.1	3.1.4.2 0	3.1.4.3 0	3.1.4.4 0	3.1.4.5 0	3.1.4.6
497 498	Line 3010 at 80	ng Hydrotesting)	380	380	380	380	380	380
499	Otay Mesa No		0	0	0	0	0	0
500	Total Supply		380	380	380	380	380	380
501	Total MMcfd S	hortfall	0	95	157	197	85	145
502	Immediate Cur	tailment to EG Stations?	No	Yes	Yes	Yes	Yes	Yes
503	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
504	(%)	Gas EG [%]	0%	7%	58%	82%	5%	26%
505	()	Gas Non-Core Non-EG [%]	0%	100% 0	100% 0	100%	100% 0	100%
506 507	Curtailment	Gas Core [MMcfd] Gas EG [MWh/d]	0	2,697	12,813	18,207	1,349	9,441
508	(Capacity)	Gas EG [MW]	0	112	534	759	56	393
509	, , , , , , , , , , , , , , , , , , , ,	Gas Non-Core Non-EG [MMcfd]	0	75	62	62	75	75
510	Number of	Gas Core [# Affected]	0	0	0	0	0	0
511	Customers	Gas EG [# Affected]	0	N/A	N/A	N/A	N/A	N/A
512	Affected	Gas Non-Core Non-EG [# Affected]	0	N/A	N/A	N/A	N/A	N/A
513 514	Hydrotesting	Otay Out / L3010 Out	3.2.4.1	3.2.4.2	3.2.4.3	3.2.4.4	3.2.4.5	3.2.4.6
515		ng Hydrotesting)	0	0	0	0	0	0
516	Line 3010 Com	0 7	0	0	0	0	0	0
517	Otay Mesa No		0	0	0	0	0	0
518	Total Supply		0	0	0	0	0	0
519	Total MMcfd S		275	475	537	577	465	525
520	Immediate Cur	rtailment to EG Stations?	Yes	Yes	Yes	Yes	Yes	Yes
521 522	Curtailment	Gas Core [%] Gas EG [%]	100% 100%	100% 100%	100% 100%	100% 100%	100% 100%	100% 100%
522 523	(%)	Gas Non-Core Non-EG [%]	100%	100%	100%	100%	100%	100%
523 524		Gas Core [MMcfd]	100%	100%	310	350	170	180
525	Curtailment	Gas EG [MWh/d]	13,487	40,461	22,253	22,253	29,671	36,414
526	(Capacity)	Gas EG [MW]	562	1,686	927	927	1,236	1,517
527		Gas Non-Core Non-EG [MMcfd]	75	75	62	62	75	75
528	Number of	Gas Core [# Affected]	868,838	868,838	868,838	868,838	868,838	868,838
	11 '11040 more							
529 530	Customers Affected	Gas EG [# Affected] Gas Non-Core Non-EG [# Affected]	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A

	-							
1			1. Example Summer Low- EG Day MMcfd	2. Example Summer High EG Day MMcfd	3. Example Winter Day MMcfd	4. Winter 1- in-10 Year Day MMcfd	5. Example Spring Day MMcfd	6. Example Fall Day MMcfd
2	Α	В	С	D	Е	F	G	Н
531 532 533	Alternate Dian	neter Pipeline 10"						
534		0" / Otay Full / L3010 80%	4.1.1.1	4.1.1.2	4.1.1.3	4.1.1.4	4.1.1.5	4.1.1.6
535		eter Pipeline 10"	50	50	50	50	50	50
536 537	Line 3010 at 80 Otay Mesa Full		380 295	380 86	380 313	380 313	380 329	380 324
538	Total Supply	Сирріу	725	516	743	743	759	754
539	Total MMcfd S	hortfall	0	0	0	0	0	0
540		tailment to EG Stations?	No	No	No	No	No	No
541	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
542	(%)	Gas EG [%]	0%	0%	0%	0%	0%	0%
543 544	(,	Gas Non-Core Non-EG [%] Gas Core [MMcfd]	0%	0%	0% 0	0%	<u>0%</u> 0	0%
544 545	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
546	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
547	(**,*** 3,	Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
548	Number of	Gas Core [# Affected]	0	0	0	0	0	0
549	Customers	Gas EG [# Affected]	0	0	0	0	0	0
550 551	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
551 552	Alt Diameter 1	0" / Otay Full / L3010 Out	4.2.1.1	4.2.1.2	4.2.1.3	4.2.1.4	4.2.1.5	4.2.1.6
553		eter Pipeline 10"	50	50	50	50	50	50
554	Line 3010 Com		0	0	0	0	0	0
555	Otay Mesa Full	Supply	295	86	313	313	329	324
556	Total Supply		345	136	363	363	379	374
557	Total MMcfd S		0	339	174	214	86	151
558 559	Immediate Cu	tailment to EG Stations? Gas Core [%]	No 0%	Yes 0%	Yes 0%	Yes 0%	Yes 0%	Yes 0%
560	Curtailment	Gas EG [%]	0%	88%	68%	92%	5%	28%
561	(%)	Gas Non-Core Non-EG [%]	0%	100%	100%	100%	100%	100%
562		Gas Core [MMcfd]	0	0	0	0	0	0
563	Curtailment	Gas EG [MWh/d]	0	35,577	15,134	20,529	1,497	10,296
564	(Capacity)	Gas EG [MW]	0	1,482	631	855	62	429
565	Number of	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0	75 0	62 0	62 0	75 0	75 0
566 567	Customers	Gas EG [# Affected]	0	N/A	N/A	N/A	N/A	N/A
568	Affected	Gas Non-Core Non-EG [# Affected]	0	N/A	N/A	N/A	N/A	N/A
569					-			
570		0" / Otay Medium / L3010 80%	4.1.2.1	4.1.2.2	4.1.2.3	4.1.2.4	4.1.2.5	4.1.2.6
571		eter Pipeline 10"	50	50	50	50	50	50
572 573	Line 3010 at 80 Otay Mesa Med		380 156	380 60	380 230	380 230	380 244	380 247
574	Total Supply	лин Зирріу	586	490	660	660	674	677
575	Total MMcfd S	hortfall	0	0	0	0	0	0
576		tailment to EG Stations?	No	No	No	No	No	No
577	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
578	(%)	Gas EG [%]	0%	0%	0%	0%	0% 0%	0%
579	` ,				00/			
580		Gas Non-Core Non-EG [%]	0%	0%	0%	0%		0%
	Curtailment	Gas Core [MMcfd]	0	0	0	0	0	0
581 582	Curtailment (Capacity)					-		_
581 582 583	(Capacity)	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0
581 582 583 584	(Capacity) Number of	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
581 582 583 584 585	(Capacity) Number of Customers	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected]	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0
581 582 583 584 585 586	(Capacity) Number of	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
581 582 583 584 585	(Capacity) Number of Customers Affected	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected]	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0
581 582 583 584 585 586 587	(Capacity) Number of Customers Affected Alt Diameter 1	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected]	0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0
581 582 583 584 585 586 587 588 589 590	(Capacity) Number of Customers Affected Alt Diameter 1 Alternate Diam Line 3010 Com	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] O" / Otay Medium / L3010 Out eter Pipeline 10" plete Outage	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0
581 582 583 584 585 586 587 588 589 590 591	(Capacity) Number of Customers Affected Alt Diameter 1 Alternate Diam Line 3010 Com Otay Mesa Mee	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] O" / Otay Medium / L3010 Out eter Pipeline 10" plete Outage	0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 4.2.2.3 50 0 230	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 4.2.2.5 50 0	0 0 0 0 0 0 0 0 0 4.2.2.6 50 0
581 582 583 584 585 586 587 588 589 590 591	(Capacity) Number of Customers Affected Alt Diameter 1 Alternate Diam Line 3010 Com Otay Mesa Med Total Supply	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] O" / Otay Medium / L3010 Out eter Pipeline 10" plete Outage dium Supply	0 0 0 0 0 0 0 0 4.2.2.1 50 0 156 206	0 0 0 0 0 0 0 0 4.2.2.2 50 0 60	0 0 0 0 0 0 0 4.2.2.3 50 0 230	0 0 0 0 0 0 0 0 4.2.2.4 50 0 230	0 0 0 0 0 0 0 0 4.2.2.5 50 0 244 294	0 0 0 0 0 0 0 0 4.2.2.6 50 0 247 297
581 582 583 584 585 586 587 588 589 590 591 592 593	(Capacity) Number of Customers Affected Alt Diameter 1 Alternate Diam Line 3010 Com Otay Mesa Met Total Supply Total MMcfd S	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] O" / Otay Medium / L3010 Out eter Pipeline 10" plete Outage dium Supply	0 0 0 0 0 0 0 0 0 4.2.2.1 50 0 0 156 206 69	0 0 0 0 0 0 0 0 4.2.2.2 50 0 60 110	0 0 0 0 0 0 0 0 0 4.2.2.3 50 0 230 280	0 0 0 0 0 0 0 0 0 0 4.2.2.4 50 0 0 230 230 280	0 0 0 0 0 0 0 0 4.2.2.5 50 0 244 294	0 0 0 0 0 0 0 0 4.2.2.6 50 0 247 297
581 582 583 584 585 586 587 588 589 590 591 592 593 594	(Capacity) Number of Customers Affected Alt Diameter 1 Alternate Diam Line 3010 Com Otay Mesa Med Total Supply Total MMcfd S Immediate Cu	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] O" / Otay Medium / L3010 Out eter Pipeline 10" plete Outage dium Supply hortfall tailment to EG Stations?	0 0 0 0 0 0 0 0 0 0 4.2.2.1 50 0 156 206 69 No	0 0 0 0 0 0 0 0 0 4.2.2.2 50 0 60 110 365 Yes	0 0 0 0 0 0 0 0 4.2.2.3 50 0 230 280 257 Yes	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 4.2.2.5 50 0 244 294 171 Yes	0 0 0 0 0 0 0 0 4.2.2.6 50 0 247 297 228 Yes
581 582 583 584 585 586 587 588 589 590 591 592 593	(Capacity) Number of Customers Affected Alt Diameter 1 Alternate Diam Line 3010 Com Otay Mesa Met Total Supply Total MMcfd S Immediate Cu Curtailment	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] O" / Otay Medium / L3010 Out eter Pipeline 10" plete Outage dium Supply	0 0 0 0 0 0 0 0 0 4.2.2.1 50 0 0 156 206 69	0 0 0 0 0 0 0 0 4.2.2.2 50 0 60 110	0 0 0 0 0 0 0 0 0 4.2.2.3 50 0 230 280	0 0 0 0 0 0 0 0 0 0 4.2.2.4 50 0 0 230 230 280	0 0 0 0 0 0 0 0 4.2.2.5 50 0 244 294	0 0 0 0 0 0 0 0 4.2.2.6 50 0 247 297
581 582 583 584 585 586 587 588 589 590 591 592 593 594 595	(Capacity) Number of Customers Affected Alt Diameter 1 Alternate Diam Line 3010 Com Otay Mesa Med Total Supply Total MMcfd S Immediate Cu	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] O" / Otay Medium / L3010 Out eter Pipeline 10" plete Outage dium Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%]	0 0 0 0 0 0 0 0 0 0 4.2.2.1 50 0 156 206 69 No	0 0 0 0 0 0 0 4.2.2.2 50 0 60 110 365 Yes 0% 97%	0 0 0 0 0 0 0 0 4.2.2.3 50 0 230 230 257 Yes 10% 100%	0 0 0 0 0 0 0 0 0 0 4.2.2.4 50 0 230 280 297 Yes 20% 100%	0 0 0 0 0 0 0 0 4.2.2.5 50 0 244 294 171 Yes 0% 44%	0 0 0 0 0 0 0 0 4.2.2.6 50 0 247 297 228 Yes 0% 57%
581 582 583 584 585 586 587 588 590 591 592 593 594 595 596 597 598	(Capacity) Number of Customers Affected Alt Diameter 1 Alternate Diam Line 3010 Com Otay Mesa Med Total Supply Total MMcfd S Immediate Cu Curtailment (%)	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Non-Core Non-EG [MMcfd] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] 0" / Otay Medium / L3010 Out eter Pipeline 10" plete Outage dium Supply hortfall tailment to EG Stations? Gas Core [%] Gas Core [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd]	0 0 0 0 0 0 0 0 0 4.2.2.1 50 0 156 206 69 No 0% 92%	0 0 0 0 0 0 0 0 4.2,2,2 50 0 60 110 365 Yes 0% 97% 100%	0 0 0 0 0 0 0 0 4.2.2.3 50 0 230 280 287 Yes 10% 100%	0 0 0 0 0 0 0 0 0 4.2.2.4 50 0 230 280 297 Yes 20% 100% 70	0 0 0 0 0 0 0 0 4.2.2.5 50 0 244 294 171 Yes 0% 44%	0 0 0 0 0 0 0 0 4.2.2.6 50 0 247 297 228 Yes 0% 57%
581 582 583 584 585 586 587 588 590 591 592 593 594 595 596 597 598 599	(Capacity) Number of Customers Affected Alt Diameter 1 Alternate Diam Line 3010 Com Otay Mesa Mer Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] O" / Otay Medium / L3010 Out eter Pipeline 10" plete Outage dium Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d]	0 0 0 0 0 0 0 0 0 0 4.2.2.1 50 0 156 206 69 No 0% 92% 0	0 0 0 0 0 0 0 0 0 4.2.2.2 50 0 60 110 365 Yes 0% 97% 100% 0	0 0 0 0 0 0 0 4.2.2.3 50 0 230 280 287 Yes 10% 100% 30 22,253	0 0 0 0 0 0 0 0 0 0 0 0 0 230 230 280 297 Yes 20% 100% 70 22,253	0 0 0 0 0 0 0 0 4.2.2.5 50 0 244 294 171 Yes 0% 440% 0	0 0 0 0 0 0 0 4.2.2.6 50 0 247 297 228 Yes 0% 57% 0
581 582 583 584 585 586 587 588 590 591 592 593 594 595 596 597 598 599 600	(Capacity) Number of Customers Affected Alt Diameter 1 Alternate Diam Line 3010 Com Otay Mesa Med Total Supply Total MMcfd S Immediate Cu Curtailment (%)	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] O" / Otay Medium / L3010 Out eter Pipeline 10" plete Outage dium Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW]	0 0 0 0 0 0 0 0 0 0 4.2.2.1 50 0 156 206 69 No 0% 0% 0%	0 0 0 0 0 0 0 0 0 0 4.2.2.2 50 0 60 110 365 Yes 0% 97% 100% 0 39,144 1,631	0 0 0 0 0 0 0 0 4.2.2.3 5.0 0 230 280 257 Yes 10% 100% 100% 30 22,253 927	0 0 0 0 0 0 0 0 0 4.2.2.4 50 0 230 280 297 Yes 20% 100% 100% 70 22,253	0 0 0 0 0 0 0 0 0 4.2.2.5 50 0 244 294 171 Yes 0% 44% 100% 0 12,928 539	0 0 0 0 0 0 0 0 0 4.2.2.6 50 0 247 297 228 Yes 0% 57% 100% 0
581 582 583 584 585 586 587 588 590 591 592 593 594 595 596 597 598 599 600 601	(Capacity) Number of Customers Affected Alt Diameter 1 Alternate Diam Line 3010 Com Otay Mesa Mer Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] O" / Otay Medium / L3010 Out eter Pipeline 10" plete Outage dium Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh] Gas Non-Core Non-EG [MMcfd]	0 0 0 0 0 0 0 0 0 4.2.2.1 50 0 156 206 69 No 0% 92% 0	0 0 0 0 0 0 0 0 4.2.2.2 50 0 60 110 365 Yes 0% 97% 100% 0 39,144 1,631 75	0 0 0 0 0 0 0 0 4.2.2.3 50 0 230 230 257 Yes 10% 100% 30 22,253 927	0 0 0 0 0 0 0 0 0 0 4.2.2.4 50 0 230 280 297 Yes 20% 100% 70 22,253 927 62	0 0 0 0 0 0 0 0 4.2.2.5 50 0 244 294 171 Yes 0% 44% 100% 0	0 0 0 0 0 0 0 0 0 4.2.2.6 50 0 247 297 228 Yes 0% 57% 100% 0
581 582 583 584 585 586 587 588 590 591 592 593 594 595 596 597 598 599 600	(Capacity) Number of Customers Affected Alt Diameter 1 Alternate Diam Line 3010 Com Otay Mesa Mer Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity)	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] O" / Otay Medium / L3010 Out eter Pipeline 10" plete Outage dium Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW]	0 0 0 0 0 0 0 0 0 0 4.2.2.1 50 0 156 206 69 No 0% 0% 0%	0 0 0 0 0 0 0 0 0 0 4.2.2.2 50 0 60 110 365 Yes 0% 97% 100% 0 39,144 1,631	0 0 0 0 0 0 0 0 4.2.2.3 5.0 0 230 280 257 Yes 10% 100% 100% 30 22,253 927	0 0 0 0 0 0 0 0 0 4.2.2.4 50 0 230 280 297 Yes 20% 100% 100% 70 22,253	0 0 0 0 0 0 0 0 0 4.2.2.5 50 0 244 294 171 Yes 0% 44% 100% 0 12,928 539	0 0 0 0 0 0 0 0 0 4.2.2.6 50 0 247 297 228 Yes 0% 57% 100% 0

Line No.		APPLICATION 15-09-013 VOLUME III	- COST-EFFEC	TIVENESS AN	ALYSIS (CORR	ECTED FEBR	(UARY 2017)	
1			1. Example Summer Low- EG Day MMcfd	2. Example Summer High EG Day MMcfd	3. Example Winter Day MMcfd	4. Winter 1- in-10 Year Day MMcfd	5. Example Spring Day MMcfd	6. Example Fall Day MMcfd
2	Α	В	С	D	Е	F	G	Н
605	Alt Diamotor 1	0" / Otay Low / L3010 80%	4.1.3.1	4.1.3.2	4.1.3.3	4.1.3.4	4.1.3.5	4.1.3.6
606 607		eter Pipeline 10"	50	50	<i>4.1.3.3</i> 50	50	50	50
608	Line 3010 at 80	% Supply	380	380	380	380	380	380
609	Otay Mesa Low	Supply	33	33	148	148	130	168
610 611	Total Supply Total MMcfd S	hortfall	463 0	463 12	578 0	578 0	560 0	598 0
612		tailment to EG Stations?	No	No	No	No	No	No
613	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
614 615	(%)	Gas EG [%] Gas Non-Core Non-EG [%]	0% 0%	0% 16%	0% 0%	0% 0%	0% 0%	0% 0%
616		Gas Core [MMcfd]	0	0	0	0	0	0
617	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
618 619	(Capacity)	Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	0	0 12	0	0	0	0
620	Number of	Gas Core [# Affected]	0	0	0	0	0	0
621	Customers	Gas EG [# Affected]	0	0	0	0	0	0
622	Affected	Gas Non-Core Non-EG [# Affected]	0	N/A	0	0	0	0
623 624	Alt Diameter 1	0" / Otay Low / L3010 Out	4.2.3.1	4.2.3.2	4.2.3.3	4.2.3.4	4.2.3.5	4.2.3.6
625		eter Pipeline 10"	50	50	50	50	50	50
626	Line 3010 Com	plete Outage	0	0	0	0	0	0
627	Otay Mesa Low	Supply	33	33	148	148	130	168
628 629	Total Supply Total MMcfd S	hortfall	83 192	83 392	198 339	198 379	180 285	218 307
630		tailment to EG Stations?	Yes	Yes	Yes	Yes	Yes	Yes
631	Curtailment	Gas Core [%]	17%	17%	36%	43%	0%	0%
632 633	(%)	Gas EG [%] Gas Non-Core Non-EG [%]	100% 100%	100% 100%	100% 100%	100% 100%	95% 100%	86% 100%
634		Gas Core [MMcfd]	17	17	112	152	0	0
635	Curtailment	Gas EG [MWh/d]	13,487	40,461	22,253	22,253	28,309	31,351
636	(Capacity)	Gas EG [MW]	562	1,686	927	927	1,180	1,306
637 638	Number of	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	75 145,018	75 145,018	62 313,622	62 377,076	75 0	75 0
639	Customers	Gas EG [# Affected]	N/A	N/A	N/A	N/A	N/A	N/A
640	Affected	Gas Non-Core Non-EG [# Affected]	N/A	N/A	N/A	N/A	N/A	N/A
641 642	Alt Diameter 1	0" / Otay Out / L3010 80%	4.1.4.1	4.1.4.2	4.1.4.3	4.1.4.4	4.1.4.5	4.1.4.6
643		eter Pipeline 10"	50	50	50	50	50	50
644	Line 3010 at 80		380	380	380	380	380	380
645	Otay Mesa No	Supply	0	0	0	0	0	0
646 647	Total Supply Total MMcfd S	hortfall	430 0	430 45	430 107	430 147	430 35	430 95
648		tailment to EG Stations?	No	No	Yes	Yes	No	Yes
649	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
650 651	(%)	Gas EG [%] Gas Non-Core Non-EG [%]	0% 0%	0% 60%	27% 100%	52% 100%	0% 47%	7% 100%
652		Gas Core [MMcfd]	0	0	0	0	0	0
653	Curtailment	Gas EG [MWh/d]	0	0	6,069	11,464	0	2,697
654 655	(Capacity)	Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	0	0 45	253 62	478 62	0 35	112 75
656	Number of	Gas Core [# Affected]	0	0	0	0	0	0
657	Customers	Gas EG [# Affected]	0	0	N/A	N/A	0	N/A
658 650	Affected	Gas Non-Core Non-EG [# Affected]	0	N/A	N/A	N/A	N/A	N/A
659 660	Alt Diameter 1	0" / Otay Out / L3010 Out	4.2.4.1	4.2.4.2	4.2.4.3	4.2.4.4	4.2.4.5	4.2.4.6
661	Alternate Diame	eter Pipeline 10"	50	50	50	50	50	50
662	Line 3010 Com		0	0	0	0	0	0
663 664	Otay Mesa No S	о ирріу	50	50	0 50	50	0 50	50
665	Total MMcfd S	hortfall	225	425	487	527	415	475
		tailment to EG Stations?	Yes	Yes	Yes	Yes	Yes	Yes
666	Immediate Cur	Ta a 1	50%	50%	84%	86%	71%	72%
666 667	Immediate Cur Curtailment	Gas Core [%]			1000/	1000/		1000/
666 667 668		Gas EG [%]	100%	100%	100% 100%	100% 100%	100%	100% 100%
666 667	Curtailment (%)	Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd]	100% 100% 50	100% 100% 50	100% 260	100% 300	100% 100% 120	100% 100% 130
666 667 668 669 670 671	Curtailment (%) Curtailment	Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d]	100% 100% 50 13,487	100% 100% 50 40,461	100% 260 22,253	100% 300 22,253	100% 100% 120 29,671	100% 130 36,414
666 667 668 669 670 671 672	Curtailment (%)	Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW]	100% 100% 50 13,487 562	100% 100% 50 40,461 1,686	100% 260 22,253 927	100% 300 22,253 927	100% 100% 120 29,671 1,236	100% 130 36,414 1,517
666 667 668 669 670 671 672 673	Curtailment (%) Curtailment	Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	100% 100% 50 13,487 562 75	100% 100% 50 40,461 1,686 75	100% 260 22,253 927 62	100% 300 22,253 927 62	100% 100% 120 29,671 1,236 75	100% 130 36,414 1,517 75
666 667 668 669 670 671 672	Curtailment (%) Curtailment (Capacity)	Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW]	100% 100% 50 13,487 562	100% 100% 50 40,461 1,686	100% 260 22,253 927	100% 300 22,253 927	100% 100% 120 29,671 1,236	100% 130 36,414 1,517

<u>No.</u>							
		1. Example Summer Low- EG Day MMcfd	2. Example Summer High- EG Day MMcfd	3. Example Winter Day MMcfd	4. Winter 1- in-10 Year Day MMcfd	5. Example Spring Day MMcfd	6. Example Fall Day MMcfd
Α	В	C	D	Е	F	G	н
Alternate Dia	meter Pipeline 12"						
Alt Diameter	12" / Otay Full / L3010 80%	5.1.1.1	5.1.1.2	5.1.1.3	5.1.1.4	5.1.1.5	5.1.1.6
Alternate Dian	neter Pipeline 12"	70 380	70 380	70 380	70 380	70 380	70 380
Otay Mesa Fu		295	86	313	313	329	324
Total Supply		745	536	763	763	779	774
Total MMcfd	Shortfall Irtailment to EG Stations?	0 No	0 No	0 No	0 No	0 No	0 No
Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
(%)	Gas EG [%] Gas Non-Core Non-EG [%]	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%
(70)	Gas Non-Core Non-EG [//s] Gas Core [MMcfd]	0	0	0	0	0	0
Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
(Capacity)	Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
Number of	Gas Core [# Affected]	0	0	0	0	0	0
Customers	Gas EG [# Affected]	0	0	0	0	0	0
Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
Alt Diameter	12" / Otay Full / L3010 Out	5.2.1.1	5.2.1.2	5.2.1.3	5.2.1.4	5.2.1.5	5.2.1.6
Alternate Dian	neter Pipeline 12"	70	70	70	70	70	70
Line 3010 Cor Otay Mesa Fu		0 295	0 86	0 313	0 313	0 329	0 324
Otay Mesa Fu Total Supply	іі Зирріу	365	156	383	383	329	394
Total MMcfd	Shortfall	0	319	154	194	66	131
	rtailment to EG Stations?	No	Yes	Yes	Yes	No	Yes
Curtailment	Gas Core [%] Gas EG [%]	0% 0%	0% 81%	0% 56%	0% 80%	0% 0%	0% 21%
(%)	Gas Non-Core Non-EG [%]	0%	100%	100%	100%	88%	100%
3	Gas Core [MMcfd]	0	0	0	0	0	0
Curtailment	Gas EG [MWh/d]	0	32,880	12,436	17,831	0	7,599
(Capacity)	Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	0	1,370 75	518 62	743 62	0 66	317 75
Number of	Gas Core [# Affected]	0	0	0	0	0	0
Customers	Gas EG [# Affected]	0	N/A	N/A	N/A	0	N/A
Affected	Gas Non-Core Non-EG [# Affected]	0	N/A	N/A	N/A	N/A	N/A
Alt Diameter	12" / Otay Medium / L3010 80%	5.1.2.1	5.1.2.2	5.1.2.3	5.1.2.4	5.1.2.5	5.1.2.6
	neter Pipeline 12"	70	70	70	70	70	70
Line 3010 at 8 Otay Mesa Me		000					
		380 156	380	380	380	380	380
	dium Supply	380 156 606					
Total Supply Total MMcfd	edium Supply Shortfall	156 606 0	380 60 510 0	380 230 680 0	380 230 680 0	380 244 694 0	380 247 697 0
Total Supply Total MMcfd Immediate Cu	Shortfall urtailment to EG Stations?	156 606 0 No	380 60 510 0 No	380 230 680 0 No	380 230 680 0 No	380 244 694 0 No	380 247 697 0 No
Total Supply Total MMcfd Immediate Cu Curtailment	Shortfall urtailment to EG Stations? Gas Core [%]	156 606 0	380 60 510 0	380 230 680 0	380 230 680 0	380 244 694 0	380 247 697 0
Total Supply Total MMcfd Immediate Cu Curtailment (%)	Shortfall urtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%]	156 606 0 No 0% 0% 0%	380 60 510 0 No 0% 0%	380 230 680 0 No 0% 0%	380 230 680 0 No 0% 0%	380 244 694 0 No 0% 0%	380 247 697 0 No 0% 0%
Total Supply Total MMcfd Immediate Ct Curtailment (%)	Shortfall Irtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd]	156 606 0 No 0% 0% 0%	380 60 510 0 No 0% 0% 0%	380 230 680 0 No 0% 0% 0%	380 230 680 0 No 0% 0% 0%	380 244 694 0 No 0% 0% 0%	380 247 697 0 No 0% 0% 0%
Total Supply Total MMcfd Immediate Ct Curtailment (%) Curtailment	Shortfall Irtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d]	156 606 0 No 0% 0% 0% 0 0	380 60 510 0 No 0% 0% 0% 0	380 230 680 0 No 0% 0% 0%	380 230 680 0 No 0% 0% 0% 0	380 244 694 0 No 0% 0% 0% 0%	380 247 697 0 No 0% 0% 0% 0 0
Total Supply Total MMcfd Immediate Curtailment (%) Curtailment (Curtailment (Capacity)	Shortfall Irtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd]	156 606 0 No 0% 0% 0%	380 60 510 0 No 0% 0% 0%	380 230 680 0 No 0% 0% 0%	380 230 680 0 No 0% 0% 0%	380 244 694 0 No 0% 0% 0% 0 0	380 247 697 0 No 0% 0% 0%
Total Supply Total MMcfd Immediate Ct Curtailment (%) Curtailment (Capacity) Number of	Shortfall Irtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [MMcfd] Gas Core [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	156 606 0 No 0% 0% 0% 0 0 0	380 60 510 0 No 0% 0% 0% 0 0 0	380 230 680 0 No 0% 0% 0% 0 0	380 230 680 0 0 0% 0% 0% 0 0 0 0	380 244 694 0 No 0% 0% 0% 0 0 0	380 247 697 0 No 0% 0% 0% 0 0 0
Total Supply Total MMcfd Immediate Ct Curtailment (%) Curtailment (Capacity) Number of Customers	Shortfall Irtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MW/d] Gas EG [MW/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected]	156 606 0 No 0% 0% 0% 0 0 0	380 60 510 0 No 0% 0% 0% 0 0 0 0	380 230 680 0 No 0% 0% 0 0 0 0 0	380 230 680 0 No 0% 0% 0% 0 0 0 0 0	380 244 694 0 No 0% 0% 0% 0 0 0 0	380 247 697 0 No 0% 0% 0% 0 0 0 0
Total Supply Total MMcfd Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected	dium Supply Shortfall Irrtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected]	156 606 0 No 0% 0% 0% 0 0 0	380 60 510 0 No 0% 0% 0% 0 0 0	380 230 680 0 No 0% 0% 0% 0 0	380 230 680 0 0 0% 0% 0% 0 0 0 0	380 244 694 0 No 0% 0% 0% 0 0 0	380 247 697 0 No 0% 0% 0% 0 0 0
Total Supply Total MMcfd Immediate Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Diameter	dium Supply Shortfall Intailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected]	156 606 0 No 0% 0% 0% 0 0 0 0 0 0	380 60 510 0 No 0% 0% 0 0 0 0 0 0	380 230 680 0 No 0% 0% 0 0 0 0 0 0	380 230 680 0 No 0% 0% 0 0 0 0 0 0 0 0	380 244 694 0 No 0% 0% 0 0 0 0 0 0 0	380 247 697 0 No 0% 0% 0 0 0 0 0 0 0
Total Supply Total MMcfd Immediate Ct Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Diameter Alternate Dian	Shortfall Intrallment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Id2" / Otay Medium / L3010 Out	156 606 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 5.2.2.1	380 60 510 0 No 0% 0% 0 0 0 0 0 0 0 0	380 230 680 0 No 0% 0% 0 0 0 0 0 0 0	380 230 680 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0	380 2444 694 0 No 0% 0% 0 0 0 0 0 0 0 0 0	380 247 697 0 No 0% 0% 0 0 0 0 0 0 0 0 0
Total Supply Total MMcfd Immediate Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Diameter	Adium Supply Shortfall Intailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Interest Pipeline 12" Inplete Outage	156 606 0 No 0% 0% 0% 0 0 0 0 0 0	380 60 510 0 No 0% 0% 0 0 0 0 0 0	380 230 680 0 No 0% 0% 0 0 0 0 0 0	380 230 680 0 No 0% 0% 0 0 0 0 0 0 0 0	380 244 694 0 No 0% 0% 0 0 0 0 0 0 0	380 247 697 0 No 0% 0% 0 0 0 0 0 0 0
Total Supply Total MMcfd Immediate Ci Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Diameter Alternate Dian Line 3010 Cor Otay Mesa Me	dium Supply Shortfall Intailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Interest Pipeline 12" Intelete Outage Indicated Intelest Int	156 606 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 156 226	380 60 510 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	380 230 680 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	380 230 680 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	380 244 694 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	380 247 697 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Total Supply Total MMcfd Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Diameter Alternate Dian Line 3010 Cor Otay Mesa Mes Total Supply Total MMcfd	dium Supply Shortfall Intailment to EG Stations? Gas EG [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Interest Pipeline 12" In the supply Shortfall	156 606 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 5.2.2.1 70 0 156 226	380 60 510 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	380 230 680 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	380 230 680 0 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0	380 2444 694 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2 5,2,2,5 70 0 0 244 314	380 247 697 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2 4 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Total Supply Total MMcfd Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Diameter Alternate Dian Line 3010 Cor Otay Mesa Mc Total Supply Total MMcfd Immediate Cu	Shortfall Intailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Intailment to EG Stations?	156 606 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 155.2,2.1 70 0 156 226 49 No	380 60 510 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	380 230 680 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	380 230 680 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	380 244 694 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 244 314 151 Yes	380 247 697 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Total Supply Total MMcfd Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Diameter Alternate Dian Line 3010 Cor Otay Mesa Mes Total Supply Total MMcfd Immediate Cu Curtailment	dium Supply Shortfall Irrtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWhod] Gas EG [MWhod] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Is a Kon-Core Non-EG [# Affected] Gas For [# Affected] Gas Non-Core Non-EG [# Affected] San Non-Core Non-EG [# Af	156 606 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 5.2.2.1 70 0 156 226	380 60 510 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	380 230 680 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	380 230 680 0 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0	380 2444 694 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2 5,2,2,5 70 0 0 244 314	380 247 697 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 2 47 317 208
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Total Supply Total MMcfd Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Diameter Alternate Dian Line 3010 Cor Otay Mesa Mc Total Supply Total MMcfd Immediate Cu Curtailment (%)	Intrailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Shortfall Intrailment to EG Stations? Gas Core [%] Gas Non-Core Non-EG [%]	156 606 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 156 226 49 No 0% 0% 66%	380 60 510 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	380 230 680 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2 3 7 0 0 3 3 0 0 3 3 3 3 3 3 3 3 3 3 3 3	380 230 680 0 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0	380 2444 694 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 2 5.2.2.5 70 0 0 244 314 151 Yes 0 0 4 0 4 10 10 10 10 10 10 10 10 10 10 10 10 10	380 247 697 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 2 47 247 317 208 Yes 0% 0% 0 49% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
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Total Supply Total MMcfd Immediate Ci Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Diameter Alternate Dian Line 3010 Cor Otay Mesa Me Total Supply Total MMcfd Immediate Ci Curtailment (%) Curtailment (%) Curtailment (Capacity)	Adium Supply Shortfall Intailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Ita'' / Otay Medium / L3010 Out Deter Pipeline 12" Dete	156 606 0 No 0% 0% 0% 0% 0 0 0 0 0 0 156 226 49 No 0% 0% 66% 0 0	380 60 510 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 130 345 Yes 0% 90% 100% 0 36,447 1,519	380 230 680 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 230 3300 237 Yes 3% 100% 100% 10 22,253	380 230 680 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	380 244 694 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 244 314 151 Yes 0% 34% 100% 0 10,231	380 247 697 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Summer Low- Summer Low- B	Day in-10 Year Day MMcfd Spring Day MMcfd Fall Day MMcfd F G H 3 5.1.3.4 5.1.3.5 5.1.3.6 70 70 70 380 380 380 380 380 148 130 168 598 580 618 0 0 0 No No No No 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Alt Diameter 12" / Otay Low / L3010 80% 5.1.3.1 5.1.3.2 5.1.3.3 5.1.3.4 5.1.3.5	3 5.1.3.4 5.1.3.5 5.1.3.6 70 70 70 380 380 380 380 168 148 130 168 598 580 618 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
The color of the	70 70 70 380 380 380 148 130 168 598 580 618 0 0 0 No No No No No No 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 148 130 168 218 200 238 359 265 287 Yes Yes Yes 38% 0% 0% 0 0% 0%
Alternate Diameter Pipeline 12" 70 70 70 70 70 70 70 7	70 70 70 380 380 380 148 130 168 598 580 618 0 0 0 No No No No No No 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 148 130 168 218 200 238 359 265 287 Yes Yes Yes 38% 0% 0% 0 0% 0%
Total Supply	148 130 168 598 580 618 0 0 0 No No No No No No 0% 0% 0% 0% 0% 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 148 130 168 218 200 238 359 265 287 Yes Yes Yes 38% 0% 0% 0 0% 0% 0 100% 100% <
Total Supply	598 580 618 0 0 0 No No No 0% 0% 0% 0% 0% 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 148 130 168 218 200 238 359 265 287 Yes Yes Yes 38% 0% 0% 0 100% 86% 79% 0 100% 100% 100% 132 0 0 0 3 22,253 25,612 28,653 927 1,067 1,194
Total MMcfd Shortfall	0 0 0 No No No 0% 0% 0% 0% 0% 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 148 130 168 218 200 238 359 265 287 Yes Yes Yes 38% 0% 0% 0 0% 0% 0 100% 86% 79% 0 100% 100% 100% 100% 100% 100% 100% 100 100 100% 100% 100 100 100% 100%
Curtailment Gas Core [%] 0% 0% 0% 0% 0% 0% 0%	0% 0% 0% 0% 0% 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 148 130 168 218 200 238 359 265 287 Yes Yes Yes 38% 0% 0% 0 100% 86% 79% 0 100% 100% 100% 132 0 0 0 3 22,253 25,612 28,653 927 1,067 1,194
Curtailment (%) Gas EG [%] 0% 0% 0% 0% 0% 0% 0%	0% 0% 0% 0% 0% 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 148 130 168 218 200 238 359 265 287 Yes Yes Yes 38% 0% 0% 0 100% 86% 79% 0 100% 100% 100% 132 0 0 0 3 22,253 25,612 28,653 927 1,067 1,194
Total Supply Tota	0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 148 130 168 218 200 238 359 265 287 Yes Yes Yes 38% 0% 0% 0 100% 86% 79% 0 100% 100% 100% 132 0 0 0 3 22,253 25,612 28,653 927 1,067 1,194
Curtailment Gas EG [MWh/d] 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 148 130 168 218 200 238 359 265 287 Yes Yes Yes 38% 0% 0% 0 100% 86% 79% 0 100% 100% 100% 132 0 0 0 3 22,253 25,612 28,653 927 1,067 1,194
Capacity Gas EG [MW]	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 148 130 168 218 200 238 359 265 287 Yes Yes Yes 38% 0% 0% 0 100% 86% 79% 0 100% 100% 100% 132 0 0 0 3 22,253 25,612 28,653 927 1,067 1,194
Total Supply Total Supply Total Mmcfd Shortfall Total Supply Tota	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 148 130 168 218 200 238 359 265 287 Yes Yes Yes 38% 0% 0% 0 100% 86% 79% 0 100% 100% 100% 132 0 0 0 3 22,253 25,612 28,653 927 1,067 1,194
Customers Gas EG [# Affected] O O O O O	0 0 0 0 0 0 3 5.2.3.4 5.2.3.5 5.2.3.6 70 70 70 70 0 0 0 0 148 130 168 168 218 200 238 359 265 287 Yes Yes Yes Yes Yes 9 38% 0% 0% 0% 0% 0% 0% 0 0 0 100%
Affected Gas Non-Core Non-EG [# Affected] 0 0 0 0 769 Alt Diameter 12" / Otay Low / L3010 Out 5.2.3.1 5.2.3.2 5.2.3.3 5.2.3.4 5 771 Alternate Diameter Pipeline 12" 70 70 70 70 772 Line 3010 Complete Outage 0 0 0 0 0 773 Otay Mesa Low Supply 33 33 148 148 774 Total Supply 103 218 218 775 Total MMcfd Shortfall 172 372 319 359 Immediate Curtailment to EG Stations? Yes Yes Yes Yes Yes 777 Gas Core [%] 0% 0% 30% 38% 777 Gas EG [%] 97% 99% 100% 100% 778 Gas Core [Mcfd] 0 0 92 132 781 Curtailment Gas EG [MWcfd] 13,041 40,014 22,253 22,253 2 <	0 0 0 3 5.2.3.4 5.2.3.5 5.2.3.6 70 70 70 70 0 0 0 0 148 130 168 218 200 238 359 265 287 Yes Yes Yes 38% 0% 0% 0 100% 86% 79% 0 100% 100% 100% 132 0 0 0 3 22,253 25,612 28,653 927 1,067 1,194
769 770	70 70 70 70 70 70 0 0 0 0 148 130 168 218 200 238 359 265 287 Yes Yes Yes 38% 0% 0% 0% 0% 100% 100% 100% 132 0 0 0 3 22,253 25,612 28,653 927 1,067 1,194
Alternate Diameter Pipeline 12" 70 70 70 70 70 70 70 7	70 70 70 0 0 0 148 130 168 218 200 238 359 265 287 Yes Yes Yes 38% 0% 0% 0 100% 86% 79% 0 100% 100% 100% 132 0 0 0 3 22,253 25,612 28,653 927 1,067 1,194
772 Line 3010 Complete Outage 0 0 0 0 773 Otay Mesa Low Supply 33 33 148 148 774 Total Supply 103 103 218 218 775 Total MMcfd Shortfall 172 372 319 359 Immediate Curtailment to EG Stations? Yes Yes Yes Yes 777 Curtailment (%) Gas Core [%] 0% 0% 30% 38% 789 Gas FG [%] 97% 99% 100% 100% 780 Gas Non-Core Non-EG [%] 100% 100% 100% 100% 781 Curtailment Gas EG [MMcfd] 0 0 92 132 782 Curtailment Gas EG [MW] 13,041 40,014 22,253 22,253 2 783 Gas Non-Core Non-EG [MMcfd] 75 75 62 62 784 Number of Gas Core [# Affected] 0 0 257,568 327,428 785 <td< td=""><td>0 0 0 148 130 168 218 200 238 359 265 287 Yes Yes Yes 38% 0% 0% 0 100% 86% 79% 0 100% 100% 100% 132 0 0 0 3 22,253 25,612 28,653 927 1,067 1,194</td></td<>	0 0 0 148 130 168 218 200 238 359 265 287 Yes Yes Yes 38% 0% 0% 0 100% 86% 79% 0 100% 100% 100% 132 0 0 0 3 22,253 25,612 28,653 927 1,067 1,194
773 Otay Mesa Low Supply 33 33 148 148 774 Total Supply 103 103 218 218 775 Total MMcfd Shortfall 172 372 319 359 776 Immediate Curtailment to EG Stations? Yes Yes Yes 777 Gas Core [%] 0% 0% 30% 38% 778 Gas EG [%] 97% 99% 100% 100% 780 Gas Non-Core Non-EG [%] 100% 100% 100% 100% 781 Curtailment Gas EG [MWrdd] 0 0 92 132 782 (Capacity) Gas EG [MW] 13,041 40,014 22,253 22,253 2 783 Gas Non-Core Non-EG [MMcfd] 75 75 62 62 784 Number of Gas Core [# Affected] 0 0 257,568 327,428 785 Customers Gas EG [# Affected] N/A N/A N/A	218 200 238 359 265 287 Yes Yes Yes 38% 0% 0% 0 100% 86% 79% 0 100% 100% 100% 132 0 0 0 3 22,253 25,612 28,653 927 1,067 1,194
Total MMcfd Shortfall 172 372 319 359	359 265 287 Yes Yes Yes 38% 0% 0% 5 100% 86% 79% 5 100% 100% 100% 6 132 0 0 3 22,253 25,612 28,653 927 1,067 1,194
Immediate Curtailment to EG Stations? Yes	Yes Yes Yes 38% 0% 0% 0 100% 86% 79% 0 100% 100% 100% 132 0 0 0 3 22,253 25,612 28,653 927 1,067 1,194
Curtailment (%) Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] 780 781 Curtailment (Gas Core [%] Gas Non-Core Non-EG [%] Gas Non-Core Non-EG [%] Gas Non-Core Non-EG [%] Curtailment (Gas Core [MMcfd]) Gas Core [MMcfd] Gas EG [MWh/d] Taylor (Capacity) Gas EG [MW] Taylor (Gas EG [MW] Tayl	38% 0% 0% 0% 0% 100% 86% 79% 0 100% 100% 100% 100% 132 0 0 0 3 22,253 25,612 28,653 927 1,067 1,194
Case Gase	0 100% 100% 100% 132 0 0 3 22,253 25,612 28,653 927 1,067 1,194
Gas Core [MW/d]	132 0 0 3 22,253 25,612 28,653 927 1,067 1,194
781 Curtailment Gas EG [MWh/d] 13,041 40,014 22,253 22,253 2 782 (Capacity) Gas EG [MW] 543 1,667 927 927 783 Gas Non-Core Non-EG [MMcfd] 75 75 62 62 784 Number of Ros Core [# Affected] 0 0 257,568 327,428 785 Customers Gas EG [# Affected] N/A N/A N/A N/A	3 22,253 25,612 28,653 927 1,067 1,194
783 Gas Non-Core Non-EG [MMcfd] 75 75 62 62 784 Number of Restriction Gas Core [# Affected] 0 0 257,568 327,428 785 Customers Gas EG [# Affected] N/A N/A N/A N/A	
784 Number of T85 Gas Core [# Affected] 0 0 257,568 327,428 785 Customers Gas EG [# Affected] N/A N/A N/A N/A	62 75 75
785 Customers Gas EG [# Affected] N/A N/A N/A N/A	
786 Affected Gas Non-Core Non-EG [# Affected] N/A N/A N/A N/A	
	N/A N/A N/A
787 788 Alt Diameter 12" / Otay Out / L3010 80% 5.1.4.1 5.1.4.2 5.1.4.3 5.1.4.4 5	3 5.1.4.4 5.1.4.5 5.1.4.6
789 Alternate Diameter Pipeline 12" 70 70 70 70	70 70 70
790 Line 3010 at 80% Supply 380 380 380 791 Otay Mesa No Supply 0 0 0 0	
791 Otal Supply 0 0 0 0 0 0 0 792 792 Total Supply 450 450 450 450	
793 Total MMcrid Shortfall 0 25 87 127	127 15 75
794 Immediate Curtailment to EG Stations? No No Yes Yes	
706 Curtailment Gas FG 1%1 0% 0% 15% 39%	
797 (%) Gas Non-Core Non-EG [%] 0% 33% 100% 100%	0% 0% 0% 39% 0% 0%
	39% 0% 0% 5 100% 20% 100%
	39% 0% 0% 0 100% 20% 100% 0 0 0 0
801 Gas Non-Core Non-EG [MMcfd] 0 25 62 62	39% 0% 0% 100% 20% 100% 0 0 0 0 8,766 0 0
OOO [Number of Con Care [# Affected]]	39% 0% 0% 100% 20% 100% 0 0 0 8,766 0 0 365 0 0 62 15 75
	39% 0% 0% 0 100% 20% 100% 0 0 0 0 2 8,766 0 0 365 0 0 0 62 15 75 0 0 0
803 Customers Gas Cofe # Affected] 0 0 0 N/A N/A 804 Affected Gas Non-Core Non-EG [# Affected] 0 N/A N/A N/A	39% 0% 0% 0% 100% 100% 0 0 0 0 0 0 0 0 0 0
803	39% 0% 0% 0% 100% 100% 20% 100% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
803	39% 0% 0% 0% 0 0 0 100% 0 0 0 0 0 0 0 0 0
803	39% 0% 0% 0% 0% 0 0 0 100% 0 0 0 0 0 0 0 0
803 Customers Gas EG [# Affected] 0 0 N/A N/A 804 Affected Gas Non-Core Non-EG [# Affected] 0 N/A N/A N/A 805 Alt Diameter 12" / Otay Out / L3010 Out 5.2.4.1 5.2.4.2 5.2.4.3 5.2.4.4 5 807 Alternate Diameter Pipeline 12" 70 70 70 70 808 Line 3010 Complete Outage 0 0 0 0 809 Otay Mesa No Supply 0 0 0 0	39% 0% 0% 0% 0% 100% 0 100% 20% 100% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Customers Gas EG [# Affected] 0	39% 0% 0% 0% 0% 0 0 0 100% 0 0 0 0 0 0 0 0
Customers Gas EG [# Affected] 0 0 N/A N/A Affected Gas Non-Core Non-EG [# Affected] 0 N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/	39% 0% 0% 0% 0% 0 0 0 100% 0 0 0 0 0 0 0 0
Customers Gas EG [# Affected] 0	39% 0% 0% 0% 0% 100% 100% 20% 100% 20% 100% 20% 100% 20% 100% 20% 100% 20% 20% 20% 20% 20% 20% 20% 20% 20%
Customers Gas EG [# Affected] 0 0 N/A N/A N/A N/A Affected Gas Non-Core Non-EG [# Affected] 0 N/A N/	39% 0% 0% 0% 0% 100% 100% 0 0 0 0 0 0 0 0
Customers Gas EG [# Affected] 0 0 N/A	39% 0% 0% 0% 0% 100% 100% 0 0 0 0 0 0 0 0
Customers Gas EG [# Affected] O O N/A N/A Affected Gas Non-Core Non-EG [# Affected] O N/A N/A N/A	39% 0% 0% 0% 0% 0 0 0 100% 0 0 0 0 0 0 0 0
Customers Gas EG [# Affected] O O N/A N/A	39% 0% 0% 0% 0% 100% 100% 20% 100% 20% 100% 20% 100% 20% 100% 20% 100% 20% 100% 20% 20% 20% 20% 20% 20% 20% 20% 20%
Customers Gas EG [# Affected] O O N/A N/A Affected Gas Non-Core Non-EG [# Affected] O N/A N/A N/A N/A N/A N/A	39% 0% 0% 0% 0% 100% 100% 0 0 0 0 0 0 0 0
Customers Gas EG [# Affected] O O N/A N/A Affected Gas Non-Core Non-EG [# Affected] O N/A N/A N/A N/A N/A N/A	39% 0% 0% 0% 0% 0 0 0 100% 0 0 0 0 0 0 0 0

<u>o.</u>		1 Evenuela	2 Evenuele				
		1. Example Summer Low- EG Day MMcfd	2. Example - Summer High - EG Day - MMcfd	3. Example Winter Day MMcfd	4. Winter 1- in-10 Year Day MMcfd	5. Example Spring Day MMcfd	6. Example Fall Day MMcfd
Α	В	С	D	E	F	G	Н
	neter Pipeline 16"						
	6" / Otay Full / L3010 80%	6.1.1.1	6.1.1.2	6.1.1.3	6.1.1.4	6.1.1.5	6.1.1.6
	eter Pipeline 16"	160	160	160	160	160	160
Line 3010 at 80 Otay Mesa Full		380 295	380 86	380 313	380 313	380 329	380 324
Total Supply	Зирріу	835	626	853	853	869	864
Total MMcfd S	hortfall	0	0	0	0	0	0
	rtailment to EG Stations?	No	No	No	No	No	No
Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
(%)	Gas EG [%]	0%	0%	0%	0%	0%	0%
(,	Gas Non-Core Non-EG [%] Gas Core [MMcfd]	0%	0%	<u>0%</u> 0	0%	<u>0%</u> 0	0%
Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
(Capacity)	Gas EG [MW]	0	0	0	0	0	0
(**,****,***	Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
Number of	Gas Core [# Affected]	0	0	0	0	0	0
Customers	Gas EG [# Affected]	0	0	0	0	0	0
Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
Alt Diameter 1	6" / Otay Full / L3010 Out	6.2.1.1	6.2.1.2	6.2.1.3	6.2.1.4	6.2.1.5	6.2.1.6
	eter Pipeline 16"	160	160	160	160	160	160
Line 3010 Com		0	0	0	0	0	0
Otay Mesa Full	Supply	295	86	313	313	329	324
Total Supply		455	246	473	473	489	484
Total MMcfd S		0	229	64	104	0	41
Immediate Cu	rtailment to EG Stations?	No	Yes	Yes	Yes	No	No
Curtailment	Gas Core [%] Gas EG [%]	0% 0%	0% 51%	0% 1%	0% 26%	0% 0%	0% 0%
(%)	Gas Non-Core Non-EG [%]	0%	100%	100%	100%	0%	55%
	Gas Core [MMcfd]	0	0	0	0	0	0
Curtailment	Gas EG [MWh/d]	0	20,742	298	5,693	0	0
(Capacity)	Gas EG [MW]	0	864	12	237	0	0
	Gas Non-Core Non-EG [MMcfd]	0	75	62	62	0	41
Number of	Gas Core [# Affected]	0	0	0	0	0	0
Customers Affected	Gas EG [# Affected] Gas Non-Core Non-EG [# Affected]	0	N/A N/A	N/A N/A	N/A N/A	0	N/A
Allected	Gas Non Cold Non EG [# Anddida]	, ,	INA	IV/A	IN/A		IV/A
Alt Diameter 1	6" / Otay Medium / L3010 80%	6.1.2.1	6.1.2.2	6.1.2.3	6.1.2.4	6.1.2.5	6.1.2.6
Alternate Diam	eter Pipeline 16"	160	160	160	160	160	160
Line 3010 at 80		380	380	380	380	380	380
Otay Mesa Me	lium Supply	156	60	230	230	244	247
Total Supply Total MMcfd S	hortfall	696	600	770 0	770	784 0	787 0
	rtailment to EG Stations?	No	No	No	No	No	No
	Gas Core [%]	0%	0%	0%	0%	0%	0%
Curtailment	Gas EG [%]	0%	0%	0%	0%	0%	0%
(%)	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
	Gas Core [MMcfd]	0	0	0	0	0	0
Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
(Capacity)	Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
Number of	Gas Core [# Affected]	0	0	0	0	0	0
Customers	Gas EG [# Affected]	0	0	0	0	0	0
Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
	6" / Otay Medium / L3010 Out	6.2.2.1	6.2.2.2	6.2.2.3	6.2.2.4	6.2.2.5	6.2.2.6
Line 3010 Com	eter Pipeline 16"	160	160 0	160 0	160	160 0	160
		156	60	230	230	244	247
Otay Mesa Med		316	220	390	390	404	407
Otay Mesa Med Total Supply	hortfall	0	255	147	187	61	118
Otay Mesa Med Total Supply Total MMcfd S	iioitiaii	No	Yes	Yes	Yes	No	Yes
Total Supply Total MMcfd S	rtailment to EG Stations?		0%	0%	0%	0%	0%
Total Supply Total MMcfd S Immediate Cu	rtailment to EG Stations? Gas Core [%]	0%			760/	0%	16%
Total Supply Total MMcfd S Immediate Cu Curtailment	rtailment to EG Stations? Gas Core [%] Gas EG [%]	0%	60%	52%	76%		
Total Supply Total MMcfd S Immediate Cu	rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%]	0% 0%	60% 100%	100%	100%	81%	100%
Total Supply Total MMcfd S Immediate Cu Curtailment (%)	rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd]	0% 0% 0	60% 100% 0	100% 0	100%	81% 0	100% 0
Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment	rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d]	0% 0% 0	60% 100% 0 24,309	100% 0 11,475	100% 0 16,870	81% 0 0	100% 0 5,777
Total Supply Total MMcfd S Immediate Cu Curtailment (%)	rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd]	0% 0% 0	60% 100% 0	100% 0	100%	81% 0	100% 0
Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment	rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW]	0% 0% 0 0	60% 100% 0 24,309 1,013	100% 0 11,475 478	100% 0 16,870 703	81% 0 0 0	100% 0 5,777 241
Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity)	rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	0% 0% 0 0 0	60% 100% 0 24,309 1,013 75	100% 0 11,475 478 62	100% 0 16,870 703 62	81% 0 0 0 0	100% 0 5,777 241 75

Line No.			,		UARY 2017)	
1	1. Example Summer Low- EG Day MMcfd	2. Example Summer High EG Day MMcfd	3. Example Winter Day MMcfd	4. Winter 1- in-10 Year Day MMcfd	5. Example Spring Day MMcfd	6. Example Fall Day MMcfd
2 A B	С	D	Е	F	G	Н
897 898 Alt Diameter 16" / Otay Low / L3010 80%	6.1.3.1	6.1.3.2	6.1.3.3	6.1.3.4	6.1.3.5	6.1.3.6
899 Alternate Diameter Pipeline 16"	160	160	160	160	160	160
900 Line 3010 at 80% Supply	380	380	380	380	380	380
901 Otay Mesa Low Supply	33	33	148	148	130	168
902 Total Supply 903 Total MMcfd Shortfall	573 0	573 0	688 0	688	670 0	708 0
904 Immediate Curtailment to EG Stations?	No	No	No	No	No	No
905 Curtailment Gas Core [%]	0%	0%	0%	0%	0%	0%
906 907 (%) Gas EG [%] Gas Non-Core Non-EG [%]	0%	0% 0%	0% 0%	0%	0% 0%	0% 0%
908 Gas Core [MMcfd]	0	0	0	0	0	0
909 Curtailment Gas EG [MWh/d]	0	0	0	0	0	0
910 (Capacity) Gas EG [MW] 911 Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
911 Gas Non-Core Non-EG [MMcfd] 912 Number of Gas Core [# Affected]	0	0	0	0	0	0
913 Customers Gas EG [# Affected]	0	0	0	0	0	0
914 Affected Gas Non-Core Non-EG [# Affect	ed] 0	0	0	0	0	0
915 916 Alt Diameter 16" / Otay Low / L3010 Out	6.2.3.1	6.2.3.2	6.2.3.3	6.2.3.4	6.2.3.5	6.2.3.6
917 Alternate Diameter Pipeline 16"	160	160	160	160	160	160
918 Line 3010 Complete Outage	0	0	0	0	0	0
919 Otay Mesa Low Supply	33	33	148	148	130	168
920 Total Supply 921 Total MMcfd Shortfall	193 82	193 282	308 229	308 269	290 175	328 197
922 Immediate Curtailment to EG Stations?	Yes	Yes	Yes	Yes	Yes	Yes
923 Gurtailment Gas Core [%]	0%	0%	1%	12%	0%	0%
924 (%) Gas EG [%]	7% 100%	69%	100%	100%	45% 100%	45%
925 Gas Non-Core Non-EG [%] 926 Gas Core [MMcfd]	0	100%	100% 2	100% 42	0	100%
927 Curtailment Gas EG [MWh/d]	902	27,876	22,253	22,253	13,473	16,515
928 (Capacity) Gas EG [MW]	38	1,162	927	927	561	688
929 Gas Non-Core Non-EG [MMcfd] 930 Number of Gas Core [# Affected]	75	75 0	62 5,325	62 104,012	75 0	75 0
931 Customers Gas EG [# Affected]	N/A	N/A	N/A	N/A	N/A	N/A
932 Affected Gas Non-Core Non-EG [# Affect	ed] N/A	N/A	N/A	N/A	N/A	N/A
933 934 Alt Diameter 16" / Otay Out / L3010 80%	6.1.4.1	6.1.4.2	6.1.4.3	6.1.4.4	6.1.4.5	6.1.4.6
935 Alternate Diameter Pipeline 16"	160	160	160	160	160	160
936 Line 3010 at 80% Supply	380	380	380	380	380	380
Otay Mesa No Supply	0	0	0	0	0	0
938 Total Supply 939 Total MMcfd Shortfall	540 0	540 0	540 0	540 37	540 0	540 0
940 Immediate Curtailment to EG Stations?	No	No	No	No	No	No
941 Curtailment Gas Core [%]	0%	0%	0%	0%	00/	
942 (9/) Gas EG [%]	0%				0%	0%
042 IV'' IGas Non-Core Non-EG [%]	00/-	0%	0%	0%	0%	0% 0%
943 Gas Non-Core Non-EG [%] 944 Gas Core [MMcfd]	0%	0% 0% 0	0% 0% 0			0%
944 Gas Non-Core (MMcfd] 945 Curtailment Gas EG [MWh/d]	0	0% 0 0	0% 0 0	0% 60% 0	0% 0% 0	0% 0% 0% 0
944 945	0 0 0	0% 0 0	0% 0 0	0% 60% 0 0	0% 0% 0 0	0% 0% 0% 0 0
944 945 Curtailment 946 (Capacity) Gas EG [MW] 947 Gas Ron-Core Non-EG [MMcfd] Gas EG [MW]	0	0% 0 0	0% 0 0	0% 60% 0	0% 0% 0	0% 0% 0% 0
Gas Notification Gas Core [MMcfd]	0 0 0 0 0	0% 0 0 0 0 0	0% 0 0 0 0 0	0% 60% 0 0 0 37 0	0% 0% 0 0 0 0 0	0% 0% 0% 0 0 0 0 0
Gas Non-Core Non-EG [# Affected] Gas Core [Mortol]	0 0 0 0 0	0% 0 0 0 0	0% 0 0 0 0	0% 60% 0 0 0 37	0% 0% 0 0 0 0	0% 0% 0% 0 0 0 0
Gas Non-Core Non-EG [# Affected 945 946 946 947 948 Number of Gas EG [# Affected 949 949 946 947 948 949	0 0 0 0 0	0% 0 0 0 0 0	0% 0 0 0 0 0 0	0% 60% 0 0 0 37 0 0 N/A	0% 0% 0 0 0 0 0 0	0% 0% 0% 0 0 0 0 0 0
Gas Non-Core Non-EG Formation	0 0 0 0 0 0 0 ed] 0	0% 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 0 6.2.4.3	0% 60% 0 0 0 37 0 0 N/A	0% 0% 0 0 0 0 0 0 0 0 0 0	0% 0% 0% 0 0 0 0 0 0 0 0
Gas Core [MMcfd]	0 0 0 0 0 0 0 0 ed] 0	0% 0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 0 0 6.2.4.3 160	0% 60% 0 0 0 37 0 N/A	0% 0% 0 0 0 0 0 0 0 0 0 0	0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Gas Non-Core Non-EG [MMcfd]	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 0 6.2.4.3 160 0 0	0% 60% 0 0 0 37 0 0 N/A	0% 0% 0 0 0 0 0 0 0 0 0 0 0	0% 0% 0% 0 0 0 0 0 0 0 0 0 0
Gas Core [MMcfd]	0 0 0 0 0 0 0 0 ed] 0	0% 0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 0 0 6.2.4.3 160	0% 60% 0 0 0 37 0 N/A	0% 0% 0 0 0 0 0 0 0 0 0 0	0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Gas Core [MMcfd]	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 0 0 0 0 160 315 Yes	0% 0 0 0 0 0 0 0 0 0 0 6.2.4.3 160 0 160 377 Yes	0% 60% 0 0 0 37 0 0 N/A 160 0 160 417 Yes	0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 160 160 365 Yes
Gas Core [MMcfd]	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 0 0 0 160 315 Yes 0%	0% 0 0 0 0 0 0 0 0 0 0 0 0 0 160 3777 Yes 48%	0% 60% 0 0 0 37 0 0 N/A 6.2.4.4 160 0 0 160 417 Yes 54%	0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 160 305 Yes 6%	0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 160 160 365 Yes 11%
Gas Core [MMcfd]	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 0 0 0 160 315 Yes 0% 80%	0% 0 0 0 0 0 0 0 0 0 0 0 160 377 Yes 48% 100%	0% 60% 0 0 0 37 0 0 N/A 6.2.4.4 160 0 0 160 417 Yes 54% 100%	0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 160 305 Yes 6% 100%	0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 160 160 365 Yes 11% 100%
Gas Core [MMcfd]	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 0 0 0 160 315 Yes 0%	0% 0 0 0 0 0 0 0 0 0 0 0 0 0 160 3777 Yes 48%	0% 60% 0 0 0 0 N/A 6.2.4.4 160 0 160 417 Yes 54%	0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 160 305 Yes 6%	0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 160 160 365 Yes 11%
Gas Core [MMcfd]	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 0 0 0 0 6.2.4.2 160 0 160 315 Yes 0% 80% 100% 0 32,368	0% 0 0 0 0 0 0 0 0 0 0 0 0 6.2.4.3 160 0 160 377 Yes 48% 100% 150 22,253	0% 60% 0 0 0 0 N/A 6.2.4.4 160 0 160 417 Yes 54% 100% 100% 190 22,253	0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 160 305 Yes 6% 100% 10 29,671	0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 1 0 0 1 6.2.4.6 160 0 0 160 365 Yes 11% 100% 20 36,414
Gas Core [MMcfd]	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 0 0 0 160 315 Yes 0% 80% 100% 0 32,368 1,349	0% 0 0 0 0 0 0 0 0 0 0 0 0 160 377 Yes 48% 100% 150 22,253 927	0% 60% 0 0 0 0 N/A 6.2.4.4 160 0 160 417 7es 54% 100% 100% 190 22,253 927	0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 160 160 365 Yes 11% 100% 100% 20 36,414 1,517
Gas Non-Core Non-EG [MMcfd]	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 0 0 0 0 160 315 Yes 0% 80% 100% 0 32,368 1,349 75	0% 0 0 0 0 0 0 0 0 0 0 0 0 0 160 377 Yes 48% 100% 100% 150 22,253 927 62	0% 60% 0 0 0 0 N/A 160 160 417 Yes 54% 100% 100% 190 22,253 927 62	0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 160 305 Yes 6% 100% 100% 100% 17,236 75	0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 160 365 Yes 11% 100% 20 36,414 1,517
Gas Core [MMcfd]	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 0 0 0 160 315 Yes 0% 80% 100% 0 32,368 1,349	0% 0 0 0 0 0 0 0 0 0 0 0 0 160 377 Yes 48% 100% 150 22,253 927	0% 60% 0 0 0 0 N/A 6.2.4.4 160 0 160 417 7es 54% 100% 100% 190 22,253 927	0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 160 160 365 Yes 11% 100% 100% 20 36,414 1,517

Line No.		APPLICATION 15-09-013 VOLUME III			ALYSIS (CORR	ECTED FEBR	(UARY 2017)	
			1. Example Summer Low-	2. Example Summer High-	3. Example	4. Winter 1-	5. Example	6. Example
1			EG Day	EG Day	Winter Day	in-10 Year	Spring Day	Fall Day
			MMcfd	MMcfd	MMcfd	Day MMcfd	MMcfd	MMcfd
2	Α	В	С	D	Е	F	G	Н
969 970	Alternate Dian	neter Pipeline 20"						
971 972	Alt Diameter 2	0" / Otay Full / L3010 80%	20.1.1.1	20.1.1.2	20.1.1.3	20.1.1.4	20.1.1.5	20.1.1.6
973		eter Pipeline 20"	250	250	250	250	250	250
974	Line 3010 at 80		380	380	380	380	380	380
975 976	Otay Mesa Full Total Supply	Supply	295 925	86 716	313 943	313 943	329 959	324 954
976	Total MMcfd S	hortfall	0	0	0	0	959	0
978		rtailment to EG Stations?	No	No	No	No	No	No
979	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
980	(%)	Gas EG [%] Gas Non-Core Non-EG [%]	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%
981 982		Gas Core [MMcfd]	0	0	0	0	0	0
983	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
984	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
985 986	Number of	Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
986 987	Customers	Gas Core [# Affected] Gas EG [# Affected]	0	0	0	0	0	0
988	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
989	AK Di	2011/2012 5 11/1 2012 6	00.044	22.24.2	00.04.0	00044	22.2.4.5	22.2.4.2
990 991		eter Pipeline 20"	20.2.1.1 250	20.2.1.2 250	20.2.1.3 250	20.2.1.4 250	20.2.1.5 250	20.2.1.6 250
991	Line 3010 Com		0	0	0	0	0	0
993	Otay Mesa Full		295	86	313	313	329	324
994	Total Supply		545	336	563	563	579	574
995	Total MMcfd S	hortfall rtailment to EG Stations?	0 No	139 Yes	0 No	14 No	0 No	0 No
996 997		Gas Core [%]	0%	0%	0%	0%	0%	0%
998	Curtailment	Gas EG [%]	0%	21%	0%	0%	0%	0%
999	(%)	Gas Non-Core Non-EG [%]	0%	100%	0%	23%	0%	0%
1000	Curtailment	Gas Core [MMcfd]	0	0 8,604	0	0	0	0
1001 1002	(Capacity)	Gas EG [MWh/d] Gas EG [MW]	0	358	0	0	0	0
1003	(Gupuony)	Gas Non-Core Non-EG [MMcfd]	0	75	0	14	0	0
1004	Number of	Gas Core [# Affected]	0	0	0	0	0	0
1005 1006	Customers	Gas EG [# Affected] Gas Non-Core Non-EG [# Affected]	0	N/A N/A	0	0 N/A	0	0
1006	Affected	Gas Non-Core Non-EG [# Affected]	U	IN/A	U	N/A	U	U
1008	Alt Diameter 2	0" / Otay Medium / L3010 80%	20.1.2.1	20.1.2.2	20.1.2.3	20.1.2.4	20.1.2.5	20.1.2.6
1009		eter Pipeline 20"	250	250	250	250	250	250
1010 1011	Line 3010 at 80 Otay Mesa Med		380 156	380 60	380 230	380 230	380 244	380 247
1011	Total Supply	ант баррту	786	690	860	860	874	877
1013	Total MMcfd S	hortfall	0	0	0	0	0	0
1014	Immediate Cu	rtailment to EG Stations?	No	No	No	No	No	No
1015 1016	Curtailment	Gas Core [%] Gas EG [%]	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%
1017	(%)	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
1018		Gas Core [MMcfd]	0	0	0	0	0	0
1019	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
1020 1021	(Capacity)	Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
1021	Number of	Gas Core [# Affected]	0	0	0	0	0	0
1023	Customers	Gas EG [# Affected]	0	0	0	0	0	0
1024 1025	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
1025	Alt Diameter 2	0" / Otay Medium / L3010 Out	20.2.2.1	20.2.2.2	20.2.2.3	20.2.2.4	20.2.2.5	20.2.2.6
1027		eter Pipeline 20"	250	250	250	250	250	250
1028	Line 3010 Com		0	0	0	0	0	0
1029	Otay Mesa Med	aium Supply	156	60	230	230	244	247
1030 1031	Total Supply Total MMcfd S	hortfall	406 0	310 165	480 57	480 97	494 0	497 28
1031		rtailment to EG Stations?	No	Yes	No	Yes	No	No
1033	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
1034	(%)	Gas EG [%]	0%	30%	0%	21%	0%	0%
1035 1036	1	Gas Non-Core Non-EG [%] Gas Core [MMcfd]	0%	100%	92% 0	100%	0% 0	37% 0
1037	Curtailment	Gas EG [MWh/d]	0	12,171	0	4,732	0	0
1038	(Capacity)	Gas EG [MW]	0	507	0	197	0	0
1039	Number of	Gas Non-Core Non-EG [MMcfd]	0	75	57	62	0	28
1040 1041	Number of Customers	Gas Core [# Affected] Gas EG [# Affected]	0	0 N/A	0	0 N/A	0	0
1041	Affected	Gas Non-Core Non-EG [# Affected]	0	N/A	N/A	N/A	0	N/A

Summer Low-EG Day MMcfd EG Day MMcfd	tample ng Day Fall Day MMcfd G H 1.3.5 20.1.3.6 250 250 250 380 380 380 30 168 60 798 0 0 0 No No 0% 0% 0% 0% 0% 0% 0
1043 1044 Alt Diameter 20" / Otay Low / L3010 80% 20.1.3.1 20.1.3.2 20.1.3.3 20.1.3.4 20 250 2	1.3.5 20.1.3.6 250 250 380 380 380 380 380 168 60 798 0 0 0 No No 0% 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0
Alt Diameter 20" / Otay Low / L3010 80% 20.1.3.1 20.1.3.2 20.1.3.3 20.1.3.4 20	250 250 250 250 880 380 130 168 760 798 0 0 No No No No 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Alternate Diameter Pipeline 20" 250	250 250 250 250 880 380 130 168 760 798 0 0 No No No No 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Otay Mesa Low Supply 33 33 148 148 148 1048 1048 1048 1049 1049 1050 1050 1050 1050 1050 1050 1051 1052 1053 1054 1055 1055 1055 1055 1055 1055 1056 1056 1057 1056 1057 1058 1057 1058 1059 1060 1061 1062 1062 1063 1064 1066	130
Total Supply	760 798 0 0 0 No No No 0% 0% 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Total MMcfd Shortfall 0	0 0 0 No No No No 0% 0% 0% 0% 0% 0% 0% 0% 0% 00 0 0 0 0
Immediate Curtailment to EG Stations?	0% 0% 0% 0% 0% 0% 0% 0% 0 0 0 0 0 0 0 0
1052	0% 0% 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0
(%) Gas Non-Core Non-EG [%] 0% 0% 0% 0% 0% 1054 1055	0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2.3.5 20.2.3.6
1054 Gas Core [MMcfd]	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1056 (Capacity) Gas EG [MW] 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1057	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Number of Gas Core [# Affected] 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Affected Gas Non-Core Non-EG [# Affected] 0 0 0 0 1061 1062 Alt Diameter 20" / Otay Low / L3010 Out 20.2.3.1 20.2.3.2 20.2.3.3 20.2.3.4 20 1063 Alternate Diameter Pipeline 20" 250 250 250 250 10 20.2.3.4 20 1064 Line 3010 Complete Outage 0 0 0 0 0 0 0 0 0 148 148 148 148 148 1066 Total Supply 283 283 398	0 0 2.3.5 20.2.3.6
Alt Diameter 20" / Otay Low / L3010 Out 20.2.3.1 20.2.3.2 20.2.3.3 20.2.3.4 20 1063 Alternate Diameter Pipeline 20" 250 250 250 250 1064 Line 3010 Complete Outage 0 0 0 0 1065 Otay Mesa Low Supply 33 33 148 148 1066 Total Supply 283 283 398 398	2.3.5 20.2.3.6
1062 Alt Diameter 20" / Otay Low / L3010 Out 20.2.3.1 20.2.3.2 20.2.3.3 20.2.3.4 20 1063 Alternate Diameter Pipeline 20" 250 250 250 250 1064 Line 3010 Complete Outage 0 0 0 0 1065 Otay Mesa Low Supply 33 33 148 148 1066 Total Supply 283 283 398 398	
1063 Alternate Diameter Pipeline 20" 250 250 250 250 1064 Line 3010 Complete Outage 0 0 0 0 1065 Otay Mesa Low Supply 33 33 148 148 1066 Total Supply 283 283 398 398	
1065 Otay Mesa Low Supply 33 33 148 148 1066 Total Supply 283 283 398 398	250 250
1066 Total Supply 283 283 398 398	0 0
	30 168 380 418
	85 107
	res Yes
Curtaliment	0%
1070 Gas EG [%] 0% 39% 47% 71%	4% 12% 00% 100%
1071 Gas Core [Mixed] 0 0 0 0 0	0 0
	335 4,377
1074 (Capacity) Gas EG [MW] 0 656 432 657	56 182
1075 Gas Non-Core Non-EG [MMcfd] 0 75 62 62 1076 Number of Gas Core [# Affected] 0 0 0 0	75 75 0 0
1077 Customers Gas EG [# Affected] 0 N/A N/A N/A	N/A N/A
7.1100104	N/A N/A
1079 1080 Alt Diameter 20" / Otay Out / L3010 80% 20.1.4.1 20.1.4.2 20.1.4.3 20.1.4.4 20	1.4.5 20.1.4.6
	250 250
	380 380
1083 Otay Mesa No Supply 0 0 0 0	0 0
1084 Total Supply 630 630 630 630 1085 Total MMcfd Shortfall 0 0 0 0	630 630 0 0
	No No
Clirtaliment	0%
1088 Gas EG [%] 0% 0% 0% 0%	0% 0% 0% 0%
1090 Gas Core [MMcfd]	0 0
1091 Curtailment Gas EG [MWh/d] 0 0 0 0	0 0
1092 (Capacity) Gas EG [MW] 0 0 0 0 1 1093 Gas Non-Core Non-EG [MMcfd] 0 0 0 0	0 0
	0 0
Number of 1094 Gas Core [# Affected] 0 0 0 0 1095 Customers Gas EG [# Affected] 0 0 0 0	0 0
Number of 1095 Gas Core [# Affected] 0 0 0 0 1096 Customers Gas EG [# Affected] 0 0 0 0 1096 Affected Gas Non-Core Non-EG [# Affected] 0 0 0 0	0 0
Number of 1095 Gas Core [# Affected] 0 0 0 0 1096 Customers Gas EG [# Affected] 0 0 0 0 1096 Affected Gas Non-Core Non-EG [# Affected] 0 0 0 0 1097 Outcome Non-EG [# Affected] 0 0 0 0	
Number of 1094 Number of 1095 Gas Core [# Affected] 0 0 0 0 0 1095 Customers Gas EG [# Affected] 0	0 0 2.4.5 20.2.4.6 250 250
Number of Gas Core [# Affected] 0 0 0 0 0 0 0 0 0	0 0 2.4.5 20.2.4.6 250 250 0 0
Number of Gas Core [# Affected] 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2.4.5 20.2.4.6 250 250 0 0 0 0
Number of Gas Core [# Affected] 0 0 0 0 0 0 0 0 0	0 0 2.4.5 20.2.4.6 250 250 0 0
Number of Gas Core [# Affected] 0 0 0 0 0 0 0 0 0	0 0 2.4.5 20.2.4.6 250 250 0 0 0 0 250 250 250 250 215 275 (es Yes
Number of Gas Core [# Affected] 0 0 0 0 0 0 0 0 0	0 0 2.4.5 20.2.4.6 250 250 0 0 0 0 0 250 250 255 250 265 Yes 0% 0%
Number of Gas Core [# Affected] 0 0 0 0 0 0 0 0 0	0 0 2.4.5 20.2.4.6 250 250 0 0 0 0 0 0 550 250 255 275 (es Yes) 9% 0% 4% 74%
Number of Gas Core [# Affected] 0 0 0 0 0 0 0 0 0	0 0 2.4.5 20.2.4.6 250 250 0 0 0 0 0 250 250 255 250 265 Yes 0% 0%
Number of Gas Core [# Affected] 0 0 0 0 0 0 0 0 0	0 0 2.4.5 20.2.4.6 250 250 0 0 0 0 0 250 250 215 275 (es Yes 0% 0% 4% 74% 00% 100% 0 0 0 0 0 0 0 0 0 0
Number of Gas Core [# Affected] 0 0 0 0 0 0 0 0 0	0 0 2.4.5 20.2.4.6 250 250 0 0 0 0 0 0 250 250 215 275 (es Yes 0% 0% 4% 74% 00% 100% 0 0 0,882 26,974 787 1,124
Number of Gas Core [# Affected] 0 0 0 0 0 0 0 0 0	0 0 2.4.5 20.2.4.6 250 250 0 0 0 0 0 0 250 250 215 275 Yes Yes 9% 0% 4% 74% 00% 100% 0 0 ,882 26,974 87 1,124 75 75
Number of Gas Core [# Affected] 0 0 0 0 0 0 0 0 0	0 0 2.4.5 20.2.4.6 250 250 0 0 0 0 0 0 250 250 215 275 (es Yes 0% 0% 4% 74% 00% 100% 0 0 0,882 26,974 787 1,124

Line No.				71172112007417				
1			EG Day	2. Example Summer High EG Day	3. Example Winter Day MMcfd	4. Winter 1- in-10 Year Day MMcfd	5. Example Spring Day MMcfd	6. Example Fall Day MMcfd
•	•		MMcfd	MMcfd	E	F F	G	Н
2 1115	Α	В	С	D	E	F	G	Н
1116 1117	Alternate Diam	eter Pipeline 24"						
1118	Alt Diameter 2	4" / Otay Full / L3010 80%	7.1.1.1	7.1.1.2	7.1.1.3	7.1.1.4	7.1.1.5	7.1.1.6
1119	Alternate Diame	· ·	400	400	400	400	400	400
1120	Line 3010 at 80		380 295	380	380	380	380 329	380
1121 1122	Otay Mesa Full Total Supply	Suppiy	1075	86 866	313 1093	313 1093	1109	324 1104
1123	Total MMcfd S	hortfall	0	0	0	0	0	0
1124		tailment to EG Stations?	No	No	No	No	No	No
1125	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
1126	(%)	Gas EG [%]	0%	0%	0%	0%	0%	0%
1127 1128	` '	Gas Non-Core Non-EG [%] Gas Core [MMcfd]	0%	0%	<u>0%</u> 0	0%	<u>0%</u> 0	0%
1129	Curtailment	Gas EG [MWh/d]	0	0	0	Ö	0	0
1130	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
1131		Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
1132	Number of	Gas Core [# Affected]	0	0	0	0	0	0
1133 1134	Customers Affected	Gas EG [# Affected] Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
1135	Allected	Cas Horr Core Horr LG [# Allected]	U	J	J	J	.	3
1136		4" / Otay Full / L3010 Out	7.2.1.1	7.2.1.2	7.2.1.3	7.2.1.4	7.2.1.5	7.2.1.6
1137	Alternate Diame		400	400	400	400	400	400
1138	Line 3010 Com Otay Mesa Full		0 295	0 86	0 313	0 313	0 329	0 324
1139 1140	Total Supply	Suppiy	695	486	713	713	729	724
1141	Total MMcfd S	hortfall	0	0	0	0	0	0
1142		tailment to EG Stations?	No	No	No	No	No	No
1143	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
1144	(%)	Gas EG [%]	0%	0%	0%	0%	0%	0%
1145	(,,,	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
1146 1147	Curtailment	Gas Core [MMcfd] Gas EG [MWh/d]	0	0	0	0	0	0
1147	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
1149	(, , , , , , , , , , , , , , , , , , ,	Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
1150	Number of	Gas Core [# Affected]	0	0	0	0	0	0
1151	Customers	Gas EG [# Affected]	0	0	0	0	0	0
1152 1153	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
1154	Alt Diameter 2	4" / Otay Medium / L3010 80%	7.1.2.1	7.1.2.2	7.1.2.3	7.1.2.4	7.1.2.5	7.1.2.6
1155	Alternate Diame		400	400	400	400	400	400
1156	Line 3010 at 80		380	380	380	380	380	380
1157	Otay Mesa Med	lium Supply	156	60	230	230	244	247
1158	Total Supply	- autali	936	840 0	1010	1010	1024	1027
1159 1160	Total MMcfd S	tailment to EG Stations?	0 No	No	0 No	0 No	0 No	0 No
1161		Gas Core [%]	0%	0%	0%	0%	0%	0%
1162	Curtailment (%)	Gas EG [%]	0%	0%	0%	0%	0%	0%
1163	(70)	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
1164	Curtoilesses	Gas Core [MMcfd]	0	0	0	0	0	0
1165 1166	Curtailment (Capacity)	Gas EG [MWh/d] Gas EG [MW]	0	0	0	0	0	0
1167	(Supucity)	Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
1168	Number of	Gas Core [# Affected]	0	0	0	0	0	0
1169						0	0	0
1170	Customers	Gas EG [# Affected]	0	0	0			
	Customers Affected	Gas EG [# Affected] Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
1171	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
	Affected	Gas Non-Core Non-EG [# Affected] 4" / Otay Medium / L3010 Out						
1171 1172	Alt Diameter 2: Alternate Diame Line 3010 Com	Gas Non-Core Non-EG [# Affected] 4" / Otay Medium / L3010 Out teter Pipeline 24" olete Outage	7.2.2.1 400 0	7.2.2.2	7.2.2.3 400 0	7.2.2.4 400 0	7.2.2.5 400 0	7.2.2.6 400 0
1171 1172 1173 1174 1175	Alt Diameter 2: Alternate Diame Line 3010 Com Otay Mesa Med	Gas Non-Core Non-EG [# Affected] 4" / Otay Medium / L3010 Out teter Pipeline 24" olete Outage	7.2.2.1 400 0 156	7.2.2.2 400 0 60	7.2.2.3 400 0 230	7.2.2.4 400 0 230	7.2.2.5 400 0 244	7.2.2.6 400 0 247
1171 1172 1173 1174 1175 1176	Alt Diameter 2: Alternate Diame Line 3010 Com Otay Mesa Med Total Supply	Gas Non-Core Non-EG [# Affected] 4" / Otay Medium / L3010 Out tetr Pipeline 24" olete Outage lium Supply	7.2.2.1 400 0 156 556	7.2.2.2 400 0 60 460	7.2.2.3 400 0 230 630	7.2.2.4 400 0 230 630	7.2.2.5 400 0 244 644	7.2.2.6 400 0 247 647
1171 1172 1173 1174 1175 1176 1177	Alt Diameter 2: Alternate Diame Line 3010 Com Otay Mesa Med Total Supply Total MMcfd S	Gas Non-Core Non-EG [# Affected] 4" / Otay Medium / L3010 Out tetr Pipeline 24" olete Outage ium Supply hortfall	7.2.2.1 400 0 156 556	7.2.2.2 400 0 60 460	7.2.2.3 400 0 230 630 0	7.2.2.4 400 0 230 630 0	7.2.2.5 400 0 244 644 0	7.2.2.6 400 0 247 647
1171 1172 1173 1174 1175 1176 1177 1178	Alt Diameter 2 Alternate Diame Line 3010 Com Otay Mesa Mec Total Supply Total MMcfd S Immediate Cur	Gas Non-Core Non-EG [# Affected] 4" / Otay Medium / L3010 Out ter Pipeline 24" blete Outage itum Supply hortfall tailment to EG Stations?	7.2.2.1 400 0 156 556 0 No	7.2.2.2 400 0 60 460 15 No	0 7.2.2.3 400 0 230 630 0 No	7.2.2.4 400 0 230 630 0 No	0 7.2.2.5 400 0 244 644 0 No	0 7.2.2.6 400 0 247 647 0 No
1171 1172 1173 1174 1175 1176 1177	Alt Diameter 2 Alternate Diame Line 3010 Com Otay Mesa Mec Total Supply Total MMcfd S Immediate Cur Curtailment	Gas Non-Core Non-EG [# Affected] 4" / Otay Medium / L3010 Out tetr Pipeline 24" olete Outage ium Supply hortfall	7.2.2.1 400 0 156 556	7.2.2.2 400 0 60 460	7.2.2.3 400 0 230 630 0	7.2.2.4 400 0 230 630 0	7.2.2.5 400 0 244 644 0	7.2.2.6 400 0 247 647
1171 1172 1173 1174 1175 1176 1177 1178	Alt Diameter 2 Alternate Diame Line 3010 Com Otay Mesa Mec Total Supply Total MMcfd S Immediate Cur	Gas Non-Core Non-EG [# Affected] #" / Otay Medium / L3010 Out ter Pipeline 24" blete Outage lium Supply hortfall tailment to EG Stations? [Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%]	0 7.2.2.1 400 0 156 556 0 No 0% 0%	7.2.2.2 400 0 60 460 15 No 0%	0 7.2.2.3 400 0 230 630 0 No 0% 0%	7.2.2.4 400 0 230 630 0 No 0% 0%	0 7.2.2.5 400 0 244 644 0 No 0% 0%	0 7.2.2.6 400 0 247 647 0 No 0%
1171 1172 1173 1174 1175 1176 1177 1178 1179 1180 1181	Affected Alt Diameter 2 Alternate Diame Line 3010 Com Otay Mesa Mec Total Supply Total MMcfd S Immediate Cur Curtailment (%)	Gas Non-Core Non-EG [# Affected] 4" / Otay Medium / L3010 Out ster Pipeline 24" blete Outage ium Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd]	0 7.2.2.1 400 0 156 556 0 No 0% 0% 0% 0%	0 7.2.2.2 400 0 60 460 15 No 0% 0% 20% 0	0 7.2,2,3 400 0 230 630 0 No 0% 0% 0%	7.2.2.4 400 0 230 630 0 No 0% 0% 0% 0%	0 7.2.2.5 400 0 244 644 0 No 0% 0% 0%	0 7.2.2.6 400 0 247 647 0 No 0% 0% 0%
1171 1172 1173 1174 1175 1176 1177 1178 1179 1180 1181 1182 1183	Affected Alt Diameter 2 Alternate Diame Line 3010 Com Otay Mesa Med Total Supply Total MMcfd Si Immediate Cur Curtailment (%) Curtailment	Gas Non-Core Non-EG [# Affected] 4" / Otay Medium / L3010 Out teter Pipeline 24" blete Outage ium Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d]	0 7.2.2.1 400 0 156 556 0 No 0% 0% 0% 0% 0 0 0	0 7.2.2.2 400 0 60 460 450 No 0% 0% 0% 0 0 0	0 7.2.2.3 400 0 230 630 0 No 0% 0% 0% 0 0 0	7.2.2.4 400 0 230 630 0 No 0% 0% 0% 0 0	0 7.2.2.5 400 0 244 644 0 No 0% 0% 0% 0 0 0 0	0 7.2.2.6 400 0 247 647 0 No 0% 0% 0% 0 0 0 0 0
1171 1172 1173 1174 1175 1176 1177 1178 1179 1180 1181 1182 1183 1184	Affected Alt Diameter 2 Alternate Diame Line 3010 Com Otay Mesa Mec Total Supply Total MMcfd S Immediate Cur Curtailment (%)	Gas Non-Core Non-EG [# Affected] 4" / Otay Medium / L3010 Out teter Pipeline 24" lolete Outage lium Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWI/d] Gas EG [MW]	0 7.2.2.1 400 0 156 556 0 No 0% 0% 0% 0 0 0 0	0 7.2.2.2 400 0 60 460 15 No 0% 0% 20% 0 0	0 7.2.2.3 400 0 230 630 0 No 0% 0% 0% 0 0 0 0	7.2.2.4 400 0 230 630 0 No 0% 0% 0% 0 0	0 7.2.2.5 400 0 244 644 0 No 0% 0% 0% 0 0 0 0	0 7.2.2.6 400 0 247 647 0 No 0% 0% 0% 0 0 0 0
1171 1172 1173 1174 1175 1176 1177 1178 1179 1180 1181 1182 1183 1184 1185	Affected Alt Diameter 2 Alternate Diame Line 3010 Com Otay Mesa Med Total Supply Total MMcfd Si Immediate Cur Curtailment (%) Curtailment	Gas Non-Core Non-EG [# Affected] 4" / Otay Medium / L3010 Out ter Pipeline 24" lolete Outage lium Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	0 7.2.2.1 400 0 156 556 0 No 0% 0% 0% 0% 0 0 0	0 7.2.2.2 400 0 60 460 15 No 0% 0% 00% 0 0 15 15 15	0 7.2.2.3 400 0 230 630 0 No 0% 0% 0% 0 0 0 0 0	7.2.2.4 400 0 230 630 0 No 0% 0% 0% 0 0	0 7.2.2.5 400 0 244 644 0 No 0% 0% 0% 0 0 0 0	0 7.2.2.6 400 0 247 647 0 No 0% 0% 0% 0 0 0 0 0
1171 1172 1173 1174 1175 1176 1177 1178 1179 1180 1181 1182 1183 1184	Affected Alt Diameter 2 Alternate Diame Line 3010 Com Otay Mesa Mec Total Supply Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity)	Gas Non-Core Non-EG [# Affected] 4" / Otay Medium / L3010 Out teter Pipeline 24" lolete Outage lium Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWI/d] Gas EG [MW]	0 7.2.2.1 400 0 156 556 0 No 0% 0% 0% 0 0 0 0 0	0 7.2.2.2 400 0 60 460 15 No 0% 0% 20% 0 0	0 7.2.2.3 400 0 230 630 0 No 0% 0% 0% 0 0 0 0	7.2.2.4 400 0 230 630 0 No 0% 0% 0% 0 0	0 7.2.2.5 400 0 244 644 0 No 0% 0% 0% 0 0 0 0 0 0	0 7.2.2.6 400 0 247 647 0 No 0% 0% 0% 0 0 0 0 0 0

Line No.

<u>Line No.</u> 1			1. Example Summer Low- EG Day MMcfd	2. Example Summer High EG Day MMcfd	3. Example Winter Day MMcfd	4. Winter 1- in-10 Year Day MMcfd	5. Example Spring Day MMcfd	6. Example Fall Day MMcfd
2	Α	В	С	D	Е	F	G	Н
1189 1190	Alt Diameter 2	4" / Otay Low / L3010 80%	7.1.3.1	7.1.3.2	7.1.3.3	7.1.3.4	7.1.3.5	7.1.3.6
1191		eter Pipeline 24"	400	400	400	400	400	400
1192	Line 3010 at 80		380	380	380	380	380	380
1193	Otay Mesa Low	Supply	33	33	148	148	130	168
1194	Total Supply		813	813	928	928	910	948
1195 1196	Total MMcfd S	nortra।। rtailment to EG Stations?	0 No	0 No	0 No	0 No	0 No	0 No
1196		Gas Core [%]	0%	0%	0%	0%	0%	0%
1198	Curtailment	Gas EG [%]	0%	0%	0%	0%	0%	0%
1199	(%)	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
1200		Gas Core [MMcfd]	0	0	0	0	0	0
1201 1202	Curtailment (Capacity)	Gas EG [MWh/d] Gas EG [MW]	0	0	0	0	0	0
1202	(Сарасіту)	Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
1204	Number of	Gas Core [# Affected]	0	0	0	0	0	0
1205	Customers	Gas EG [# Affected]	0	0	0	0	0	0
1206	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
1207 1208		4" / Otay Low / L3010 Out	7.2.3.1	7.2.3.2	7.2.3.3	7.2.3.4	7.2.3.5	7.2.3.6
1209		eter Pipeline 24"	400	400	400	400	400	400
1210	Line 3010 Com		0	0	0	0	0	0
1211	Otay Mesa Low	Supply	33	33	148	148	130	168
1212 1213	Total Supply Total MMcfd S	hortfall	433 0	433 42	548 0	548 29	530 0	568 0
1213		tailment to EG Stations?	No	No No	No	No	No	No
1215		Gas Core [%]	0%	0%	0%	0%	0%	0%
1216	Curtailment	Gas EG [%]	0%	0%	0%	0%	0%	0%
1217	(%)	Gas Non-Core Non-EG [%]	0%	56%	0%	47%	0%	0%
1218	Count of law a met	Gas Core [MMcfd]	0	0	0	0	0	0
1219 1220	Curtailment (Capacity)	Gas EG [MWh/d] Gas EG [MW]	0	0	0	0	0	0
1220	(Сарасіту)	Gas Non-Core Non-EG [MMcfd]	0	42	0	29	0	0
1222	Number of	Gas Core [# Affected]	0	0	0	0	0	0
1223	Customers	Gas EG [# Affected]	0	0	0	0	0	0
1224 1225	Affected	Gas Non-Core Non-EG [# Affected]	0	N/A	0	N/A	0	0
1226	Alt Diameter 2	4" / Otay Out / L3010 80%	7.1.4.1	7.1.4.2	7.1.4.3	7.1.4.4	7.1.4.5	7.1.4.6
1227		eter Pipeline 24"	400	400	400	400	400	400
1228	Line 3010 at 80		380	380	380	380	380	380
1229 1230	Otay Mesa No	Supply	7 80	7 80	7 80	7 80	7 80	7 80
1230	Total Supply Total MMcfd S	hortfall	0	0	0	0	0	0
1232		tailment to EG Stations?	No	No	No	No	No	No
1233	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
1234	(%)	Gas EG [%]	0%	0%	0%	0%	0%	0%
1235	(,,,							
1236 1237		Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
	Curtailment	Gas Core [MMcfd]	0	0%	0% 0	0%	0% 0	0
1237	Curtailment (Capacity)			0%	0%	0%	0%	
	(Capacity)	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	0 0 0	0% 0 0 0	0% 0 0 0	0% 0 0 0	0% 0 0 0	0 0 0
1238 1239 1240	(Capacity) Number of	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0 0 0 0	0% 0 0 0 0	0% 0 0 0 0	0% 0 0 0 0	0% 0 0 0 0	0 0 0 0
1238 1239 1240 1241	(Capacity) Number of Customers	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected]	0 0 0 0	0% 0 0 0 0 0	0% 0 0 0 0 0	0% 0 0 0 0 0	0% 0 0 0 0 0	0 0 0 0 0
1238 1239 1240	(Capacity) Number of	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0 0 0 0	0% 0 0 0 0	0% 0 0 0 0	0% 0 0 0 0	0% 0 0 0 0	0 0 0 0
1238 1239 1240 1241 1242	(Capacity) Number of Customers Affected Alt Diameter 2	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] 4" / Otay Out / L3010 Out	0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0	0 0 0 0 0 0 0
1238 1239 1240 1241 1242 1243 1244 1245	(Capacity) Number of Customers Affected Alt Diameter 2 Alternate Diameter	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected]	0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 7.2.4.3	0% 0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 7.2.4.5	0 0 0 0 0 0 0 0
1238 1239 1240 1241 1242 1243 1244 1245 1246	(Capacity) Number of Customers Affected Alt Diameter 2 Alternate Diameter 2 Line 3010 Com	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] 4" / Otay Out / L3010 Out eter Pipeline 24" plete Outage	0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 7.2.4.6 400
1238 1239 1240 1241 1242 1243 1244 1245 1246 1247	(Capacity) Number of Customers Affected Alt Diameter 2 Alternate Diame Line 3010 Com Otay Mesa No	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] 4" / Otay Out / L3010 Out eter Pipeline 24" plete Outage	0 0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 0 7.2.4.2 400 0	0% 0 0 0 0 0 0 0 0 0 7.2.4.3 400 0	0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 7.2.4.5 400 0	0 0 0 0 0 0 0 0 0 0 0
1238 1239 1240 1241 1242 1243 1244 1245 1246	(Capacity) Number of Customers Affected Alt Diameter 2 Alternate Diameter 2 Line 3010 Com	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] 4"/Otay Out / L3010 Out eter Pipeline 24" plete Outage Supply	0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 7.2.4.6 400
1238 1239 1240 1241 1242 1243 1244 1245 1246 1247 1248	(Capacity) Number of Customers Affected Alt Diameter 2 Alternate Diameter 2 Alternate Diameter 3010 Com Otay Mesa No: Total Supply Total MMcfd S	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] 4"/Otay Out / L3010 Out eter Pipeline 24" plete Outage Supply	0 0 0 0 0 0 0 0 7.2.4.1 400 0	0% 0 0 0 0 0 0 0 0 7.2.4.2 400 0 0 400	0% 0 0 0 0 0 0 0 0 7.2.4.3 400 0 400	0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 7.2.4.5 400 0 0 400	0 0 0 0 0 0 0 0 7.2.4.6 400 0
1238 1239 1240 1241 1242 1243 1244 1245 1246 1247 1248 1249 1250 1251	(Capacity) Number of Customers Affected Alt Diameter 2 Alternate Diameter 2 Alternate Diameter 3010 Com Otay Mesa No: Total Supply Total MMcfd S	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] 4" / Otay Out / L3010 Out eter Pipeline 24" plete Outage Supply hortfall tailment to EG Stations? Gas Core [%]	0 0 0 0 0 0 0 0 0 7.2.4.1 400 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 400 75 Yes 0%	0% 0 0 0 0 0 0 0 0 0 7.2.4.3 400 0 400 137 Yes 0%	0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 400 477 Yes 0%	0% 0 0 0 0 0 0 0 0 0 0 0 0 0 400 65 No 0%	0 0 0 0 0 0 0 0 0 7.2.4.6 400 0 0 400 125 Yes
1238 1239 1240 1241 1242 1243 1244 1245 1246 1247 1248 1249 1250 1251	(Capacity) Number of Customers Affected Alt Diameter 2 Alternate Diametine 3010 Com Otay Mesa No Total Supply Total MMcfd S Immediate Cur	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] 4" / Otay Out / L3010 Out eter Pipeline 24" plete Outage Supply hortfall tailment to EG Stations? [Gas Core [%] Gas EG [%]	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 7.2.4.2 400 0 400 75 Yes 0% 0%	0% 0 0 0 0 0 0 0 0 7.2.4.3 400 0 400 137 Yes 0% 45%	0% 0 0 0 0 0 0 0 0 7.2.4.4 400 0 400 177 Yes 0% 70%	0% 0 0 0 0 0 0 0 0 0 0 0 0 0 400 65 No 0% 0%	0 0 0 0 0 0 0 0 7.2.4.6 400 0 0 400 125 Yes 0%
1238 1239 1240 1241 1242 1243 1244 1245 1246 1247 1248 1249 1250 1251 1252 1253	(Capacity) Number of Customers Affected Alt Diameter 2 Alternate Diametical Solution Com Otay Mesa No Total Supply Total MMcfd S Immediate Cur	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Non-Core Non-EG [MMcfd] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] 4" / Otay Out / L3010 Out eter Pipeline 24" plete Outage Supply hortfall tailment to EG Stations? Gas Core [%] Gas Non-Core Non-EG [%]	0 0 0 0 0 0 0 0 7.2.4.1 400 0 0 400 0 0 No 0	0% 0 0 0 0 0 0 0 0 0 7.2.4.2 400 0 400 75 Yes 0% 0% 100%	0% 0 0 0 0 0 0 0 0 7.2.4.3 400 0 400 137 Yes 0% 45% 100%	0% 0 0 0 0 0 0 0 0 0 0 0 0 0 172.4.4 400 0 177 Yes 0% 70% 100%	0% 0 0 0 0 0 0 0 0 0 7.2.4.5 400 0 400 65 No 0% 87%	0 0 0 0 0 0 0 0 7.2.4.6 400 0 0 400 125 Yes 0% 19%
1238 1239 1240 1241 1242 1243 1244 1245 1246 1247 1248 1249 1250 1251 1252 1253	(Capacity) Number of Customers Affected Alt Diameter 2 Alternate Diametine 3010 Com Otay Mesa No Total Supply Total MMcfd S Immediate Cur	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Non-Core Non-EG [MMcfd] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] 4" / Otay Out / L3010 Out eter Pipeline 24" plete Outage Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd]	0 0 0 0 0 0 0 0 0 7.2.4.1 400 0 0 400 0 No 0 0 0 0	0% 0 0 0 0 0 0 0 0 7.2.4.2 400 0 400 75 Yes 0% 0% 100% 0	0% 0 0 0 0 0 0 0 0 7.2.4.3 400 0 400 137 Yes 0% 100% 0	0% 0 0 0 0 0 0 0 0 0 0 0 0 1 7.2.4.4 400 0 400 177 Yes 0% 70% 100% 0	0% 0 0 0 0 0 0 0 0 7.2.4.5 400 0 400 65 No 0% 87% 0	0 0 0 0 0 0 0 0 7.2.4.6 400 0 0 400 125 Yes 0% 19%
1238 1239 1240 1241 1242 1243 1244 1245 1246 1247 1248 1249 1250 1251 1252 1253	(Capacity) Number of Customers Affected Alt Diameter 2 Alternate Diameter 2 Alternate Diameter 3010 Com Otay Mesa No: Total Supply Total MMcfd S Immediate Cur Curtailment (%)	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Non-Core Non-EG [MMcfd] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] 4" / Otay Out / L3010 Out eter Pipeline 24" plete Outage Supply hortfall tailment to EG Stations? Gas Core [%] Gas Non-Core Non-EG [%]	0 0 0 0 0 0 0 0 7.2.4.1 400 0 0 400 0 0 No 0	0% 0 0 0 0 0 0 0 0 0 7.2.4.2 400 0 400 75 Yes 0% 0% 100%	0% 0 0 0 0 0 0 0 0 7.2.4.3 400 0 400 137 Yes 0% 45% 100%	0% 0 0 0 0 0 0 0 0 0 0 0 0 0 172.4.4 400 0 177 Yes 0% 70% 100%	0% 0 0 0 0 0 0 0 0 0 7.2.4.5 400 0 400 65 No 0% 87%	0 0 0 0 0 0 0 0 7.2.4.6 400 0 0 400 125 Yes 0% 19%
1238 1239 1240 1241 1242 1243 1244 1245 1246 1247 1248 1249 1250 1251 1252 1253 1254 1255 1256 1257	(Capacity) Number of Customers Affected Alt Diameter 2 Alternate Diame Line 3010 Com Otay Mesa No Total Supply Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity)	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Non-Core Non-EG [MMcfd] Gas SG [# Affected] Gas Non-Core Non-EG [# Affected] 4" / Otay Out / L3010 Out eter Pipeline 24" plete Outage Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd]	0 0 0 0 0 0 0 0 0 7.2.4.1 400 0 0 0 400 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 400 75 Yes 0% 0% 100% 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 137 Yes 0% 45% 100% 0 10,115 421	0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 17.2.4.4 400 0 0 1777 Yes 0% 70% 100% 0 15,510 646 62	0% 0 0 0 0 0 0 0 0 0 0 0 7.2.4.5 400 0 400 65 No 0% 87% 0 0 0 0 65	0 0 0 0 0 0 0 0 7.2.4.6 400 0 0 400 125 Yes 0% 19% 100% 0 6,743 281 75
1238 1239 1240 1241 1242 1243 1244 1245 1246 1247 1250 1251 1252 1253 1254 1255 1256 1257 1258	(Capacity) Number of Customers Affected Alt Diameter 2 Alternate Diametine 3010 Com Otay Mesa No: Total Supply Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Non-Core Non-EG [MMcfd] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] 4" / Otay Out / L3010 Out eter Pipeline 24" plete Outage Supply hortfall tailment to EG Stations? Gas Core [%] Gas Core [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Non-Core Non-EG [MMcfd] Gas Non-Core Non-EG [MMcfd] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0 0 0 0 0 0 0 0 0 0 0 400 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 7.2.4.2 400 0 400 75 Yes 0% 100% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 7.2.4.3 400 0 400 137 Yes 0% 100% 10,115 421 62 0	0% 0 0 0 0 0 0 0 0 0 0 0 0 1 7.2.4.4 400 0 0 177 Yes 0% 100% 0 15,510 642 0	0% 0 0 0 0 0 0 0 0 0 0 7.2.4.5 400 0 400 65 No 0% 87% 0 0 0 65 0	0 0 0 0 0 0 0 0 0 0 400 125 Yes 0% 100% 0 6,743 281 75
1238 1239 1240 1241 1242 1243 1244 1245 1246 1247 1248 1249 1250 1251 1252 1253 1254 1255 1256 1257	(Capacity) Number of Customers Affected Alt Diameter 2 Alternate Diame Line 3010 Com Otay Mesa No Total Supply Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity)	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Non-Core Non-EG [MMcfd] Gas SG [# Affected] Gas Non-Core Non-EG [# Affected] 4" / Otay Out / L3010 Out eter Pipeline 24" plete Outage Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd]	0 0 0 0 0 0 0 0 0 7.2.4.1 400 0 0 0 400 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 400 75 Yes 0% 0% 100% 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 137 Yes 0% 45% 100% 0 10,115 421	0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 17.2.4.4 400 0 0 1777 Yes 0% 70% 100% 0 15,510 646 62	0% 0 0 0 0 0 0 0 0 0 0 0 7.2.4.5 400 0 400 65 No 0% 87% 0 0 0 0 65	0 0 0 0 0 0 0 0 7.2.4.6 400 0 0 400 125 Yes 0% 19% 100% 0 6,743 281 75

Line No.		APPLICATION 15-09-013 VOLUME III			ALYSIS (CORR	ECTED FEBR	(UARY 2017)	
			1. Example Summer Low-	2. Example Summer High-	3. Example	4. Winter 1-	5. Example	6. Example
1			EG Day	EG Day	Winter Day	in-10 Year	Spring Day	Fall Day
			MMcfd	MMcfd	MMcfd	Day MMcfd	MMcfd	MMcfd
2 1261	Α	В	С	D	Е	F	G	Н
1262	Alternate Dian	neter Pipeline 30"						
1263 1264	Alt Diameter 3	0" / Otay Full / L3010 80%	8.1.1.1	8.1.1.2	8.1.1.3	8.1.1.4	8.1.1.5	8.1.1.6
1265		eter Pipeline 30"	600	600	600	600	600	600
1266 1267	Line 3010 at 80 Otay Mesa Full		380 295	380 86	380 313	380 313	380 329	380 324
1267	Total Supply	Сирріу	1275	1066	1293	1293	1309	1304
1269	Total MMcfd S		0	0	0	0	0	0
1270	Immediate Cu	rtailment to EG Stations?	No 00/	No 00/	No	No	No	No
1271 1272	Curtailment	Gas Core [%] Gas EG [%]	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%
1273	(%)	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
1274	Curtailmant	Gas Core [MMcfd]	0	0	0	0	0	0
1275 1276	Curtailment (Capacity)	Gas EG [MWh/d] Gas EG [MW]	0	0	0	0	0	0
1277	(Gapaony)	Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
1278	Number of	Gas Core [# Affected]	0	0	0	0	0	0
1279 1280	Customers Affected	Gas EG [# Affected] Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
1281								,
1282		0" / Otay Full / L3010 Out	8.2.1.1	8.2.1.2	8.2.1.3	8.2.1.4	8.2.1.5	8.2.1.6
1283 1284	Line 3010 Com	eter Pipeline 30"	600	600	600 0	600	600 0	600
1285	Otay Mesa Full		295	86	313	313	329	324
1286	Total Supply		895	686	913	913	929	924
1287	Total MMcfd S	hortfall rtailment to EG Stations?	0 No	0 No	0 No	0 No	0 No	0 No
1288 1289		Gas Core [%]	0%	0%	0%	0%	0%	0%
1290	Curtailment (%)	Gas EG [%]	0%	0%	0%	0%	0%	0%
1291	(70)	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
1292 1293	Curtailment	Gas Core [MMcfd] Gas EG [MWh/d]	0	0	0	0	0	0
1294	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
1295		Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
1296 1297	Number of Customers	Gas Core [# Affected] Gas EG [# Affected]	0	0	0	0	0	0
1298	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
1299								
1300 1301		eter Pipeline 30"	8.1.2.1 600	8.1.2.2 600	8.1.2.3 600	8.1.2.4 600	8.1.2.5 600	8.1.2.6 600
1301	Line 3010 at 80		380	380	380	380	380	380
1303	Otay Mesa Med	dium Supply	156	60	230	230	244	247
1304	Total Supply	Laufall	1136	1040	1210	1210	1224	1227
1305 1306	Total MMcfd S Immediate Cur	nortrail rtailment to EG Stations?	0 No	0 No	0 No	0 No	0 No	0 No
1307	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
1308	(%)	Gas EG [%]	0%	0%	0%	0%	0%	0%
1309 1310	<u> </u>	Gas Non-Core Non-EG [%] Gas Core [MMcfd]	0%	0% 0	0% 0	0%	0% 0	0%
1311	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
1312	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
1313 1314	Number of	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0	0	0	0	0	0
1315	Customers	Gas EG [# Affected]	0	0	0	0	0	0
1316	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
1317 1318	Alt Diameter 3	0" / Otay Medium / L3010 Out	8.2.2.1	8.2.2.2	8.2.2.3	8.2.2.4	8.2.2.5	8.2.2.6
1319		eter Pipeline 30"	600	600	600	600	600	600
1320	Line 3010 Com		0	0	0	0	0	0
1321 1322	Otay Mesa Med Total Supply	лит Supply	156 756	60 660	230 830	230 830	244 844	247 847
1322	Total MMcfd S	hortfall	0	0	0	0	0	0
1324		rtailment to EG Stations?	No	No	No	No	No	No
1325	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
1326 1327	(%)	Gas EG [%] Gas Non-Core Non-EG [%]	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%
1328		Gas Core [MMcfd]	0	0	0	0	0	0
1329	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
1330 1331	(Capacity)	Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
1332	Number of	Gas Core [# Affected]	0	0	0	0	0	0
1333	Customers	Gas EG [# Affected]	0	0	0	0	0	0
1334	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0

WORK PAPER TABLE - SCENARIO ANALYSIS GAS DEMAND AND SUPPLY (SA 1.1

EXAMPLE DAY OF GAS DEMAND AND SUPPLY FOR CUSTOMER CLASSES DURING SEASONAL VARIATIONS FOR ANALYSIS OF

APPLICATION 15-09-013 VOLUME III - COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 2017) Line No. 2. Example 1. Example 3. Example 4. Winter 1-5. Example 6. Example Summer Low- Summer High 1 Winter Day in-10 Year **Spring Day** Fall Day **EG Dav EG** Dav MMcfd Day MMcfd MMcfd MMcfd MMcfd MMcfd 2 В C ם F F G н 1335 1336 Alt Diameter 30" / Otay Low / L3010 80% 8.1.3.1 8.1.3.2 3.1.3.3 8.1.3.5 Alternate Diameter Pipeline 30 1337 600 600 600 600 600 ine 3010 at 80% Supply 1338 380 380 380 380 380 380 1339 Otay Mesa Low Supply 33 33 148 148 130 168 Total Supply 1013 1128 1128 1110 1148 1013 1340 1341 Total MMcfd Shortfall 0 0 0 0 0 0 Immediate Curtailment to EG Stations? No No No No No 1342 No 1343 Gas Core [%] 0% 0% 0% 0% 0% 0% Curtailment 1344 0% 0% 0% 0% 0% Gas EG [%] 0% (%) 1345 Gas Non-Core Non-EG [%] 0% 0% 0% 0% 0% 0% Gas Core [MMcfd] 1346 0 0 0 0 0 0 Gas EG [MWh/d] Curtailment 0 0 0 0 1347 0 0 Gas EG [MW] 1348 (Capacity) 0 0 0 0 0 0 Gas Non-Core Non-EG [MMcfd] 1349 0 0 0 0 0 0 Number of 1350 Gas Core [# Affected] 0 0 0 0 0 0 Customers Gas EG [# Affected] 1351 0 0 0 0 0 0 1352 Affected Gas Non-Core Non-EG [# Affected] 0 0 0 0 0 0 1353 Alt Diameter 30" / Otay Low / L3010 Out 8.2.3.1 8.2.3.2 8.2.3.3 8.2.3.4 8.2.3.5 8.2.3.6 1354 1355 Alternate Diameter Pipeline 30" 600 600 600 600 600 600 Line 3010 Complete Outage 0 0 0 0 1356 0 0 Otay Mesa Low Supply 33 33 148 148 130 168 1357 1358 Total Supply 633 633 748 748 730 768 Total MMcfd Shortfall 1359 0 0 0 0 0 0 1360 Immediate Curtailment to EG Stations? No No No No No No 1361 Gas Core [%] 0% 0% 0% 0% 0% 0% Curtailment 1362 Gas EG [%] 0% 0% 0% 0% 0% 0% (%) 1363 Gas Non-Core Non-EG [%] 0% 0% 0% 0% 0% 0% 1364 Gas Core [MMcfd] 0 0 0 0 0 0 1365 Curtailment Gas EG [MWh/d] 0 0 0 0 0 0 1366 (Capacity) Gas EG [MW] 0 0 0 0 0 1367 Gas Non-Core Non-EG [MMcfd] 0 0 0 0 0 0 Number of 1368 Gas Core [# Affected] 0 0 0 0 0 1369 Customers Gas EG [# Affected] 0 0 0 0 0 0 1370 Affected Gas Non-Core Non-EG [# Affected] 0 0 0 0 0 1371 Alt Diameter 30" / Otay Out / L3010 80% 8.1.4.1 8.1.4.2 8.1.4.3 8.1.4.5 1372 8.1.4.4 8.1.4.6 1373 Alternate Diameter Pipeline 30" 600 600 600 600 600 600 1374 Line 3010 at 80% Supply 380 380 380 380 380 380 1375 Otav Mesa No Supply Λ Λ Λ Λ Λ n 1376 Total Supply 980 980 980 980 980 980 1377 Total MMcfd Shortfall 1378 Immediate Curtailment to EG Stations? No No No Gas Core [%] 0% 0% 0% 0% 1379 Curtailment Gas EG [%] 0% 0% 0% 0% 0% 1380 (%) 1381 Gas Non-Core Non-EG [%] 0% 0% 0% 0% 0% 0% 1382 Gas Core [MMcfd] 0 0 0 0 0 0 Curtailment Gas EG [MWh/d] 1383 0 0 0 0 0 0 1384 (Capacity) Gas EG [MW] 0 0 0 0 0 0 1385 Gas Non-Core Non-EG [MMcfd] 0 0 0 0 0 0 1386 Gas Core [# Affected] 0 0 Gas EG [# Affected] Customers 0 0 1387 1388 Affected Gas Non-Core Non-EG [# Affected] 1389 8.2.4.2 Alt Diameter 30" / Otay Out / L3010 Out 3.2.4.3 8.2.4.5 1390 8.2.4.1 8.2.4.4 8.2.4.6 Alternate Diameter Pipeline 30 600 600 600 1391 600 600 600 1392 ine 3010 Complete Outage 0 0 0 0 0 0 1393 Otay Mesa No Supply Total Supply
Total MMcfd Shortfall 600 600 600 600 600 600 1394 1395 0 0 0 0 0 0 Immediate Curtailment to EG Stations? 1396 No No No No No No 1397 Gas Core [%] 0% 0% 0% 0% 0% 0% Curtailment 1398 Gas EG [%] 0% 0% 0% 0% 0% 0% (%) Gas Non-Core Non-EG [%] 1399 0% 0% 0% 0% 0% 0% Gas Core [MMcfd] 1400 0 0 0 0 0 0 Curtailment Gas EG [MWh/d] 0 0 0 0 0 0 1401 Gas EG [MW] 1402 (Capacity) 0 0 0 0 0 0 Gas Non-Core Non-EG [MMcfd] 0 0 0 1403 0 0 0 Number of 1404 Gas Core [# Affected] 0 0 0 0 0 0

0

0

0

0

0

0

0

0

0

1405

1406

Customers

Affected

Gas EG [# Affected]

Gas Non-Core Non-EG [# Affected]

		1. Example	2. Example Summer High	3. Example	4. Winter 1-	5. Example	6. Examp
		EG Day MMcfd	EG Day MMcfd	Winter Day MMcfd	in-10 Year Day MMcfd	Spring Day MMcfd	Fall Day MMcfd
Α	В	С	D	Е	F	G	Н
Alternate Diar	neter Pipeline 42"						
	12" / Otay Full / L3010 80%	9.1.1.1	9.1.1.2	9.1.1.3	9.1.1.4	9.1.1.5	9.1.1.6
Line 3010 at 80	eter Pipeline 42"	710 380	710 380	710 380	710 380	710 380	710 380
Otay Mesa Ful		295	86	313	313	329	324
Total Supply		1385	1176	1403	1403	1419	1414
Total MMcfd S		0	0	0	0	0	0
	rtailment to EG Stations? Gas Core [%]	No 0%	No 0%	No 0%	No 0%	No 0%	No 0%
Curtailment	Gas EG [%]	0%	0%	0%	0%	0%	0%
(%)	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
Ct	Gas Core [MMcfd]	0	0	0	0	0	0
Curtailment (Capacity)	Gas EG [MWh/d] Gas EG [MW]	0	0	0	0	0	0
(Gapacity)	Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
Number of	Gas Core [# Affected]	0	0	0	0	0	0
Customers	Gas EG [# Affected]	0	0	0	0	0	0
Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
Alt Diameter 4	12" / Otay Full / L3010 Out	9.2.1.1	9.2.1.2	9.2.1.3	9.2.1.4	9.2.1.5	9.2.1.6
	eter Pipeline 42"	710	710	710	710	710	710
Line 3010 Com		0	0	0	0	0	0
Otay Mesa Ful	Supply	295	86	313	313	329	324
Total Supply Total MMcfd S	Shortfall	1005	796 0	1023 0	1023 0	1039 0	1034
	rtailment to EG Stations?	No	No	No	No	No	No
Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
(%)	Gas EG [%]	0%	0%	0%	0%	0%	0%
(,-,	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	<u>0%</u> 0	0%
Curtailment	Gas Core [MMcfd] Gas EG [MWh/d]	0	0	0	0	0	0
(Capacity)	Gas EG [MW]	0	0	0	0	0	0
	Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
Number of	Gas Core [# Affected]	0	0	0	0	0	0
Customers	Gas EG [# Affected]	0	0	0	0	0	
∆ffected	Gas Non-Core Non-FG [# Affected]	0					0
	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
Alt Diameter 4	12" / Otay Medium / L3010 80%	9.1.2.1	9.1.2.2	9.1.2.3	9.1.2.4	9.1.2.5	9.1.2.0
Alt Diameter 4 Alternate Diam	12" / Otay Medium / L3010 80% eter Pipeline 42"	9.1.2.1 710	9.1.2.2 710	9.1.2.3 710	9.1.2.4 710	9.1.2.5 710	9.1.2. 710
Alt Diameter 4	12" / Otay Medium / L3010 80% eter Pipeline 42" 0% Supply	9.1.2.1	9.1.2.2	9.1.2.3	9.1.2.4	9.1.2.5	9.1.2.
Alt Diameter 4 Alternate Diam Line 3010 at 80	12" / Otay Medium / L3010 80% eter Pipeline 42" 0% Supply	9.1.2.1 710 380	9.1.2.2 710 380	9.1.2.3 710 380	9.1.2.4 710 380	9.1.2.5 710 380	9.1.2. 710 380 247
Alternate Diam Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S	12" / Otay Medium / L3010 80% eter Pipeline 42" 0% Supply dium Supply	9.1.2.1 710 380 156 1246 0	9.1.2.2 710 380 60 1150	9.1.2.3 710 380 230 1320 0	9.1.2.4 710 380 230 1320 0	9.1.2.5 710 380 244 1334 0	9.1.2. 710 380 247 1337
Alt Diameter 4 Alternate Diam Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu	12" / Otay Medium / L3010 80% eter Pipeline 42" 0% Supply dium Supply chortfall rtailment to EG Stations?	9.1.2.1 710 380 156 1246 0 No	9.1.2.2 710 380 60 1150 0	9.1.2.3 710 380 230 1320 0 No	9.1.2.4 710 380 230 1320 0 No	9.1.2.5 710 380 244 1334 0 No	9.1.2. 710 380 247 1337 0
Alt Diameter 4 Alternate Diam Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment	12" / Otay Medium / L3010 80% eter Pipeline 42" 0% Supply dium Supply	9.1.2.1 710 380 156 1246 0	9.1.2.2 710 380 60 1150	9.1.2.3 710 380 230 1320 0	9.1.2.4 710 380 230 1320 0	9.1.2.5 710 380 244 1334 0	9.1.2. 710 380 247 1337
Alt Diameter 4 Alternate Diam Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment	t2" / Otay Medium / L3010 80% eter Pipeline 42")% Supply dium Supply shortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%]	9.1.2.1 710 380 156 1246 0 No 0% 0% 0%	9.1.2.2 710 380 60 1150 0 No 0% 0%	0 9.1.2.3 710 380 230 1320 0 No 0% 0%	0 9.1.2.4 710 380 230 1320 0 No 0% 0% 0%	0 9.1.2.5 710 380 244 1334 0 No 0% 0%	9.1.2. 710 380 247 1337 0 No 0% 0%
Alt Diameter 4 Alternate Diam Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%)	Iz" / Otay Medium / L3010 80% eter Pipeline 42")% Supply dium Supply Shortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd]	9.1.2.1 710 380 156 1246 0 No 0% 0% 0%	9.1.2.2 710 380 60 1150 0 No 0% 0% 0%	0 9.1.2.3 710 380 230 1320 0 No 0% 0% 0%	0 9.1.2.4 710 380 230 1320 0 No 0% 0% 0%	0 9.1.2.5 710 380 244 1334 0 No 0% 0% 0%	9.1.2. 710 380 247 1337 0 No 0% 0% 0%
Alt Diameter 4 Alternate Diam Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%)	Iz" / Otay Medium / L3010 80% eter Pipeline 42")% Supply dium Supply Shortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MMh/d]	9.1.2.1 710 380 156 1246 0 No 0% 0% 0% 0 0 0	9.1.2.2 710 380 60 1150 0 No 0% 0% 0% 0% 0 0 0	0 9.1.2.3 710 380 230 1320 0 No 0% 0% 0% 0	0 9.1.2.4 710 380 230 1320 0 No 0% 0% 0% 0%	0 9.1.2.5 710 380 244 1334 0 No 0% 0% 0% 0 0	0 9.1.2.1 710 380 247 1337 0 No 0% 0% 0%
Alt Diameter 4 Alternate Diam Line 3010 at 86 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%)	Iz" / Otay Medium / L3010 80% eter Pipeline 42")% Supply dium Supply Shortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd]	9.1.2.1 710 380 156 1246 0 No 0% 0% 0%	9.1.2.2 710 380 60 1150 0 No 0% 0% 0%	0 9.1.2.3 710 380 230 1320 0 No 0% 0% 0%	0 9.1.2.4 710 380 230 1320 0 No 0% 0% 0%	0 9.1.2.5 710 380 244 1334 0 No 0% 0% 0%	9.1.2. 710 380 247 1337 0 No 0% 0% 0%
Alt Diameter 4 Alternate Diam Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of	deter Pipeline 42")% Supply dium Supply Gas Core [%] Gas EG [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	9.1.2.1 710 380 156 1246 0 No 0% 0% 0% 0 0 0 0 0	0 9.1.2.2 710 380 60 1150 0 No 0% 0% 0 0 0 0	0 9.1.2.3 710 380 230 1320 0 No 0% 0% 0 0 0 0	0 9.1.2.4 710 380 230 1320 0 No 0% 0% 0% 0% 0 0 0 0	0 9.1.2.5 710 380 244 1334 0 No 0% 0% 0% 0 0 0 0	0 9.1.2.0 710.0 380 247 1337 0 No 0% 0% 0% 0 0
Alt Diameter 4 Alternate Diam Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers	Iz" / Otay Medium / L3010 80% eter Pipeline 42")% Supply dium Supply Shortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected]	9.1.2.1 710 380 156 1246 0 No 0% 0% 0% 0 0 0 0 0 0 0	9.1.2.2 710 380 60 1150 0 No 0% 0% 0% 0 0 0 0 0 0 0	0 9.1.2.3 710 380 230 1320 0 No 0% 0% 0 0 0 0 0 0 0	9.1.2.4 710 380 230 1320 0 No 0% 0% 0% 0 0 0 0 0 0 0	0 9.1.2.5 710 380 244 1334 0 No 0% 0% 0 0 0 0 0	0 9.1.2. 710 380 247 1337 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0
Alt Diameter 4 Alternate Diam Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers	deter Pipeline 42")% Supply dium Supply Gas Core [%] Gas EG [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	9.1.2.1 710 380 156 1246 0 No 0% 0% 0% 0 0 0 0 0	0 9.1.2.2 710 380 60 1150 0 No 0% 0% 0 0 0 0	0 9.1.2.3 710 380 230 1320 0 No 0% 0% 0 0 0 0	0 9.1.2.4 710 380 230 1320 0 No 0% 0% 0% 0% 0 0 0 0	0 9.1.2.5 710 380 244 1334 0 No 0% 0% 0% 0 0 0 0	0 9.1.2.0 710.0 380 247 1337 0 No 0% 0% 0% 0 0
Alt Diameter 4 Alternate Diam Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected	Iz" / Otay Medium / L3010 80% eter Pipeline 42")% Supply dium Supply Shortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected]	9.1.2.1 710 380 156 1246 0 No 0% 0% 0% 0 0 0 0 0 0 0	9.1.2.2 710 380 60 1150 0 No 0% 0% 0% 0 0 0 0 0 0 0	0 9.1.2.3 710 380 230 1320 0 No 0% 0% 0 0 0 0 0 0 0	9.1.2.4 710 380 230 1320 0 No 0% 0% 0% 0 0 0 0 0 0 0	0 9.1.2.5 710 380 244 1334 0 No 0% 0% 0 0 0 0 0	0 9.1.2.1 710 380 247 1337 0 0% 0% 0% 0 0 0 0 0 0 0
Alt Diameter 4 Alternate Diam Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Diameter 4 Alternate Diam	teter Pipeline 42" j/w Supply dium Supply	9.1.2.1 710 380 156 1246 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 1 0 0 1 0 0 1 0 0 1 0	9.1.2.2 710 380 60 1150 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 9.2.2.2 710	0 9.1.2.3 710 380 230 1320 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.2.4 710 380 230 1320 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.2.5 710 380 244 1334 0 No 0% 0% 0 0 0 0 0 0 0 9.2.2.5 710	9.1.2.6 710 380 247 1337 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 710
Alt Diameter 4 Alternate Diam Line 3010 at 8(Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Diameter 4 Alternate Diam Line 3010 Com	I2" / Otay Medium / L3010 80% eter Pipeline 42")% Supply dium Supply dium Supply dium Supply Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Hon-Core Non-EG [# Affected]	9.1.2.1 710 380 156 1246 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.2.2 710 380 60 1150 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 9.2.2.2 710 0	0 9.1.2.3 710 380 230 1320 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.2.4 710 380 230 1320 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.2.5 7.10 380 244 1334 0 0 0% 0% 0 0 0 0 0 0 0 0	0 9.1.2. 710 380 247 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0
Alt Diameter 4 Alternate Diam Line 3010 at 8(Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Diameter 4 Alternate Diam Line 3010 Com Otay Mesa Me	I2" / Otay Medium / L3010 80% eter Pipeline 42")% Supply dium Supply dium Supply dium Supply Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Hon-Core Non-EG [# Affected]	9.1.2.1 710 380 156 1246 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 10 0 156	9.1.2.2 710 380 60 1150 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.2.3 710 380 230 1320 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.2.4 710 380 230 1320 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0	0 9.1.2.5 710 380 244 1334 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0	0 9.1.2. 710. 380 247 1337 0 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0
Alt Diameter 4 Alternate Diam Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Diameter 4 Alternate Diam Line 3010 Com Otay Mesa Me Total Supply	Iz" / Otay Medium / L3010 80% eter Pipeline 42" 19% Supply dium Supply dium Supply dium Supply Gas Core [%] Gas Core [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Core [# Affected] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas FG [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Von-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Iz" / Otay Medium / L3010 Out eter Pipeline 42" splete Outage dium Supply	9.1.2.1 710 380 156 1246 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 156 866	0 9.1.2.2 710 380 60 1150 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0	9.1.2.3 710 380 230 1320 0 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0	9.1.2.4 710 380 230 1320 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.2.5 710 380 244 1334 0 0% 0% 0% 0 0 0 0 0 0 0 0	0 9.1.2. 710 380 247 1337 0 0% 0% 0% 0 0 0 0 0 9.2.2. 710 0 247
Alt Diameter 4 Alternate Diam Line 3010 at 8(Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Diameter 4 Alternate Diam Line 3010 Com Otay Mesa Me Total Supply Total MMcfd S	I2" / Otay Medium / L3010 80% eter Pipeline 42")% Supply dium Supply dium Supply dium Supply Shortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas EG [# Affected] Gas Hon-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] IZ" / Otay Medium / L3010 Out eter Pipeline 42" splete Outage dium Supply Shortfall rtailment to EG Stations?	9.1.2.1 710 380 156 1246 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 10 0 156	9.1.2.2 710 380 60 1150 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.2.3 710 380 230 1320 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.2.4 710 380 230 1320 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0	0 9.1.2.5 710 380 244 1334 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0	0 9.1.2. 710 380 247 1337 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 247
Alt Diameter 4 Alternate Diam Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alternate Diam Line 3010 Com Otay Mesa Me Total Supply Total MMcfd S Immediate Cu	12" / Otay Medium / L3010 80%	9.1.2.1 710 380 156 1246 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 156 866 0 No	9.1.2.2 710 380 60 1150 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.2.3 710 380 230 1320 0 0 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.2.4 710 380 230 1320 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.2.5 710 380 244 1334 0 0 0% 0% 0 0 0 0 0 0 0 0	9.1.2. 710 380 247 1337 0 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0
Alt Diameter 4 Alternate Diam Line 3010 at 8(Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Diameter 4 Alternate Diam Line 3010 Com Total Mucfd S Immediate Cu Curtailment	Iz" / Otay Medium / L3010 80% eter Pipeline 42")% Supply dium Supply Gas Core [%] Gas EG [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Iz" / Otay Medium / L3010 Out eter Pipeline 42" piplete Outage dium Supply Shortfall ritaliment to EG Stations? Gas Core [%] Gas EG [%]	9.1.2.1 710 380 156 1246 0 No 0% 0% 0% 0 0 0 0 0 0 0 156 866 0 No 0% 0%	9.1.2.2 710 380 60 1150 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.2.3 710 380 230 1320 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.2.4 710 380 230 1320 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.2.5 710 380 244 1334 0 0% 0% 0 0 0 0 0 0 0 0 0	9.1.2. 710 380 247 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0
Alt Diameter 4 Alternate Diam Line 3010 at 80 Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Diameter 4 Alternate Diam Line 3010 Com Otay Mesa Me Total Supply Total MMcfd S Immediate Cu	## Pipeline 42" Pipeline 42" Pi	9.1.2.1 710 380 156 1246 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.2.2 710 380 60 1150 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.2.3 710 7380 230 1320 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.2.4 710 380 230 1320 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.2.5 7380 244 1334 0 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.2. 710 380 247 1337 0 0% 0% 0% 0 0 0 0 0 0 0 0 247 10 0 247 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Alt Diameter 4 Alternate Diam Line 3010 at 8(Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alternate Diam Line 3010 Com Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment	Iz" / Otay Medium / L3010 80% eter Pipeline 42")% Supply dium Supply Gas Core [%] Gas EG [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Iz" / Otay Medium / L3010 Out eter Pipeline 42" piplete Outage dium Supply Shortfall ritaliment to EG Stations? Gas Core [%] Gas EG [%]	9.1.2.1 710 380 156 1246 0 No 0% 0% 0% 0 0 0 0 0 0 0 156 866 0 No 0% 0%	9.1.2.2 710 380 60 1150 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.2.3 710 380 230 1320 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.2.4 710 380 230 1320 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.2.5 7.10 380 244 1334 0 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.2.1 710 380 247 1337 0 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0
Alt Diameter 4 Alternate Diam Line 3010 at 8(Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment ((%) Curtailment (Capacity) Number of Customers Affected Alt Diameter 4 Alternate Diam Line 3010 Com Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%)	12" / Otay Medium / L3010 80%	9.1.2.1 710 380 156 1246 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 156 866 0 No 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%	9.1.2.2 710 380 60 1150 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.2.3 710 780 230 1320 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.2.4 710 380 230 1320 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.2.5 710 380 244 1334 0 0 0% 0% 0 0 0 0 0 0 0 0	9.1.2. 710 380 247 1337 0 0 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0
Alt Diameter 4 Alternate Diam Line 3010 at 8(Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Diameter 4 Alternate Diam Line 3010 Com Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment (%) Curtailment (%)	12" / Otay Medium / L3010 80% eter Pipeline 42" 19% Supply dium Supply Gas EG [%] Gas EG [%] Gas EG [MW] Gas Core [MMcfd] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] 12" / Otay Medium / L3010 Out eter Pipeline 42" uplete Outage dium Supply dium Supply dium Supply dishortfall rtailment to EG Stations? Gas Core [%] Gas Core [MMcfd] Gas EG [MW/d] Gas Core [MMcfd] Gas EG [MW/d] Gas EG [MW/d] Gas Ron-Core Non-EG [MMcfd] Gas EG [MW/d] Gas Non-Core Non-EG [MMcfd] Gas EG [MW/d] Gas Non-Core Non-EG [MMcfd]	9.1.2.1 710 380 156 1246 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.2.2 9.1.2.2 9.1.2.2 9.1.2.3 0 0 0 1150 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.2.3 710 7380 230 1320 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.2.4 710 380 230 1320 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 230 940 0 No 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.2.5 7380 244 1334 0 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.2. 710 730 247 1337 0 0% 0% 0% 0 0 0 0 0 0 0 247 710 0 0 0 0 0 0 0 0 0 0 0 0 0
Alt Diameter 4 Alternate Diam Line 3010 at 8(Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (Capacity) Number of Customers Affected Alt Diameter 4 Alternate Diam Line 3010 Com Otay Mesa Me Total Supply Total MMcfd S Immediate Cu Curtailment (%) Curtailment	Iz" / Otay Medium / L3010 80% eter Pipeline 42")% Supply dium Supply Gas Core [%] Gas EG [%] Gas EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Core # Affected] Gas Core # Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Iz" / Otay Medium / L3010 Out eter Pipeline 42" plete Outage dium Supply dinortfall retailment to EG Stations? Gas Core [%] Gas Core [%] Gas EG [%] Gas Core [MMcfd] Gas EG [MWh/d]	9.1.2.1 710 380 156 1246 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 156 866 0 No 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%	9.1.2.2 710 380 60 1150 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.2.3 710 780 230 1320 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.2.4 7.10 380 230 1320 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.2.5 7.10 380 244 1334 0 0 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.2.0 9.1.2.1 710 7380 247 1337 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Line No.								
			1. Example	2. Example	3. Example	4. Winter 1-	5. Example	6. Example
1				Summer High	Winter Day	in-10 Year	Spring Day	Fall Day
			EG Day	EG Day	MMcfd	Day MMcfd	MMcfd	MMcfd
2	Α	В	MMcfd C	MMcfd D	Е	F	G	н
2 1481	A	В	, c	U		, ,	G G	п
1482	Alt Diameter 4	2" / Otay Low / L3010 80%	9.1.3.1	9.1.3.2	9.1.3.3	9.1.3.4	9.1.3.5	9.1.3.6
1483	Alternate Diame		710	710	710	710	710	710
1484	Line 3010 at 80		380	380	380	380	380	380
1485	Otay Mesa Low	Supply	33	33	148	148	130	168
1486	Total Supply		1123	1123	1238	1238	1220	1258
1487	Total MMcfd S		0	0	0	0	0	0
1488	Immediate Cur	tailment to EG Stations?	No	No	No	No	No	No
1489	Curtailment	Gas Core [%]	0% 0%	0%	0%	0%	0%	0% 0%
1490 1491	(%)	Gas EG [%] Gas Non-Core Non-EG [%]	0%	0% 0%	0% 0%	0% 0%	0% 0%	0%
1492		Gas Core [MMcfd]	0	0	0	0	0	0
1493	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
1494	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
1495		Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
1496	Number of	Gas Core [# Affected]	0	0	0	0	0	0
1497	Customers	Gas EG [# Affected]	0	0	0	0	0	0
1498 1499	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
1500	Alt Diameter 4	2" / Otay Low / L3010 Out	9.2.3.1	9.2.3.2	9.2.3.3	9.2.3.4	9.2.3.5	9.2.3.6
1501	Alternate Diame		710	710	710	710	710	710
1502	Line 3010 Com		0	0	0	0	0	0
1503	Otay Mesa Low	Supply	33	33	148	148	130	168
1504	Total Supply		743	743	858	858	840	878
1505	Total MMcfd S		0	0	0	0	0	0
1506	Immediate Cur	tailment to EG Stations?	No	No	No	No	No	No
1507 1508	Curtailment	Gas Core [%] Gas EG [%]	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%
1506	(%)	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
1510		Gas Core [MMcfd]	0	0	0	0	0	0
1511	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
1512	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
1513		Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
1514	Number of	Gas Core [# Affected]	0	0	0	0	0	0
1515	Customers	Gas EG [# Affected]	0	0	0	0	0	0
1516	Customers Affected	Gas EG [# Affected] Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
1516 1517	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
1516	Affected Alt Diameter 4	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80%						
1516 1517 1518	Affected	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% eter Pipeline 42"	9.1.4.1	9.1.4.2	9.1.4.3	9.1.4.4	9.1.4.5	9.1.4.6
1516 1517 1518 1519	Alt Diameter 4:	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% ster Pipeline 42" % Supply	9.1.4.1 710	9.1.4.2 710	9.1.4.3 710	9.1.4.4 710	9.1.4.5 710	9.1.4.6 710
1516 1517 1518 1519 1520 1521 1522	Alt Diameter 4. Alternate Diame Line 3010 at 80 Otay Mesa No 3 Total Supply	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% eter Pipeline 42" % Supply Supply	9.1.4.1 710 380 0 1090	9.1.4.2 710 380 0	9.1.4.3 710 380 0	9.1.4.4 710 380 0	9.1.4.5 710 380 0	9.1.4.6 710 380 0
1516 1517 1518 1519 1520 1521 1522 1523	Alt Diameter 4. Alternate Diame Line 3010 at 80 Otay Mesa No 3 Total Supply Total MMcfd S	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% eter Pipeline 42" % Supply Supply hortfall	9.1.4.1 710 380 0 1090	9.1.4.2 710 380 0 1090	9.1.4.3 710 380 0 1090	9.1.4.4 710 380 0 1090	9.1.4.5 710 380 0 1090	9.1.4.6 710 380 0 1090
1516 1517 1518 1519 1520 1521 1522 1523 1524	Alt Diameter 4. Alternate Diame Line 3010 at 80 Otay Mesa No 3 Total Supply Total MMcfd S	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% eter Pipeline 42" % Supply Supply hortfall tailment to EG Stations?	9.1.4.1 710 380 0 1090 0 No	9.1.4.2 710 380 0 1090 0 No	0 9.1.4.3 710 380 0 1090 0 No	9.1.4.4 710 380 0 1090 0 No	0 9.1.4.5 710 380 0 1090 0 No	9.1.4.6 710 380 0 1090 0 No
1516 1517 1518 1519 1520 1521 1522 1523 1524 1525	Alt Diameter 4. Alternate Diame Line 3010 at 80 Otay Mesa No 3 Total Supply Total MMcfd S	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% ster Pipeline 42" % Supply Supply hortfall tailment to EG Stations? Gas Core [%]	9.1.4.1 710 380 0 1090 0 No	9.1.4.2 710 380 0 1090 0 No	0 9.1.4.3 710 380 0 1090 0 No 0%	9.1.4.4 710 380 0 1090 0 No 0%	0 9.1.4.5 710 380 0 1090 0 No 0%	9.1.4.6 710 380 0 1090 0 No
1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526	Alt Diameter 4 Alternate Diame Line 3010 at 80 Otay Mesa No. Total Supply Total MMcfd S Immediate Cur	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% eter Pipeline 42" % Supply Supply hortfall tailment to EG Stations? [Gas Core [%] Gas EG [%]	0 9.1.4.1 710 380 0 1090 0 No 0%	0 9.1.4.2 710 380 0 1090 0 No 0% 0%	0 9.1.4.3 710 380 0 1090 0 No 0%	9.1.4.4 710 380 0 1090 0 No 0% 0%	0 9.1.4.5 710 380 0 1090 0 No 0%	0 9.1.4.6 710 380 0 1090 0 No 0%
1516 1517 1518 1519 1520 1521 1522 1523 1524 1525	Alt Diameter 4 Alternate Diame Line 3010 at 80 Otay Mesa No. Total Supply Total MMcfd S Immediate Cur Curtailment	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% ster Pipeline 42" % Supply Supply hortfall tailment to EG Stations? Gas Core [%]	9.1.4.1 710 380 0 1090 0 No	9.1.4.2 710 380 0 1090 0 No	0 9.1.4.3 710 380 0 1090 0 No 0%	9.1.4.4 710 380 0 1090 0 No 0%	0 9.1.4.5 710 380 0 1090 0 No 0%	9.1.4.6 710 380 0 1090 0 No
1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527	Affected Alt Diameter 4 Alternate Diame Line 3010 at 80 Otay Mesa No 3 Total Supply Total MMcfd Si Immediate Cur Curtailment (%) Curtailment	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% eter Pipeline 42" % Supply Supply hortfall tailment to EG Stations? [Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%]	0 9.1.4.1 710 380 0 1090 0 No 0% 0%	0 9.1.4.2 710 380 0 1090 0 No 0% 0%	0 9.1.4.3 710 380 0 1090 0 No 0% 0%	9.1.4.4 710 380 0 1090 0 No 0% 0%	0 9.1.4.5 710 380 0 1090 0 No 0% 0%	0 9.1.4.6 710 380 0 1090 0 No 0% 0%
1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527 1528 1529 1530	Affected Alt Diameter 4 Alternate Diame Line 3010 at 80 Otay Mesa No. Total Supply Total MMcfd S Immediate Cur Curtailment (%)	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% ster Pipeline 42" % Supply Supply hortfall tailment to EG Stations? [Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW]	0 9.1.4.1 710 380 0 1090 0 No 0% 0% 0% 0 0 0	0 9.1.4.2 710 380 0 1090 0 No 0% 0% 0% 0 0	0 9.1.4.3 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0	9.1.4.4 710 380 0 1090 0 No 0% 0% 0% 0 0	0 9.1.4.5 710 380 0 1090 0 No 0% 0% 0% 0 0 0	0 9.1.4.6 710 380 0 1090 0 No 0% 0% 0% 0 0
1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527 1528 1529 1530 1531	Alf Diameter 4 Alternate Diame Line 3010 at 80 Otay Mesa No 3 Total Supply Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity)	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% ster Pipeline 42" % Supply Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	0 9.1.4.1 710 380 0 1090 0 No 0% 0% 0% 0 0	0 9.1.4.2 710 380 0 1090 0 No 0% 0% 0 0 0 0	0 9.1.4.3 710 380 0 1090 0 No 0% 0% 0 0 0 0	9.1.4.4 710 380 0 1090 0 No 0% 0% 0% 0 0 0	0 9.1.4.5 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0	0 9.1.4.6 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0
1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527 1528 1529 1530 1531 1531	Alt Diameter 4 Alternate Diameter 4 Alternate Diameter 3 Alternate Diameter 3 Cotay Mesa No 3 Total Supply Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% beter Pipeline 42" % Supply Supply hortfall tailment to EG Stations? [Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0 9.1.4.1 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0	0 9.1.4.2 710 380 0 1090 0 No 0% 0% 0 0 0 0	0 9.1.4.3 710 380 0 1090 0 No 0% 0% 0 0 0 0	9.1.4.4 710 380 0 1090 0 No 0% 0% 0% 0 0 0	0 9.1.4.5 710 380 0 1090 0 No 0% 0% 0 0 0 0	0 9.1.4.6 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0
1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527 1528 1529 1530 1531 1532	Affected Alt Diameter 4 Alternate Diame Line 3010 at 80 Otay Mesa No 3 Total Supply Total MMcfd SI Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% ster Pipeline 42" % Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected]	0 9.1.4.1 710 380 0 1090 No 0% 0% 0% 0 0 0 0 0 0 0	0 9.1.4.2 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0	0 9.1.4.3 710 380 0 1090 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.4.4 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.4.5 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0	0 9.1.4.6 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0
1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527 1528 1529 1530 1531 1532 1533	Alt Diameter 4 Alternate Diameter 4 Alternate Diameter 3 Alternate Diameter 3 Cotay Mesa No 3 Total Supply Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% beter Pipeline 42" % Supply Supply hortfall tailment to EG Stations? [Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0 9.1.4.1 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0	0 9.1.4.2 710 380 0 1090 0 No 0% 0% 0% 0 0 0	0 9.1.4.3 710 380 0 1090 0 No 0% 0% 0 0 0 0	9.1.4.4 710 380 0 1090 0 No 0% 0% 0% 0 0 0	0 9.1.4.5 710 380 0 1090 0 No 0% 0% 0 0 0 0	0 9.1.4.6 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0
1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527 1528 1529 1530 1531 1532	Alfected Alt Diameter 4 Alternate Diame Line 3010 at 80 Otay Mesa No 3 Total Supply Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% ster Pipeline 42" % Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected]	0 9.1.4.1 710 380 0 1090 No 0% 0% 0% 0 0 0 0 0 0 0	0 9.1.4.2 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0	0 9.1.4.3 710 380 0 1090 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.4.4 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.4.5 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0	0 9.1.4.6 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0
1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527 1528 1529 1530 1531 1532 1533 1534 1533	Affected Alt Diameter 4 Alternate Diame Line 3010 at 80 Otay Mesa No 3 Total Supply Total MMcfd SI Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Diameter 4 Alternate Diame	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% Inter Pipeline 42" % Supply Supply Interfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Core [# Affected] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Cas Non-Core Non-EG [# Affected] Cas Pipeline 42"	0 9.1.4.1 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.4.2 710 380 0 1090 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0	0 9.1.4.3 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.4.4 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.4.5 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.4.6 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0
1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527 1528 1529 1530 1531 1532 1533 1534 1535 1536	Affected Alt Diameter 4 Alternate Diame Line 3010 at 80 Otay Mesa No 3 Total Supply Total MMcfd Si Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alternate Diame Line 3010 Com	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% teter Pipeline 42" % Supply Supply hortfall tailment to EG Stations? [Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Core [# Affected] Cas Core [# Affected]	0 9.1.4.1 710 380 0 1090 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0	0 9.1.4.2 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.4.3 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.4.4 710 380 0 1090 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.4.5 710 380 0 1090 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0	0 9.1.4.6 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527 1528 1529 1530 1531 1532 1533 1534 1535 1536 1537	Alt Diameter 4 Alternate Diame Line 3010 at 80 Otay Mesa No 3 Total Supply Total MMcfd Si Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Diameter 4 Alternate Diame Line 3010 Com Otay Mesa No 3	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% teter Pipeline 42" % Supply Supply hortfall tailment to EG Stations? [Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Core [# Affected] Cas Core [# Affected]	0 9.1.4.1 710 380 0 1090 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0	0 9.1.4.2 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.4.3 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.4.4 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.4.5 710 380 0 1090 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0	0 9.1.4.6 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527 1528 1529 1530 1531 1532 1533 1534 1535 1536 1537 1538	Affected Alt Diameter 4 Alternate Diame Line 3010 at 80 Otay Mesa No 3 Total Supply Total MMcfd Si Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Diameter 4 Alternate Diame Line 3010 Com Otay Mesa No 3 Total Supply	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% ster Pipeline 42" % Supply Supply hortfall tailment to EG Stations? [Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas Core [# Affected] Gas Core [# Affected] Gas EG [# Affected] Gas Core [# Affected] Cas Hort-Core Non-EG [# Affected] Cas Core [# Affected] Cas Core [# Affected] Cas Core Non-Core Non-EG [# Affected] Cas Core [# Affected] Cas Non-Core Non-EG [# Affected] Cas Core Non-Core Non-EG [# Affected] Cas Non-Core Non-EG [# Affected] Cas Core [# Affected]	0 9.1.4.1 710 380 0 1090 0 No 0% 0% 0 0 0 0 0 0 0 0 0 710	0 9.1.4.2 710 380 0 1090 0 No 0% 0% 0 0 0 0 0 0 9.2.4.2 710 0 0 710	0 9.1.4.3 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 710	9.1.4.4 710 380 0 1090 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.4.5 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 710	9.1.4.6 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 710
1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527 1528 1529 1530 1531 1532 1533 1534 1535 1536 1537 1538 1539	Affected Alt Diameter 4 Alternate Diame Line 3010 at 80 Otay Mesa No 3 Total Supply Total MMcfd SI Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alternate Diame Line 3010 Com Otay Mesa No 3 Total Supply Total MMcfd Si	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% teter Pipeline 42" % Supply Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Core [# Affected] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Cas Non-Core Non-EG [# Affected] Cas Core [# Affected] Cas Co	0 9.1.4.1 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 710 0	0 9.1.4.2 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 710 0	0 9.1.4.3 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 710 0	9.1.4.4 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.4.5 7710 380 0 1090 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 710 0	9.1.4.6 710 380 0 1090 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 710 0 710 0
1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527 1528 1529 1530 1531 1532 1533 1534 1535 1536 1537 1538 1539 1540 1541 1542	Alt Diameter 4 Alternate Diame Line 3010 at 80 Otay Mesa No 3 Total Supply Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alternate Diame Line 3010 Com Otay Mesa No 3 Total Supply Total MMcfd S Immediate Cur	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% ster Pipeline 42" % Supply Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Core [# Affected] Gas Cor	0 9.1.4.1 710 380 0 1090 0 No 0% 0% 0 0 0 0 0 0 0 0 710 0 No No	0 9.1.4.2 710 380 0 1090 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0	0 9.1.4.3 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 710 0 0 0 0 0 0 0 0 0 0	9.1.4.4 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.4.5 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 7 10 0 0 0 0 0 0 0 0	9.1.4.6 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 710 0 0 0 0 0 0 0 0
1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527 1528 1530 1531 1532 1533 1534 1535 1536 1537 1538 1539 1540 1541	Affected Alt Diameter 4 Alternate Diame Line 3010 at 80 Otay Mesa No 3 Total Supply Total MMcfd SI Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alternate Diame Line 3010 Com Otay Mesa No 3 Total Supply Total MMcfd SI Immediate Cur Curtailment	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% ster Pipeline 42" % Supply Supply hortfall tailment to EG Stations? [Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Core [# Affected] Cas EG [# Affected] Gas Core [# Affected] Gas Hon-Core Non-EG [# Affected] Cas Core [%] Cas Core [%]	0 9.1.4.1 710 380 0 1090 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0	9.1.4.2 710 380 0 1090 0 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.4.3 710 380 0 1090 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.4.4 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.4.5 710 380 0 1090 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0	9.1.4.6 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527 1528 1529 1530 1531 1532 1533 1534 1535 1536 1537 1538 1539 1540 1541 1542	Alt Diameter 4 Alternate Diame Line 3010 at 80 Otay Mesa No 3 Total Supply Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alternate Diame Line 3010 Com Otay Mesa No 3 Total Supply Total MMcfd S Immediate Cur	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% ster Pipeline 42" % Supply Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Core [# Affected] Gas Cor	0 9.1.4.1 710 380 0 1090 0 No 0% 0% 0 0 0 0 0 0 0 0 710 0 No No	0 9.1.4.2 710 380 0 1090 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0	0 9.1.4.3 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 710 0 0 0 0 0 0 0 0 0 0	9.1.4.4 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.4.5 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 7 10 0 0 0 0 0 0 0 0	9.1.4.6 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 710 0 0 0 0 0 0 0 0
1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527 1528 1529 1530 1531 1532 1533 1534 1535 1536 1537 1538 1539 1540 1541	Affected Alt Diameter 4 Alternate Diame Line 3010 at 80 Otay Mesa No 3 Total Supply Total MMcfd SI Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alternate Diame Line 3010 Com Otay Mesa No 3 Total Supply Total MMcfd SI Immediate Cur Curtailment Curtailment Customers Affected	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% steer Pipeline 42" % Supply Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Core [# Affected] Gas Core [# Affected] cer Pipeline 42" plete Outage Supply hortfall tailment to EG Stations? Gas Core [%] Gas Core [%] Gas Core [%] Gas Core [MMcfd]	9.1.4.1 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.4.2 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.4.3 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.4.4 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.4.5 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.4.6 710 380 0 1090 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527 1528 1530 1531 1532 1533 1534 1535 1536 1537 1538 1539 1540 1541 1542 1543 1544 1544 1546 1546 1547	Affected Alt Diameter 4 Alternate Diame Line 3010 at 80 Otay Mesa No 3 Total Supply Total MMcfd SI Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alternate Diame Line 3010 Com Otay Mesa No 3 Total Supply Total MMcfd SI Immediate Cur Curtailment (%) Curtailment (%)	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% steer Pipeline 42" % Supply Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] teter Pipeline 42" plete Outage Supply hortfall tailment to EG Stations? Gas Core [%] Gas Core [%] Gas Core [MMcfd] Gas Core [MMcfd] Gas EG [MWh/d]	0 9.1.4.1 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.4.2 710 380 0 1090 0 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.4.3 710 380 0 1090 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.4.4 710 380 0 1090 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 710 0 No 0 0 710 0 No 0% 0% 0% 0% 0% 0% 0% 0% 0%	0 9.1.4.5 710 380 0 1090 0 0 0 0 0 0 0 0 0 0 0 0	9.1.4.6 7110 380 0 1090 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527 1528 1529 1530 1531 1532 1533 1534 1535 1536 1537 1538 1539 1540 1541 1542 1543 1544 1545 1544 1545	Affected Alt Diameter 4 Alternate Diame Line 3010 at 80 Otay Mesa No 3 Total Supply Total MMcfd SI Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alternate Diame Line 3010 Com Otay Mesa No 3 Total Supply Total MMcfd SI Immediate Cur Curtailment Curtailment Customers Affected	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% ster Pipeline 42" % Supply Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWI/d] Gas EG [MWI/d] Gas EG [# Affected] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Cas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] The pletter Pipeline 42" plete Outage Supply hortfall tailment to EG Stations? Gas Core [%] Gas Core [%] Gas Core [MMcfd] Gas EG [WM/d] Gas EG [MW/d]	0 9.1.4.1 710 380 0 1090 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0	0 9.1.4.2 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.4.3 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 710 0 No 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%	9.1.4.4 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 710 0 No 0% 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.4.5 710 780 0 1090 0 0 0 0 0 0 0 0 0 0 0 0	9.1.4.6 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527 1528 1529 1530 1531 1532 1533 1534 1535 1536 1537 1540 1541 1542 1540 1541 1544 1545 1546 1546 1546 1546 1546	Affected Alt Diameter 4 Alternate Diame Line 3010 at 80 Otay Mesa No 3 Total Supply Total MMcfd Si Immediate Cur (%) Curtailment (Capacity) Number of Customers Affected Alternate Diame Line 3010 Com Otay Mesa No 3 Total Supply Total MMcfd Si Immediate Cur Curtailment (%) Curtailment Customers Affected Alternate Diame Line 3010 Com Customers Customers Affected Alternate Diame Line 3010 Com Customers Customers Affected Customers Affected Alternate Diame Line 3010 Com Customers Custome	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% steer Pipeline 42" % Supply Supply hortfall tailment to EG Stations? Gas Core [%] Gas Core [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Cas Non-Core Non-EG [# Affected] Gas Core [# Affected] Gas Core [# Affected] Gas Core [# Affected] Gas Core [# Affected] Cas Core [# Affected] Gas Core [# Affected] Cas Core [# Affected] Gas Core [Mortfall Tailment to EG Stations? Gas Core [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWfd] Gas EG [MMcfd] Gas EG [MMcfd]	0 9.1.4.1 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 710 0 No 0% 0% 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0	9.1.4.2 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 710 0 0 710 0 No 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%	0 9.1.4.3 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 710 0 0 710 0 No 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%	9.1.4.4 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.4.5 7380 0 1090 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.4.6 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527 1528 1529 1530 1531 1532 1533 1534 1535 1536 1537 1538 1539 1540 1541 1542 1543 1544 1545 1546 1547 1546 1547 1549 1550	Affected Alt Diameter 4 Alternate Diame Line 3010 at 80 Otay Mesa No 3 Total Supply Total MMcfd SI Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alternate Diame Line 3010 Com Otay Mesa No 3 Total Supply Total MMcfd SI Immediate Cur Curtailment (%) Curtailment Curtailment City Mesa No 3 County Curtailment (%) Curtailment (%) Curtailment (%) Curtailment (Capacity) Number of	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% ster Pipeline 42" % Supply Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 Out ster Pipeline 42" plete Outage Supply hortfall tailment to EG Stations? Gas Core [%] Gas Core [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Core [MMcfd] Gas Core [MAffected]	0 9.1.4.1 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.4.2 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.4.3 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 710 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.4.4 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.4.5 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.4.6 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527 1528 1529 1530 1531 1532 1533 1534 1535 1536 1537 1540 1541 1542 1540 1541 1544 1545 1546 1546 1546 1546 1546	Affected Alt Diameter 4 Alternate Diame Line 3010 at 80 Otay Mesa No 3 Total Supply Total MMcfd Si Immediate Cur (%) Curtailment (Capacity) Number of Customers Affected Alternate Diame Line 3010 Com Otay Mesa No 3 Total Supply Total MMcfd Si Immediate Cur Curtailment (%) Curtailment Customers Affected Alternate Diame Line 3010 Com Customers Customers Affected Alternate Diame Line 3010 Com Customers Customers Affected Customers Affected Alternate Diame Line 3010 Com Customers Custome	Gas Non-Core Non-EG [# Affected] 2" / Otay Out / L3010 80% steer Pipeline 42" % Supply Supply hortfall tailment to EG Stations? Gas Core [%] Gas Core [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Cas Non-Core Non-EG [# Affected] Gas Core [# Affected] Gas Core [# Affected] Gas Core [# Affected] Gas Core [# Affected] Cas Core [# Affected] Gas Core [# Affected] Cas Core [# Affected] Gas Core [Mortfall Cas Core [%] Gas Core [MMcfd] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MMcfd] Gas EG [MMcfd] Gas EG [MMcfd] Gas EG [MMcfd] Gas Core [MMcfd]	0 9.1.4.1 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 710 0 No 0% 0% 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0	9.1.4.2 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 710 0 0 710 0 No 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%	0 9.1.4.3 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 710 0 0 710 0 No 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%	9.1.4.4 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9.1.4.5 7380 0 1090 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9.1.4.6 710 380 0 1090 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Line No.								
			1. Example	2. Example	3. Example	4. Winter 1-	5. Example	6. Example
1				Summer High	Winter Day	in-10 Year	Spring Day	Fall Day
			EG Day	EG Day	MMcfd	Day MMcfd	MMcfd	MMcfd
2	Α	В	MMcfd C	MMcfd D	Е	F	G	н
1553	A	Б	C	D	E	Г	G	п
1554	L1600 In-Kind	Replacement						
1555								
1556		/ Otay Full / L3010 80%	10.1.1.1	10.1.1.2	10.1.1.3	10.1.1.4	10.1.1.5	10.1.1.6
1557	L1600 In-Kind F		160	160	160	160	160	160
1558	Line 3010 at 80		380	380	380	380	380	380
1559	Otay Mesa Full	Supply	295 835	86	313 853	313 853	329 869	324 864
1560 1561	Total Supply Total MMcfd S	hortfall	0	626 0	0	0	0	0
1562		rtailment to EG Stations?	No	No	No	No	No	No
1563	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
1564	(%)	Gas EG [%]	0%	0%	0%	0%	0%	0%
1565	(70)	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
1566	Curtailment	Gas Core [MMcfd]	0	0	0	0	0	0
1567 1568	(Capacity)	Gas EG [MWh/d] Gas EG [MW]	0	0	0	0	0	0
1569	(Сарасну)	Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
1570	Number of	Gas Core [# Affected]	0	0	0	0	0	0
1571	Customers	Gas EG [# Affected]	0	0	0	0	0	0
1572	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
1573	1 1600 lo Kind	/ Otav Full / L3010 Out	10.2.1.1	10.2.1.2	10.2.1.3	10.2.1.4	10.2.1.5	10.2.1.6
1574 1575	L1600 In-Kind F		160	160	160	160	160	160
1575	Line 3010 Com		0	0	0	0	0	0
1577	Otay Mesa Full		295	86	313	313	329	324
1578	Total Supply		455	246	473	473	489	484
1579	Total MMcfd S		0	229	64	104	0	41
1580	Immediate Cur	tailment to EG Stations?	No	Yes	Yes	Yes	No	No
1581	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
1582 1583	(%)	Gas EG [%] Gas Non-Core Non-EG [%]	0% 0%	51% 100%	1% 100%	26% 100%	0% 0%	0% 55%
1584		Gas Core [MMcfd]	0	0	0	0	0	0
1585	Curtailment	Gas EG [MWh/d]	0	20,742	298	5,693	0	0
1586	(Capacity)	Gas EG [MW]	0	864	12	237	0	0
1587		Gas Non-Core Non-EG [MMcfd]	0	75	62	62	0	41
1588	Number of	Gas Core [# Affected]	0	0	0	0	0	0
1589 1590	Customers	Gas EG [# Affected] Gas Non-Core Non-EG [# Affected]	0	N/A N/A	N/A N/A	N/A N/A	0	0 N/A
1590	Affected	Gas Non-Core Non-EG [# Allected]	U	N/A	N/A	N/A	U	IN/A
1592	L1600 In-Kind	/ Otay Medium / L3010 80%	10.1.2.1	10.1.2.2	10.1.2.3	10.1.2.4	10.1.2.5	10.1.2.6
1593	L1600 In-Kind F		160	160	160	160	160	160
1594	Line 3010 at 80		380	380	380	380	380	380
1595	Otay Mesa Med	dium Supply	156	60	230	230	244	247
1596	Total Supply		696	600	770	770	784	787
1597	Total MMcfd S	rtailment to EG Stations?	0 No	0 No	0 No	0 No	0 No	0 No
1598 1599		Gas Core [%]	0%	0%	0%	0%	0%	0%
1600	Curtailment	Gas EG [%]	0%	0%	0%	0%	0%	0%
1601	(%)	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
1602		Gas Core [MMcfd]	0	0	0	0	0	0
1603	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
1604 1605	(Capacity)	Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
1605	Number of	Gas Core [# Affected]	0	0	0	0	0	0
1607	Customers	Gas EG [# Affected]	0	0	0	0	0	0
1608	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
1609		/0: 11 11 11 11 11				100	- 10-0	
1610		/ Otay Medium / L3010 Out	10.2.2.1	10.2.2.2	10.2.2.3	10.2.2.4	10.2.2.5	10.2.2.6
1611 1612	L1600 In-Kind F Line 3010 Com		160	160 0	160 0	160 0	160 0	160 0
1612	Otay Mesa Med		156	60	230	230	244	247
1614	Total Supply		316	220	390	390	404	407
1615	Total MMcfd S	hortfall	0	255	147	187	61	118
1616	Immediate Cur	tailment to EG Stations?	No	Yes	Yes	Yes	No	Yes
1617	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
1618	(%)	Gas EG [%]	0%	60%	52%	76%	0%	16%
1619 1620	-	Gas Non-Core Non-EG [%] Gas Core [MMcfd]	0%	100%	100%	100%	81% 0	100%
1620	Curtailment	Gas EG [MWh/d]	0	24,309	11,475	16,870	0	5,777
1622	(Capacity)	Gas EG [MW]	0	1,013	478	703	0	241
1623		Gas Non-Core Non-EG [MMcfd]	0	75	62	62	61	75
1624	Number of	Gas Core [# Affected]	0	0	0	0	0	0
1625 1626	Customers	Gas EG [# Affected]	0	N/A	N/A	N/A	0	N/A
	Affected	Gas Non-Core Non-EG [# Affected]	0	N/A	N/A	N/A	N/A	N/A

Line No.

1			1. Example Summer Low- EG Day MMcfd	2. Example Summer High EG Day MMcfd	3. Example Winter Day MMcfd	4. Winter 1- in-10 Year Day MMcfd	5. Example Spring Day MMcfd	6. Example Fall Day MMcfd
2 1627	Α	В	С	D	Е	F	G	Н
1627	L1600 In-Kind	/ Otay Low / L3010 80%	10.1.3.1	10.1.3.2	10.1.3.3	10.1.3.4	10.1.3.5	10.1.3.6
1629	L1600 In-Kind F		160	160	160	160	160	160
1630	Line 3010 at 80 Otay Mesa Low		380	380 33	380 148	380 148	380 130	380 168
1631 1632	Total Supply	Зирріу	573	573	688	688	670	708
1633	Total MMcfd S	hortfall	0	0	0	0	0	0
1634	Immediate Cur	tailment to EG Stations?	No	No	No	No	No	No
1635	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
1636 1637	(%)	Gas EG [%] Gas Non-Core Non-EG [%]	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%
1638		Gas Core [MMcfd]	0	0	0	0	0	0
1639	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
1640	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
1641	Number of	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0	0	0	0	0	0
1642 1643	Customers	Gas EG [# Affected]	0	0	0	0	0	0
1644	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
1645			40.00	/0.0	40.000	1000	10.00	10.000
1646 1647	L1600 In-Kind F	/ Otay Low / L3010 Out	10.2.3.1 160	10.2.3.2 160	10.2.3.3 160	10.2.3.4 160	10.2.3.5 160	10.2.3.6 160
1647 1648	Line 3010 Com		0	0	0	0	0	0
1649	Otay Mesa Low		33	33	148	148	130	168
1650	Total Supply		193	193	308	308	290	328
1651	Total MMcfd S		82	282	229	269	175	197
1652 1653	Immediate Cur	tailment to EG Stations? Gas Core [%]	Yes 0%	Yes 0%	Yes 1%	Yes 12%	Yes 0%	Yes 0%
1654	Curtailment	Gas EG [%]	7%	69%	100%	100%	45%	45%
1655	(%)	Gas Non-Core Non-EG [%]	100%	100%	100%	100%	100%	100%
1656		Gas Core [MMcfd]	0	0	2	42	0	0
1657	Curtailment	Gas EG [MWh/d]	902	27,876	22,253	22,253	13,473	16,515
1658 1659	(Capacity)	Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	38 75	1,162 75	927 62	927 62	561 75	688 75
1660	Number of	Gas Core [# Affected]	0	0	5,325	104,012	0	0
1661	Customers	Gas EG [# Affected]	N/A	N/A	N/A	N/A	N/A	N/A
1662	Affected	Gas Non-Core Non-EG [# Affected]	N/A	N/A	N/A	N/A	N/A	N/A
1663 1664	L1600 In-Kind	/ Otay Out / L3010 80%	10.1.4.1	10.1.4.2	10.1.4.3	10.1.4.4	10.1.4.5	10.1.4.6
1665	L1600 In-Kind F		160	160	160	160	160	160
1666	Line 3010 at 80		380	380	380	380	380	380
1667	Otay Mesa No S	Supply	0	0	0	0 540	0	0
1668 1669	Total Supply							540
1670		hortfall	540	540	540		540	
	Total MMcfd S Immediate Cur		0	0	0	37	0	0
1671	Immediate Cur	tailment to EG Stations? [Gas Core [%]	0 No 0%	0 No 0%	0 No 0%	37 No 0%	0 No 0%	0 No 0%
1671 1672	Immediate Cur Curtailment	tailment to EG Stations? Gas Core [%] Gas EG [%]	0 No 0% 0%	0 No 0% 0%	0 No 0% 0%	37 No 0% 0%	0 No 0% 0%	0 No 0% 0%
1671 1672 1673	Immediate Cur	tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%]	0 No 0% 0%	0 No 0% 0% 0%	0 No 0% 0% 0%	37 No 0% 0% 60%	0 No 0% 0% 0%	0 No 0% 0%
1671 1672 1673 1674	Immediate Cur Curtailment	tailment to EG Stations? Gas Core [%] Gas EG [%]	0 No 0% 0% 0%	0 No 0% 0% 0%	0 No 0% 0% 0%	37 No 0% 0% 60%	0 No 0% 0% 0%	0 No 0% 0% 0%
1671 1672 1673	Immediate Cur Curtailment (%)	tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW]	0 No 0% 0%	0 No 0% 0% 0%	0 No 0% 0% 0%	37 No 0% 0% 60%	0 No 0% 0% 0%	0 No 0% 0%
1671 1672 1673 1674 1675 1676 1677	Immediate Cur Curtailment (%) Curtailment (Capacity)	tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	0 No 0% 0% 0% 0 0 0	0 No 0% 0% 0 0 0	0 No 0% 0% 0 0 0 0	37 No 0% 0% 60% 0 0	0 No 0% 0% 0% 0 0	0 No 0% 0% 0 0 0
1671 1672 1673 1674 1675 1676 1677	Immediate Cur Curtailment (%) Curtailment (Capacity) Number of	tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0 No 0% 0% 0% 0 0 0	0 No 0% 0% 0 0 0 0	0 No 0% 0% 0 0 0 0	37 No 0% 0% 60% 0 0 0 0	0 No 0% 0% 0% 0 0 0	0 No 0% 0% 0 0 0 0
1671 1672 1673 1674 1675 1676 1677 1678 1679	Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers	tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected]	0 No 0% 0% 0% 0 0 0	0 No 0% 0% 0 0 0	0 No 0% 0% 0 0 0 0	37 No 0% 0% 60% 0 0 37 0	0 No 0% 0% 0% 0 0	0 No 0% 0% 0 0 0
1671 1672 1673 1674 1675 1676 1677	Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected	tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected]	0 No 0% 0% 0% 0 0 0 0 0 0	0 No 0% 0% 0% 0 0 0 0 0	0 No 0% 0% 0% 0 0 0 0 0 0	37 No 0% 60% 0 0 0 0 0 0 0 N/A	0 No 0% 0% 0% 0 0 0 0 0 0	0 No 0% 0% 0% 0 0 0 0 0
1671 1672 1673 1674 1675 1676 1677 1678 1679 1680 1681	Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected L1600 In-Kind	tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected]	0 No 0% 0% 0% 0 0 0 0 0 0	0 No 0% 0% 0% 0 0 0 0 0 0	0 No 0% 0% 0% 0 0 0 0 0 0	37 No 0% 60% 0 0 0 0 0 0 0 N/A	0 No 0% 0% 0% 0 0 0 0 0 0	0 No 0% 0% 0% 0 0 0 0 0 0
1671 1672 1673 1674 1675 1676 1677 1678 1679 1680 1681 1682 1683	Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected L1600 In-Kind L1600 In-Kind	tailment to EG Stations? Gas Core [%] Gas Core [%] Gas Mon-Core Non-EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected]	0 No 0% 0% 0% 0 0 0 0 0 0 0 0	0 No 0% 0% 0 0 0 0 0 0 0 0	0 No 0% 0% 0 0 0 0 0 0 0 0	37 No 0% 0% 60% 0 0 0 0 0 0 0 N/A	0 No 0% 0% 0 0 0 0 0 0 0 0	0 No 0% 0% 0 0 0 0 0 0 0 0
1671 1672 1673 1674 1675 1676 1677 1678 1679 1680 1681	Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected L1600 In-Kind	tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Votay Out / L3010 Out Replacement Polete Outage	0 No 0% 0% 0% 0 0 0 0 0 0	0 No 0% 0% 0% 0 0 0 0 0 0	0 No 0% 0% 0% 0 0 0 0 0 0	37 No 0% 60% 0 0 0 0 0 0 0 N/A	0 No 0% 0% 0% 0 0 0 0 0 0	0 No 0% 0% 0% 0 0 0 0 0 0
1671 1672 1673 1674 1675 1676 1677 1678 1679 1680 1681 1682 1683	Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected L1600 In-Kind L1600 In-Kind F Line 3010 Com	tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Votay Out / L3010 Out Replacement Polete Outage	0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0	0 No 0% 0% 0 0 0 0 0 0 0 0 0	0 No 0% 0% 0 0 0 0 0 0 0 0	37 No 0% 0% 60% 0 0 0 0 0 0 N/A	0 No 0% 0% 0% 0 0 0 0 0 0 0 0	0 No 0% 0% 0 0 0 0 0 0 0 0
1671 1672 1673 1674 1675 1676 1677 1678 1679 1680 1681 1682 1683 1684 1685 1686	Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected L1600 In-Kind F Line 3010 Com Otay Mesa No S Total Supply Total MMcfd Si	tailment to EG Stations? Gas Core [%] Gas Core [%] Gas Mon-Core Non-EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Cost Mon-Core Non-EG [# Affected] Cost Mon-Core Non-EG [# Affected] Cost Mon-Core Non-EG [# Affected] Cotay Out / L3010 Out Replacement plete Outage Supply hortfall	0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	37 No 0% 60% 0 0 0 37 0 0 N/A	0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1671 1672 1673 1674 1675 1676 1677 1678 1679 1680 1681 1682 1683 1684 1685 1686 1687	Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected L1600 In-Kind F Line 3010 Com Otay Mesa No S Total Supply Total MMcfd Si	tailment to EG Stations? Gas Core [%] Gas Core [%] Gas Mon-Core Non-EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Cotay Out / L3010 Out Replacement plete Outage Supply hortfall tailment to EG Stations?	0 No No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	37 No 0% 60% 0 0 0 0 0 0 0 0 N/A 10.2.4.4 160 0 0 417 Yes	0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1671 1672 1673 1674 1675 1676 1677 1678 1679 1680 1681 1682 1683 1684 1685 1686 1687 1688	Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected L1600 In-Kind L1600 In-Kind F Line 3010 Com Otay Mesa No. S Total Supply Total MMcfd S Immediate Cur Curtailment	tailment to EG Stations? Gas Core [%] Gas Core [%] Gas Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Votay Out / L3010 Out Replacement plete Outage Supply hortfall tailment to EG Stations? Gas Core [%]	0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	37 No 0% 60% 0 0 0 0 0 0 0 0 N/A 10.2.4.4 160 0 0 160 417 Yes 54%	0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1671 1672 1673 1674 1675 1676 1677 1678 1679 1680 1681 1682 1683 1684 1685 1686 1687 1688	Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected L1600 In-Kind Line 3010 Com Otay Mesa No.3 Total Supply Total MMcfd S Immediate Cur	tailment to EG Stations? Gas Core [%] Gas Core [%] Gas Mon-Core Non-EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Cotay Out / L3010 Out Replacement plete Outage Supply hortfall tailment to EG Stations?	0 No No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	37 No 0% 60% 0 0 0 0 0 0 0 0 N/A 10.2.4.4 160 0 0 417 Yes	0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1671 1672 1673 1674 1675 1676 1677 1678 1679 1680 1681 1682 1683 1684 1685 1686 1687 1688	Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected L1600 In-Kind L1600 In-Kind F Line 3010 Com Otay Mesa No.3 Total Supply Total MMcfd S Immediate Cur Curtailment (%)	tailment to EG Stations? Gas Core [%] Gas Core [%] Gas Non-Core Non-EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] ### Comparison of Com	0 No	0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	37 No 0% 60% 0 0 0 0 37 0 0 N/A 160 0 0 160 417 Yes 54% 100%	0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 No No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1671 1672 1673 1674 1675 1676 1677 1678 1680 1681 1682 1683 1684 1685 1686 1687 1688 1689 1690 1691 1692	Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected L1600 In-Kind L1600 In-Kind F Line 3010 Com Otay Mesa No. Total Supply Total MMcfd S Immediate Cur Curtailment (%)	tailment to EG Stations? Gas Core [%] Gas Core [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] ### Comparison of Comparison o	0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 10.2.4.1 160 0 0 115 Yes 0% 40% 100% 0 5,395	0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	37 No 0% 60% 0 0 0 0 0 0 0 N/A 160 0 0 0 160 417 Yes 54% 100% 100% 100%	0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 No No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1671 1672 1673 1674 1675 1676 1677 1678 1679 1680 1681 1682 1683 1684 1685 1686 1687 1689 1690 1691 1692 1693	Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected L1600 In-Kind L1600 In-Kind F Line 3010 Com Otay Mesa No.3 Total Supply Total MMcfd S Immediate Cur Curtailment (%)	tailment to EG Stations? Gas Core [%] Gas Core [%] Gas	0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 10.2.4.1 160 0 160 115 Yes 0% 40% 100% 0 5,395	0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	37 No 0% 60% 0 0 0 0 37 0 0 N/A 160 0 0 160 417 Yes 54% 100% 100% 100%	0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 No No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1671 1672 1673 1674 1675 1676 1677 1678 1679 1680 1681 1682 1683 1684 1685 1686 1687 1689 1690 1691 1692 1693 1694	Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected L1600 In-Kind L1600 In-Kind F Line 3010 Com Otay Mesa No. Total Supply Total MMcfd S Immediate Cur Curtailment (%)	tailment to EG Stations? Gas Core [%] Gas Core [%] Gas Non-Core Non-EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] When the company of the comp	0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 10.2.4.1 160 0 160 115 Yes 0% 40% 100% 0 5,395 225 75	0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	37 No 0% 60% 0 0 0 37 0 0 N/A 160 0 0 160 417 Yes 54% 100% 190 22,253 927 62	0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 10.2.4.5 160 0 160 305 Yes 6% 100% 100% 10 29,671 1,236 75	0 No No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1671 1672 1673 1674 1675 1676 1677 1678 1679 1680 1681 1682 1683 1684 1685 1686 1687 1689 1690 1691 1692 1693	Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected L1600 In-Kind Line 3010 Com Otay Mesa No 3 Total Supply Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity)	tailment to EG Stations? Gas Core [%] Gas Core [%] Gas	0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 10.2.4.1 160 0 160 115 Yes 0% 40% 100% 0 5,395	0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	37 No 0% 60% 0 0 0 0 37 0 0 N/A 160 0 0 160 417 Yes 54% 100% 100% 100%	0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 No No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Line No.		APPLICATION 15-09-013 VOLUME III			ALTSIS (CORR	ECTED FEBR	(UART 2017)	
			1. Example Summer Low-	2. Example Summer High-	3. Example	4. Winter 1-	5. Example	6. Example
1			EG Day	EG Day	Winter Day	in-10 Year	Spring Day	Fall Day
			MMcfd	MMcfd	MMcfd	Day MMcfd	MMcfd	MMcfd
2	Α	В	С	D	E	F	G	Н
1699 1700	Otay Mesa Alt	<u>ernate</u>						
1701 1702	Otay Mesa Alt	ernate / Otay Full / L3010 80%	11.1.1.1	11.1.1.2	11.1.1.3	11.1.1.4	11.1.1.5	11.1.1.6
1703	Otay Mesa Alte	rnate	0	0	0	0	0	0
1704	Line 3010 at 80		380	380	380	380	380	380
1705 1706	Otay Mesa Full Total Supply	Supply	295 675	86 466	313 693	313 693	329 709	324 704
1707	Total MMcfd S	hortfall	0	9	0	0	0	0
1708		rtailment to EG Stations?	No	No	No	No	No	No
1709	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
1710 1711	(%)	Gas EG [%] Gas Non-Core Non-EG [%]	0% 0%	0% 12%	0% 0%	0% 0%	0% 0%	0% 0%
1711		Gas Core [MMcfd]	0	0	0	0	0	0
1713	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
1714	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
1715 1716	Number of	Gas Non-Core Non-EG [MMcfd]	0	9	0	0	0	0
1716 1717	Customers	Gas Core [# Affected] Gas EG [# Affected]	0	0	0	0	0	0
1718	Affected	Gas Non-Core Non-EG [# Affected]	0	N/A	0	0	0	0
1719							44.0-1-	
1720	Otay Mesa Alte	ernate / Otay Full / L3010 Out	11.2.1.1	11.2.1.2 0	11.2.1.3 0	11.2.1.4 0	11.2.1.5 0	11.2.1.6 0
1721 1722	Line 3010 Com		0	0	0	0	0	0
1723	Otay Mesa Full		295	86	313	313	329	324
1724	Total Supply		295	86	313	313	329	324
1725	Total MMcfd S		0	389	224	264	136	201
1726 1727		rtailment to EG Stations? Gas Core [%]	No 0%	Yes 14%	Yes 0%	Yes 11%	Yes 0%	Yes 0%
1728	Curtailment	Gas EG [%]	0%	100%	98%	100%	28%	47%
1729	(%)	Gas Non-Core Non-EG [%]	0%	100%	100%	100%	100%	100%
1730		Gas Core [MMcfd]	0	14	0	37	0	0
1731 1732	Curtailment (Capacity)	Gas EG [MWh/d] Gas EG [MW]	0	40,461 1,686	21,877 912	22,253 927	8,240 343	17,039 710
1732	(Capacity)	Gas Non-Core Non-EG [MMcfd]	0	75	62	62	75	75
1734	Number of	Gas Core [# Affected]	0	119,839	0	92,375	0	0
1735	Customers	Gas EG [# Affected]	0	N/A	N/A	N/A	N/A	N/A
1736 1737	Affected	Gas Non-Core Non-EG [# Affected]	0	N/A	N/A	N/A	N/A	N/A
1738	Otay Mesa Alt	ernate / Otay Medium / L3010 80%	11.1.2.1	11.1.2.2	11.1.2.3	11.1.2.4	11.1.2.5	11.1.2.6
1739	Otay Mesa Alte		0	0	0	0	0	0
1740	Line 3010 at 80 Otay Mesa Med		380	380	380	380	380	380
1741 1742	Total Supply	dium Supply	156 536	60 440	230 610	230 610	244 624	247 627
1742	Total MMcfd S	hortfall	0	35	0	0	0	0
1744		rtailment to EG Stations?	No	No	No	No	No	No
1745	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
1746 1747	(%)	Gas EG [%] Gas Non-Core Non-EG [%]	0% 0%	0% 47%	0% 0%	0% 0%	0% 0%	0% 0%
1748		Gas Core [MMcfd]	0	0	0	0	0	0
1749	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
1750	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
1751 1752	Number of	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0	35 0	0	0	0	0
1752	Customers	Gas EG [# Affected]	0	0	0	0	0	0
1754	Affected	Gas Non-Core Non-EG [# Affected]	0	N/A	0	0	0	0
1755	0	(0) 14 11 (100)	44.004	44.000	44.000	11001	44.00.5	44.000
1756 1757	Otay Mesa Alte	ernate / Otay Medium / L3010 Out	11.2.2.1	11.2.2.2 0	11.2.2.3 0	11.2.2.4 0	11.2.2.5 0	11.2.2.6 0
1758	Line 3010 Com		0	0	0	0	0	0
1759	Otay Mesa Med		156	60	230	230	244	247
1760	Total Supply		156	60	230	230	244	247
1761	Total MMcfd S		119	415	307	347	221	278
1762 1763		rtailment to EG Stations? Gas Core [%]	Yes 0%	Yes 40%	Yes 26%	Yes 34%	Yes 0%	Yes 0%
1763	Curtailment	Gas EG [%]	44%	100%	100%	100%	66%	75%
1765	(%)	Gas Non-Core Non-EG [%]	100%	100%	100%	100%	100%	100%
1766	Curtailmant	Gas Core [MMcfd]	0	40	80	120	0	0
1767 1768	Curtailment (Capacity)	Gas EG [MWh/d] Gas EG [MW]	5,978 249	40,461 1,686	22,253 927	22,253 927	19,672 820	27,355 1,140
1769	(Supusity)	Gas Non-Core Non-EG [MMcfd]	75	75	62	62	75	75
1770	Number of	Gas Core [# Affected]	0	349,638	224,454	298,098	0	0
1771	Customers	Gas EG [# Affected]	N/A	N/A	N/A N/A	N/A	N/A	N/A
1772	Affected	Gas Non-Core Non-EG [# Affected]	N/A	N/A		N/A	N/A	N/A

Line No.		APPLICATION 15-09-013 VOLUME III	- COST-EFFEC	TIVENESS AN	ALYSIS (CORR	ECTED FEBR	RUARY 2017)	
1			EG Day	2. Example Summer High EG Day	3. Example Winter Day MMcfd	4. Winter 1- in-10 Year Day MMcfd	5. Example Spring Day MMcfd	6. Example Fall Day MMcfd
2	A	В	MMcfd C	MMcfd D	E	F	G	Н
1773		•						
1774 1775	Otay Mesa Alte	ernate / Otay Low / L3010 80%	11.1.3.1 0	11.1.3.2 0	11.1.3.3 0	11.1.3.4 0	11.1.3.5 0	11.1.3.6
1775	Line 3010 at 80		380	380	380	380	380	380
1777	Otay Mesa Low		33	33	148	148	130	168
1778	Total Supply		413	413	528	528	510	548
1779	Total MMcfd S	hortfall rtailment to EG Stations?	0 No	62 No	9 No	49 No	0 No	0 No
1780 1781		Gas Core [%]	0%	0%	0%	0%	0%	0%
1782	Curtailment	Gas EG [%]	0%	0%	0%	0%	0%	0%
1783	(%)	Gas Non-Core Non-EG [%]	0%	82%	14%	79%	0%	0%
1784	Curtailment	Gas Core [MMcfd]	0	0	0	0	0	0
1785 1786	(Capacity)	Gas EG [MWh/d] Gas EG [MW]	0	0	0	0	0	0
1787	(Gapacity)	Gas Non-Core Non-EG [MMcfd]	0	62	9	49	0	0
1788	Number of	Gas Core [# Affected]	0	0	0	0	0	0
1789	Customers	Gas EG [# Affected]	0	0	0	0	0	0
1790 1791	Affected	Gas Non-Core Non-EG [# Affected]	0	N/A	N/A	N/A	0	0
1791	Otav Mesa Alt	ernate / Otay Low / L3010 Out	11.2.3.1	11.2.3.2	11.2.3.3	11.2.3.4	11.2.3.5	11.2.3.6
1793	Otay Mesa Alte		0	0	0	0	0	0
1794	Line 3010 Com	plete Outage	0	0	0	0	0	0
1795	Otay Mesa Low	v Supply	33	33	148	148	130	168
1796	Total Supply Total MMcfd S	hortfall	33	33 442	148 389	148 429	130	168 357
1797 1798		rtailment to EG Stations?	242 Yes	Yes	Yes	Yes	335 Yes	Yes
1799		Gas Core [%]	67%	67%	52%	58%	23%	7%
1800	Curtailment (%)	Gas EG [%]	100%	100%	100%	100%	100%	100%
1801	(70)	Gas Non-Core Non-EG [%]	100%	100%	100%	100%	100%	100%
1802	Curtailment	Gas Core [MMcfd] Gas EG [MWh/d]	67 13,487	67 40,461	162 22,253	202 22,253	40 29,671	12 36,414
1803 1804	(Capacity)	Gas EG [MW]	562	1,686	927	927	1,236	1,517
1805	(Gupuony)	Gas Non-Core Non-EG [MMcfd]	75	75	62	62	75	75
1806	Number of	Gas Core [# Affected]	579,437	579,437	453,758	501,195	203,921	60,119
1807	Customers	Gas EG [# Affected]	N/A	N/A	N/A	N/A	N/A	N/A
1808 1809	Affected	Gas Non-Core Non-EG [# Affected]	N/A	N/A	N/A	N/A	N/A	N/A
1810	Otay Mesa Alt	ernate / Otay Out / L3010 80%	11.1.4.1	11.1.4.2	11.1.4.3	11.1.4.4	11.1.4.5	11.1.4.6
1811	Otay Mesa Alte	ernate	0	0	0	0	0	0
1812	Line 3010 at 80		380	380	380	380	380	380
1813	Otay Mesa No Total Supply	Supply	380	0	0	0	0	0
1814 1815	Total MMcfd S	hortfall	0	380 95	380 157	380 197	380 85	380 145
1816		rtailment to EG Stations?	No	Yes	Yes	Yes	Yes	Yes
1817	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
1818	(%)	Gas EG [%]	0%	7%	58%	82%	5%	26%
1819 1820	. ,	Gas Non-Core Non-EG [%] Gas Core [MMcfd]	0%	100%	100% 0	100%	100% 0	100%
1821	Curtailment	Gas EG [MWh/d]	0	2,697	12,813	18,207	1,349	9,441
1822	(Capacity)	Gas EG [MW]	0	112	534	759	56	393
1823	Normalisation	Gas Non-Core Non-EG [MMcfd]	0	75	62	62	75	75
1824 1825	Number of Customers	Gas Core [# Affected] Gas EG [# Affected]	0	0 N/A	0 N/A	0 N/A	0 N/A	0 N/A
1826	Affected	Gas Non-Core Non-EG [# Affected]	0	N/A	N/A	N/A	N/A	N/A
1827								
1828		ernate / Otay Out / L3010 Out	11.2.4.1	11.2.4.2	11.2.4.3	11.2.4.4	11.2.4.5	11.2.4.6
1829 1830	Otay Mesa Alte Line 3010 Com		0	0	0	0	0	0
1831	Otay Mesa No		0	0	0	0	0	0
1832	Total Supply		0	0	0	0	0	0
1833	Total MMcfd S		275	475	537	577	465	525
1834	Immediate Cur	rtailment to EG Stations?	Yes	Yes	Yes	Yes	Yes	Yes
1835 1836	Curtailment	Gas Core [%] Gas EG [%]	100% 100%	100% 100%	100% 100%	100% 100%	100% 100%	100% 100%
	(0/)	Jas EU [/0]	100%	100%	100%	100%	100%	100%
	(%)	Gas Non-Core Non-FG [%]			.0070	.00/0		
1837 1838	(%)	Gas Non-Core Non-EG [%] Gas Core [MMcfd]	100%	100	310	350	170	180
1837	(%) Curtailment	Gas Core [MMcfd] Gas EG [MWh/d]	100 13,487	100 40,461	22,253	22,253	170 29,671	180 36,414
1837 1838 1839 1840		Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW]	100 13,487 562	100 40,461 1,686	22,253 927	22,253 927	170 29,671 1,236	180 36,414 1,517
1837 1838 1839 1840 1841	Curtailment (Capacity)	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	100 13,487 562 75	100 40,461 1,686 75	22,253 927 62	22,253 927 62	170 29,671 1,236 75	180 36,414 1,517 75
1837 1838 1839 1840 1841 1842	Curtailment (Capacity)	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	100 13,487 562 75 868,838	100 40,461 1,686 75 868,838	22,253 927 62 868,838	22,253 927 62 868,838	170 29,671 1,236 75 868,838	180 36,414 1,517 75 868,838
1837 1838 1839 1840 1841	Curtailment (Capacity)	Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	100 13,487 562 75	100 40,461 1,686 75	22,253 927 62	22,253 927 62	170 29,671 1,236 75	180 36,414 1,517 75

Line No.								
1				2. Example Summer High	3. Example Winter Day	4. Winter 1- in-10 Year	5. Example Spring Day	6. Example Fall Day
-			EG Day	EG Day	MMcfd	Day MMcfd	MMcfd	MMcfd
2	Α	В	MMcfd C	MMcfd D	Е	F	G	н
1845			J J					
1846	LNG Storage	Alternate						
1847 1848	LNG Storage /	Otay Full / L3010 80%	13.1.1.1	13.1.1.2	13.1.1.3	13.1.1.4	13.1.1.5	13.1.1.6
1849	LNG Storage A		0	0	0	0	0	0
1850	Line 3010 at 80		380	380	380	380	380	380
1851	Otay Mesa Full	Supply	295	86	313	313	329	324
1852	Total Supply Total MMcfd S	h a suffall	675	466	693	693	709	704
1853 1854		nortrail rtailment to EG Stations?	0 No	9 No	0 No	0 No	0 No	0 No
1855		Gas Core [%]	0%	0%	0%	0%	0%	0%
1856	Curtailment	Gas EG [%]	0%	0%	0%	0%	0%	0%
1857	(%)	Gas Non-Core Non-EG [%]	0%	12%	0%	0%	0%	0%
1858	0	Gas Core [MMcfd]	0	0	0	0	0	0
1859	Curtailment	Gas EG [MWh/d] Gas EG [MW]	0	0	0	0	0	0
1860 1861	(Capacity)	Gas Non-Core Non-EG [MMcfd]	0	9	0	0	0	0
1862	Number of	Gas Core [# Affected]	0	0	0	0	0	0
1863	Customers	Gas EG [# Affected]	0	0	0	0	0	0
1864	Affected	Gas Non-Core Non-EG [# Affected]	0	N/A	0	0	0	0
1865	I NC O	/ O421 F. II / I 2042 O /	40.0	12010	12010	12011	120 (-	10010
1866	LNG Storage A	Otay Full / L3010 Out	13.2.1.1	13.2.1.2 0	13.2.1.3 0	13.2.1.4 0	13.2.1.5 0	13.2.1.6 0
1867 1868	Line 3010 Com		0	0	0	0	0	0
1869	Otay Mesa Full		295	86	313	313	329	324
1870	Total Supply		295	86	313	313	329	324
1871	Total MMcfd S		0	389	224	264	136	201
1872	Immediate Cui	rtailment to EG Stations?	No	Yes	Yes	Yes	Yes	Yes
1873	Curtailment	Gas Core [%]	0%	14%	0%	11%	0%	0%
1874 1875	(%)	Gas EG [%] Gas Non-Core Non-EG [%]	0% 0%	100% 100%	98% 100%	100% 100%	28% 100%	47% 100%
1876		Gas Core [MMcfd]	0	14	0	37	0	0
1877	Curtailment	Gas EG [MWh/d]	0	40,461	21,877	22,253	8,240	17,039
1878	(Capacity)	Gas EG [MW]	0	1,686	912	927	343	710
1879		Gas Non-Core Non-EG [MMcfd]	0	75	62	62	75	75
1880	Number of	Gas Core [# Affected]	0	119,839	0	92,375	0	0
1881 1882	Customers	Gas EG [# Affected] Gas Non-Core Non-EG [# Affected]	0	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
1883	Affected	Gas Non-Core Non-EG [# Allected]	U	IN/A	IV/A	IN/A	N/A	N/A
1884	LNG Storage /	Otay Medium / L3010 80%	13.1.2.1	13.1.2.2	13.1.2.3	13.1.2.4	13.1.2.5	13.1.2.6
1885	LNG Storage A		0	0	0	0	0	0
1886	Line 3010 at 80		380	380	380	380	380	380
1887	Otay Mesa Med	dium Supply	156	60	230	230	244	247
1888	Total Supply Total MMcfd S	hortfall	536 0	440 35	610 0	610 0	624 0	627
1889 1890		rtailment to EG Stations?	No	No	No	No	No	No
1891		Gas Core [%]	0%	0%	0%	0%	0%	0%
1892	Curtailment (%)	Gas EG [%]	0%	0%	0%	0%	0%	0%
1893	(/0)	Gas Non-Core Non-EG [%]	0%	47%	0%	0%	0%	0%
1894	Cuntallas	Gas Core [MMcfd]	0	0	0	0	0	0
1895 1896	Curtailment (Capacity)	Gas EG [MWh/d] Gas EG [MW]	0	0	0	0	0	0
1897	(Sapacity)	Gas Non-Core Non-EG [MMcfd]	0	35	0	0	0	0
1898	Number of	Gas Core [# Affected]	0	0	0	0	0	0
1899	Customers	Gas EG [# Affected]	0	0	0	0	0	0
1900	Affected	Gas Non-Core Non-EG [# Affected]	0	N/A	0	0	0	0
1901	I NG Starage	Otay Medium / L3010 Out	12.2.2.1	12222	12222	13.2.2.4	13.2.2.5	12226
1902 1903	LNG Storage A		13.2.2.1 0	13.2.2.2 0	13.2.2.3 0	0	13.2.2.5 0	13.2.2.6 0
1904	Line 3010 Com		0	0	0	0	0	0
1905	Otay Mesa Med		156	60	230	230	244	247
1906	Total Supply		156	60	230	230	244	247
1907	Total MMcfd S		119	415	307	347	221	278
1908	immediate Cui	rtailment to EG Stations?	Yes	Yes	Yes	Yes	Yes	Yes
1909 1910	Curtailment	Gas Core [%] Gas EG [%]	0% 44%	40% 100%	26% 100%	34% 100%	0% 66%	0% 75%
1911	(%)	Gas Non-Core Non-EG [%]	100%	100%	100%	100%	100%	100%
1912		Gas Core [MMcfd]	0	40	80	120	0	0
1913	Curtailment	Gas EG [MWh/d]	5,978	40,461	22,253	22,253	19,672	27,355
1914	(Capacity)	Gas EG [MW]	249	1,686	927	927	820	1,140
1915 1916	Number of	Gas Non-Core Non-EG [MMcfd]	75 0	75	62	62 208 008	75 0	75 0
1916 1917	Customers	Gas Core [# Affected] Gas EG [# Affected]	N/A	349,638 N/A	224,454 N/A	298,098 N/A	N/A	N/A
		[
1917	Affected	Gas Non-Core Non-EG [# Affected]	N/A	N/A	N/A	N/A	N/A	N/A

Line No.

<u>Line No.</u> 1			1. Example Summer Low- EG Day MMcfd	2. Example Summer High EG Day MMcfd	3. Example Winter Day MMcfd	4. Winter 1- in-10 Year Day MMcfd	5. Example Spring Day MMcfd	6. Example Fall Day MMcfd
2	Α	В	С	D	Е	F	G	Н
1919 1920	LNG Storage /	Otay Low / L3010 80%	13.1.3.1	13.1.3.2	13.1.3.3	13.1.3.4	13.1.3.5	13.1.3.6
1921	LNG Storage Al	ternate	0	0	0	0	0	0
1922	Line 3010 at 80		380	380	380	380	380	380
1923 1924	Otay Mesa Low Total Supply	Supply	33 413	33 413	148 528	148 528	130 510	168 548
1925	Total MMcfd Si	nortfall	0	62	9	49	0	0
1926	Immediate Cur	tailment to EG Stations?	No	No	No	No	No	No
1927	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
1928 1929	(%)	Gas EG [%] Gas Non-Core Non-EG [%]	0% 0%	0% 82%	0% 14%	0% 79%	0% 0%	0% 0%
1930		Gas Core [MMcfd]	0	0	0	0	0	0
1931	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
1932	(Capacity)	Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	0	0 62	9	0 49	0	0
1933 1934	Number of	Gas Core [# Affected]	0	0	0	0	0	0
1935	Customers	Gas EG [# Affected]	0	0	0	0	0	0
1936	Affected	Gas Non-Core Non-EG [# Affected]	0	N/A	N/A	N/A	0	0
1937 1938	I NG Storage /	Otay Low / L3010 Out	13.2.3.1	13.2.3.2	13.2.3.3	13.2.3.4	13.2.3.5	13.2.3.6
1939	LNG Storage Al		0	0	0	0	0	0
1940	Line 3010 Com	olete Outage	0	0	0	0	0	0
1941	Otay Mesa Low	Supply	33	33	148	148	130	168
1942 1943	Total Supply Total MMcfd Si	oortfall	33 242	33 442	148 389	148 429	130 335	168 357
1943		tailment to EG Stations?	Yes	Yes	Yes	Yes	Yes	Yes
1945	Curtailment	Gas Core [%]	67%	67%	52%	58%	23%	7%
1946	(%)	Gas EG [%]	100%	100%	100%	100%	100%	100%
1947 1948	(**)	Gas Non-Core Non-EG [%] Gas Core [MMcfd]	100% 67	100% 67	100% 162	100% 202	100% 40	100% 12
1949	Curtailment	Gas EG [MWh/d]	13,487	40,461	22,253	22,253	29,671	36,414
1950	(Capacity)	Gas EG [MW]	562	1,686	927	927	1,236	1,517
1951	Noushanaf	Gas Non-Core Non-EG [MMcfd]	75	75	62	62	75	75
1952 1953	Number of Customers	Gas Core [# Affected] Gas EG [# Affected]	579,437 N/A	579,437 N/A	453,758 N/A	501,195 N/A	203,921 N/A	60,119 N/A
1954	Affected	Gas Non-Core Non-EG [# Affected]	N/A	N/A	N/A	N/A	N/A	N/A
1955 1956	I NG Storage /	Otay Out / L3010 80%	13.1.4.1	13.1.4.2	13.1.4.3	13.1.4.4	13.1.4.5	13.1.4.6
1957	LNG Storage Al		0	0	0	0	0	0
1958	Line 3010 at 80		380	380	380	380	380	380
1959	Otay Mesa No S	Supply	0	0	0	0	0	0
1960 1961	Total Supply Total MMcfd Si	portfall	380	380 95	380 157	380 197	380 85	380 145
1962		tailment to EG Stations?	No	Yes	Yes	Yes	Yes	Yes
1963	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
1964	(%)	Gas EG [%]	0%	7%	58%	82% 100%	5% 100%	26%
1965 1966		Gas Non-Core Non-EG [%] Gas Core [MMcfd]	0%	100%	100% 0	0	0	100%
1967	Curtailment	Gas EG [MWh/d]	0	2,697	12,813	18,207	1,349	9,441
1968	(Capacity)	Gas EG [MW]	0	112	534	759	56	393
1969 1970	Number of	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0	75 0	62 0	62 0	75 0	75 0
1971	Customers	Gas EG [# Affected]	0	N/A	N/A	N/A	N/A	N/A
1972	Affected	Gas Non-Core Non-EG [# Affected]	0	N/A	N/A	N/A	N/A	N/A
1973 1974	I NG Storage	Otay Out / L3010 Out	13.2.4.1	13.2.4.2	13.2.4.3	13.2.4.4	13.2.4.5	13.2.4.6
1974	LNG Storage A		0	0	0	0	0	0
1976	Line 3010 Comp	olete Outage	0	0	0	0	0	0
1977	Otay Mesa No S	Supply	0	0	0	0	0	0
1978 1979	Total Supply Total MMcfd Si	portfall	0 275	0 475	0 537	0 577	0 465	0 525
1979		tailment to EG Stations?	Yes	Yes	Yes	Yes	Yes	Yes
1981	Curtailment	Gas Core [%]	100%	100%	100%	100%	100%	100%
1982	(%)	Gas EG [%]	100%	100%	100%	100%	100%	100%
1983 1984		Gas Non-Core Non-EG [%] Gas Core [MMcfd]	100% 100	100% 100	100% 310	100% 350	100% 170	100% 180
1985	I		13,487	40,461	22,253	22,253	29,671	36,414
	Curtailment	Gas EG [MWh/d]	10,401					
1986	Curtailment (Capacity)	Gas EG [MW]	562	1,686	927	927	1,236	1,517
1986 1987	(Capacity)	Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	562 75	1,686 75	927 62	62	75	75
1986 1987 1988	(Capacity) Number of	Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	562 75 868,838	1,686 75 868,838	927 62 868,838	62 868,838	75 868,838	75 868,838
1986 1987	(Capacity)	Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	562 75	1,686 75	927 62	62	75	75

Summar-Love Summary Winter Day In-10 Vests Spring Day Fig.	Line No.								
A	1			Summer Low-	Summer High	Winter Day	in-10 Year	Spring Day	6. Example Fall Day
### All Energy Alternate (Grid-Scale) ### Total Supply ### Total Murbor of Grid Supply ### Total						MMcfd	Day MMcfd	MMcfd	MMcfd
All Energy Alternate (Grid-Scale)	2	Α	В	С	D	Е	F	G	Н
All Energy (Crist) (Color Port 14.9.1.12 14.1.1.2 14.1.1.3 14.1.1.5 14.1.1.	1992	Alt Energy Alte	ernate (Grid-Scale)						
All Energy Allernate (Grid Scale)		Alt Energy (Gr	id) / Otav Full / L3010 80%	14.1.1.1	14.1.1.2	14.1.1.3	14.1.1.4	14.1.1.5	14.1.1.6
Clay Meas Full Supply									0
									380
Total Middled Shortfall 0 9 0 0 0 0 0 0 0 0			Supply						324
			L - off - II						704
Curtallment Gas Core Sc									0 No
Curtailment Gas EG %									0%
Curtaliment Case Grey (Murchies) 0.5									0%
Curtailment Gas EG [MW/Ivd] 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2003	(%)	Gas Non-Core Non-EG [%]	0%	12%	0%	0%	0%	0%
Capacity Gas EG [MW]		_							0
Mumber of Gas Non-Core Non-EG MModrd 0 9 0 0 0 0 0 0 0									0
Number of Gas Core # Affected 0		(Capacity)							0
Customers Gas EG & Affected 0		Number of		_					0
Affected Gas Non-Core Non-EG [# Affected] O									0
All Energy (Grid)									0
All Energy Alternate (Grid-Scale)									
Line 3010 Complete Outage									14.2.1.6
Disay Mesa Full Supply 295 86 313 313 329									0
Total Supply									324
Total Midd Shortfall			Сарріу						324
Immediate Curtaliment to EG Stations? No. Yes			hortfall						201
Curtailment Gas EG [%] 0% 100% 98% 100% 28%				No					Yes
Company Comp	2019	Curtailment							0%
Comparison									47%
Cupacity Capacity		(,							100%
Capacity Gas EG MW Gas Non-Core Non-EG MMcId Gas Non-C		Curtailment							0 17,039
Case Non-Core Non-EG [MMcfd] 0 75 62 62 75					,				710
Customers Affected Gas EG # Affected Gas Non-Core Non-EG # Affected O N/A		(Gupusity)							75
Affected Gas Non-Core Non-EG [# Affected] 0 N/A		Number of	Gas Core [# Affected]		119,839		92,375	0	0
Alt Energy (Grid) / Otay Medium / L3010 80% 14.1.2.1 14.1.2.2 14.1.2.3 14.1.2.4 14.1.2.5 14.1.2.5 14.1.2.3 14.1.2.4 14.1.2.5 14.1.2.1 14.1.2.2 14.1.2.3 14.1.2.4 14.1.2.5 14.1.2.5 14.1.2.3 14.1.2.4 14.1.2.3 14.1.2.3 14.1.2.4 14.1.2.3 14.1.2.		Customers		_					N/A
Alt Energy (Grid) / Otay Medium / L3010 80%		Affected	Gas Non-Core Non-EG [# Affected]	0	N/A	N/A	N/A	N/A	N/A
Alt Energy Alternate (Grid-Scale)		Alt Engrav (Gr	id) / Otay Madium / L2010 909/	1/121	14122	1/1122	14124	1/125	14.1.2.6
Line 301 at 80% Supply 380									0
Disay Mesa Medium Supply					-		-		380
Total MMcfd Shortfall	2033	Otay Mesa Med	lium Supply	156	60	230	230	244	247
	2034			536				624	627
Curtailment (%) Gas Core [%] 0% 0% 0% 0% 0% 0% 0%									0
Curtailment (%) Gas EG [%] 0% 0% 0% 0% 0% 0% 0%		Immediate Cur							No 00/
Cas Non-Core Non-EG [%] 0% 47% 0% 0% 0% 0% 0% 0% 0%		Curtailment							0% 0%
Curtailment Gas EG [MMr/d] 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		(%)							0%
Curtailment Capacity Gas EG [MWh/d] 0 0 0 0 0 0 0 0 0									0
Comparison	2041		Gas EG [MWh/d]	0	0	0	0	0	0
Number of Customers Gas EG [# Affected] 0 0 0 0 0 0 0 0 0		(Capacity)							0
Customers Gas EG [# Affected 0 0 0 0 0 0 0 0 0		Number of							0
Affected Gas Non-Core Non-EG [# Affected] 0 N/A 0 0 0 0 Affected Gas Non-Core Non-EG [# Affected] 0 N/A 0 0 0 0 Affected Gas Non-Core Non-EG [# Affected] 0 N/A 0 0 0 0 Alt Energy (Grid) / Otay Medium / L3010 Out 14.2.2.1 14.2.2.2 14.2.2.3 14.2.2.4 14.2.2.5 14 2049 Alt Energy Alternate (Grid-Scale) 0 0 0 0 0 0 0 Line 3010 Complete Outage 0 0 0 0 0 0 0 0 Otay Mesa Medium Supply 156 60 230 230 244 2052 Total Supply 156 60 230 230 244 2053 Total Supply 156 60 230 230 244 2054 Immediate Curtailment to EG Stations? Yes									0
2047 2048									0
Alt Energy (Grid) / Otay Medium / L3010 Out 14.2.2.1 14.2.2.2 14.2.2.3 14.2.2.4 14.2.2.5 14.2.2.									
Line 3010 Complete Outage 0	2048			_	14.2.2.2				14.2.2.6
Otay Mesa Medium Supply 156 60 230 230 244 2052									0
Total Supply									0
Total MMcfd Shortfall 119 415 307 347 221 120			лин Бирріу						247 247
Immediate Curtailment to EG Stations? Yes			hortfall						278
Curtailment (%) Gas Core [%] 0% 40% 26% 34% 0% 0% 0									Yes
2056 2057 Gas EG [%] 44% 100% 100% 100% 66% 7 2058 2059 Curtailment Gas EG [MWh/d] 0 40 80 120 0 2060 (Capacity) Gas EG [MWh/d] 5,978 40,461 22,253 22,253 19,672 27 2060 Gas EG [MWh/d] 249 1,686 927 927 820 1 2061 Gas Non-Core Non-EG [MMcfd] 75 75 62 62 75				0%		26%		0%	0%
Gas									75%
2059 Curtailment (Capacity) Gas EG [MWh/d] 5,978 40,461 22,253 22,253 19,672 27 2060 (Capacity) Gas EG [MW] 249 1,686 927 927 820 1 2061 (Gas Non-Core Non-EG [MMcfd] 75 75 62 62 62 75		,							100%
2060 (Capacity) Gas EG [MW] 249 1,686 927 927 820 1 2061 Gas Non-Core Non-EG [MMcfd] 75 75 62 62 75		Curtailment							0 27 355
2061 Gas Non-Core Non-EG [MMcfd] 75 75 62 62 75								•	27,355 1,140
		(Sapacity)							75
2062 Number of Gas Core [# Affected] 0 349,638 224,454 298,098 0		Number of		0				0	0
2063 Customers Gas EG [# Affected] N/A N/A N/A N/A N/A	2063		Gas EG [# Affected]		N/A	N/A	N/A		N/A
2064 Affected Gas Non-Core Non-EG [# Affected] N/A N/A N/A N/A N/A N/A N/A	2064	Affected	Gas Non-Core Non-EG [# Affected]	N/A	N/A	N/A	N/A	N/A	N/A

Line No.		APPLICATION 15-09-013 VOLUME III	000: 2:: 20				,	
1			1. Example Summer Low- EG Day	2. Example Summer High- EG Day	3. Example Winter Day MMcfd	4. Winter 1- in-10 Year Day MMcfd	5. Example Spring Day MMcfd	6. Example Fall Day MMcfd
2	A	В	MMcfd C	MMcfd D	E	F F	G	H
2065								
2066 2067		id) / Otay Low / L3010 80% mate (Grid-Scale)	14.1.3.1	14.1.3.2 0	14.1.3.3 0	14.1.3.4 0	14.1.3.5 0	14.1.3.6 0
2068	Line 3010 at 80	% Supply	380	380	380	380	380	380
2069 2070	Otay Mesa Low Total Supply	Supply	33 413	33 413	148 528	148 528	130 510	168 548
2071	Total MMcfd S	hortfall	0	62	9	49	0	0
2072 2073	Immediate Cur	tailment to EG Stations?	No 0%	No 0%	No 0%	No 0%	No 0%	No 0%
2073	Curtailment	Gas Core [%] Gas EG [%]	0%	0%	0%	0%	0%	0%
2075	(%)	Gas Non-Core Non-EG [%]	0%	82%	14%	79%	0%	0%
2076 2077	Curtailment	Gas Core [MMcfd] Gas EG [MWh/d]	0	0	0	0	0	0
2078	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
2079 2080	Number of	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0	62 0	9	49 0	0	0
2081	Customers	Gas EG [# Affected]	0	0	0	0	0	0
2082	Affected	Gas Non-Core Non-EG [# Affected]	0	N/A	N/A	N/A	0	0
2083 2084	Alt Energy (Gr	id) / Otay Low / L3010 Out	14.2.3.1	14.2.3.2	14.2.3.3	14.2.3.4	14.2.3.5	14.2.3.6
2085		rnate (Grid-Scale)	0	0	0	0	0	0
2086 2087	Line 3010 Com Otay Mesa Low		33	33	0 148	0 148	130	0 168
2088	Total Supply	11.7	33	33	148	148	130	168
2089	Total MMcfd S	hortfall tailment to EG Stations?	242 Yes	442 Yes	389 Yes	429 Yes	335 Yes	357 Yes
2090 2091	Curtailment	Gas Core [%]	67%	67%	52%	58%	23%	7%
2092	(%)	Gas EG [%]	100%	100%	100%	100%	100%	100%
2093 2094	(**)	Gas Non-Core Non-EG [%] Gas Core [MMcfd]	100% 67	100% 67	100% 162	100% 202	100% 40	100% 12
2095	Curtailment	Gas EG [MWh/d]	13,487	40,461	22,253	22,253	29,671	36,414
2096 2097	(Capacity)	Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	562 75	1,686 75	927 62	927 62	1,236 75	1,517 75
2098	Number of	Gas Core [# Affected]	579,437	579,437	453,758	501,195	203,921	60,119
2099	Customers	Gas EG [# Affected] Gas Non-Core Non-EG [# Affected]	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
2100 2101	Affected	Gas Non-Core Non-EG [# Affected]	N/A	IN/A	N/A	N/A	N/A	IN/A
2102		id) / Otay Out / L3010 80%	14.1.4.1	14.1.4.2	14.1.4.3	14.1.4.4	14.1.4.5	14.1.4.6
2103 2104	Line 3010 at 80	rnate (Grid-Scale) % Supply	380	380	380	0 380	380	380
2105	Otay Mesa No S		0	0	0	0	0	0
2106 2107	Total Supply Total MMcfd S	hortfall	380	380 95	380 157	380 197	380 85	380 145
2107		tailment to EG Stations?	No	Yes	Yes	Yes	Yes	Yes
2109	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
2110 2111	(%)	Gas EG [%] Gas Non-Core Non-EG [%]	0% 0%	7% 100%	58% 100%	82% 100%	5% 100%	26% 100%
2112	0	Gas Core [MMcfd]	0	0	0	0	0	0
2113 2114	Curtailment (Capacity)	Gas EG [MWh/d] Gas EG [MW]	0	2,697 112	12,813 534	18,207 759	1,349 56	9,441 393
2115		Gas Non-Core Non-EG [MMcfd]	0	75	62	62	75	75
2116 2117	Number of Customers	Gas Core [# Affected] Gas EG [# Affected]	0	0 N/A	0 N/A	0 N/A	0 N/A	0 N/A
2118	Affected	Gas Non-Core Non-EG [# Affected]	0	N/A	N/A	N/A	N/A	N/A
2119 2120	Alt Energy (Gr	id) / Otay Out / L3010 Out	14.2.4.1	14.2.4.2	14.2.4.3	14.2.4.4	14.2.4.5	14.2.4.6
2121	· · · ·	nate (Grid-Scale)	0	0	0	0	0	0
2122	Line 3010 Com		0	0	0	0	0	0
2123 2124	Otay Mesa No S Total Supply	Бирріу	0	0 0	0	0 0	0 0	0 0
2125	Total MMcfd S	hortfall	275	475	537	577	465	525
2126 2127		tailment to EG Stations?	Yes 100%	Yes 100%	Yes 100%	Yes 100%	Yes 100%	Yes 100%
2127	Curtailment	Gas Core [%] Gas EG [%]	100%	100%	100%	100%	100%	100%
2129	(%)	Gas Non-Core Non-EG [%]	100%	100%	100%	100%	100%	100%
2130 2131	Curtailment	Gas Core [MMcfd] Gas EG [MWh/d]	100 13,487	100 40,461	310 22,253	350 22,253	170 29,671	180 36,414
2132	(Capacity)	Gas EG [MW]	562	1,686	927	927	1,236	1,517
2133	Number of	Gas Non-Core Non-EG [MMcfd]	75	75	62	62	75	75
2134 2135	Customers	Gas Core [# Affected] Gas EG [# Affected]	868,838 N/A	868,838 N/A	868,838 N/A	868,838 N/A	868,838 N/A	868,838 N/A
2136	Affected	Gas Non-Core Non-EG [# Affected]	N/A	N/A	N/A	N/A	N/A	N/A

<u>o.</u>							
		1. Example Summer Low- EG Day MMcfd	2. Example Summer High EG Day MMcfd	3. Example Winter Day MMcfd	4. Winter 1- in-10 Year Day MMcfd	5. Example Spring Day MMcfd	6. Examp Fall Day MMcfd
Α	В	C	D	Е	F	G	н
Alt Energy Alt	ernate (Smaller-Scale)	, ,	J	_		<u> </u>	
Alt Energy (Sr.	mall) / Otay Full / L3010 80%	21.1.1.1	21.1.1.2	21.1.1.3	21.1.1.4	21.1.1.5	21.1.1.6
	rnate (Smaller-Scale)	0	0	0	0	0	0
Line 3010 at 80	0% Supply	380	380	380	380	380	380
Otay Mesa Full	Supply	295	86	313	313	329	324
Total Supply		675	466	693	693	709	704
Total MMcfd S		0	9	0	0	0	0
	rtailment to EG Stations?	No	No 00/	No	No	No	No OO/
Curtailment	Gas Core [%] Gas EG [%]	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%
(%)	Gas Non-Core Non-EG [%]	0%	12%	0%	0%	0%	0%
	Gas Core [MMcfd]	0	0	0	0	0	0
Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
(Capacity)	Gas EG [MW]	0	0	0	0	0	0
	Gas Non-Core Non-EG [MMcfd]	0	9	0	0	0	0
Number of	Gas Core [# Affected]	0	0	0	0	0	0
Customers	Gas EG [# Affected]	0	0	0	0	0	0
Affected	Gas Non-Core Non-EG [# Affected]	0	N/A	0	0	0	0
Alt Energy (Sr.	mall) / Otay Full / L3010 Out	21.2.1.1	21.2.1.2	21.2.1.3	21.2.1.4	21.2.1.5	21.2.1.6
	rnate (Smaller-Scale)	0	0	0	0	0	0
Line 3010 Com		0	0	0	0	0	0
Otay Mesa Full		295	86	313	313	329	324
Total Supply		295	86	313	313	329	324
Total MMcfd S	hortfall	0	389	224	264	136	201
Immediate Cur	rtailment to EG Stations?	No	Yes	Yes	Yes	Yes	Yes
Curtailment	Gas Core [%]	0%	14%	0%	11%	0%	0%
(%)	Gas EG [%]	0%	100%	98%	100%	28%	47%
	Gas Non-Core Non-EG [%]	0%	100%	100%	100%	100%	100%
Curtailment	Gas Core [MMcfd]	0	14	0	37	0	0
Curtailment (Capacity)	Gas EG [MWh/d] Gas EG [MW]	0	40,461 1,686	21,877 912	22,253 927	8,240 343	17,039 710
(Capacity)	Gas Non-Core Non-EG [MMcfd]	0	75	62	62	75	75
Number of	Gas Core [# Affected]	0	119,839	0	92,375	0	0
Customers	Gas EG [# Affected]	0	N/A	N/A	N/A	N/A	N/A
Affected	Gas Non-Core Non-EG [# Affected]	0	N/A	N/A	N/A	N/A	N/A
	nall) / Otay Medium / L3010 80%	21.1.2.1	21.1.2.2	21.1.2.3	21.1.2.4	21.1.2.5	21.1.2.0
	rnate (Smaller-Scale)	0	0	0	0	0	0
Line 3010 at 80	1% Supply						
	dium Cumplu	380	380	380	380	380	380
ITatal Committee	dium Supply	156	60	230	230	244	247
Total Supply		156 536	60 440	230 610	230 610	244 624	247 627
Total MMcfd S	hortfall	156 536 0	60 440 35	230 610 0	230 610 0	244 624 0	247 627 0
Total MMcfd S Immediate Cur	chortfall rtailment to EG Stations?	156 536 0 No	60 440 35 No	230 610 0 No	230 610 0 No	244 624 0 No	247 627 0 No
Total MMcfd S Immediate Cur Curtailment	hortfall	156 536 0	60 440 35	230 610 0	230 610 0	244 624 0	247 627 0
Total MMcfd S Immediate Curtailment	ihortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%]	156 536 0 No 0%	60 440 35 No 0%	230 610 0 No 0%	230 610 0 No 0%	244 624 0 No 0%	247 627 0 No 0%
Total MMcfd S Immediate Cur Curtailment (%)	inortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd]	156 536 0 No 0% 0% 0%	60 440 35 No 0% 0% 47%	230 610 0 No 0% 0% 0%	230 610 0 No 0% 0% 0% 0%	244 624 0 No 0% 0% 0% 0%	247 627 0 No 0% 0% 0%
Total MMcfd S Immediate Cur Curtailment (%) Curtailment	inortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d]	156 536 0 No 0% 0% 0% 0 0	60 440 35 No 0% 47% 0	230 610 0 No 0% 0% 0% 0	230 610 0 No 0% 0% 0% 0 0	244 624 0 No 0% 0% 0% 0 0	247 627 0 No 0% 0% 0% 0%
Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity)	Gas Core [%] Gas FG [%] Gas FG [%] Gas FG [%] Gas FG [MMcfd] Gas FG [MWh/d] Gas FG [MW]	156 536 0 No 0% 0% 0% 0 0	60 440 35 No 0% 47% 0 0	230 610 0 No 0% 0% 0% 0 0	230 610 0 No 0% 0% 0% 0 0 0	244 624 0 No 0% 0% 0% 0 0	247 627 0 No 0% 0% 0% 0 0 0
Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity)	inortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	156 536 0 No 0% 0% 0% 0 0 0	60 440 35 No 0% 0% 47% 0 0	230 610 0 No 0% 0% 0% 0 0 0	230 610 0 No 0% 0% 0% 0 0 0	244 624 0 No 0% 0% 0% 0 0 0 0 0 0 0	247 627 0 No 0% 0% 0% 0 0 0 0 0 0 0
Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of	inortfall frailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	156 536 0 No 0% 0% 0% 0 0 0 0	60 440 35 No 0% 0% 47% 0 0 0	230 610 0 No 0% 0% 0% 0 0 0	230 610 0 No 0% 0% 0% 0 0 0 0	244 624 0 No 0% 0% 0% 0 0 0 0 0 0 0	247 627 0 No 0% 0% 0 0 0 0 0
Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers	inortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected]	156 536 0 No 0% 0% 0% 0 0 0	60 440 35 No 0% 47% 0 0 0 35 0 0	230 610 0 No 0% 0% 0% 0 0 0	230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0	244 624 0 No 0% 0% 0% 0 0 0 0 0 0 0	247 627 0 No 0% 0% 0 0 0 0 0
Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected	inortfall frailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	156 536 0 No 0% 0% 0% 0 0 0 0	60 440 35 No 0% 0% 47% 0 0 0	230 610 0 No 0% 0% 0 0 0 0 0	230 610 0 No 0% 0% 0% 0 0 0 0	244 624 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0	247 627 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0
Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected	inortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected]	156 536 0 No 0% 0% 0% 0 0 0 0	60 440 35 No 0% 47% 0 0 0 35 0 0	230 610 0 No 0% 0% 0 0 0 0 0	230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0	244 624 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0	247 627 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0
Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Energy (Sr Alt Energy Alte	inhortfall frailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected]	156 536 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	60 440 35 No 0% 0% 47% 0 0 0 35 0 0 No 0 47% 0 0 0 0 0 0 0 0 0 0 0 0 0	230 610 0 No 0% 0% 0% 0% 0 0 0 0 0 0 21.2.2.3	230 610 0 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	244 624 0 No 0% 0% 0% 0% 0 0 0 0 0 0 21.2,2,5	247 627 0 No 0% 0% 0% 0 0 0 0 0 21.2.2.
Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Energy (Sr Alt Energy Alte Line 3010 Com	inhortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] mall) / Otay Medium / L3010 Out mate (Smaller-Scale) plete Outage	156 536 0 No 0% 0% 0% 0% 0 0 0 0 0 0 21.2.2.1 0 0	60 440 35 No 0% 0% 47% 0 0 0 0 N/A	230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 21.2.2.3 0	230 610 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 21.2.2.4 0 0	244 624 0 No 0% 0% 0% 0 0 0 0 0 0 21.2.2.5 0 0	247 627 0 No 0% 0% 0% 0 0 0 0 0 0 21.2.2.
Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Energy (Sr Alt Energy Alte Line 3010 Com Otay Mesa Med	inhortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] mall) / Otay Medium / L3010 Out mate (Smaller-Scale) plete Outage	156 536 0 No 0% 0% 0% 0% 0 0 0 0 0 0 21.2.2.1 0 0 156	60 440 35 No 0% 47% 0 0 0 0 0 0 0 0 0 0 0 0 0	230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 21.2.2.3 0 0 230	230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 21.2.2.4 0 0 230	244 624 0 No 0% 0% 0% 0 0 0 0 0 0 21.2.2.5 0 0 244	247 627 0 No 0% 0% 0% 0 0 0 0 0 0 21.2.2.
Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Energy (Sr Alt Energy Alte Line 3010 Com Otay Mesa Mec Total Supply	inortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] mall) / Otay Medium / L3010 Out rnate (Smaller-Scale) plete Outage dium Supply	156 536 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 156	60 440 35 No 0% 47% 0 0 0 0 0 N/A 21.2.2.2 0 60 60	230 610 0 No 0% 0% 0% 0% 0 0 0 0 0 0 21.2.2.3 0 0 230	230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 21,2,2,4 0 230 230	244 624 0 No 0% 0% 0% 0 0 0 0 0 0 0 21.2.2.5 0 0 244	247 627 0 No 0% 0% 0% 0 0 0 0 0 0 0 21.2.2.
Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Energy (Sr Alt Energy Alte Line 3010 Com Otay Mesa Med Total Supply Total MMcfd S	inortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] mall) / Otay Medium / L3010 Out mate (Smaller-Scale) plete Outage dium Supply	156 536 0 No 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	60 440 35 No 0% 0% 47% 0 0 0 35 0 0 No 0 21.2.2.2 0 0 60 60	230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 21.2.2.3 0 0 230 230 307	230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 21.2.2.4 0 0 230 230 347	244 624 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 21.2.2.5 0 0 244 244 221	247 627 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 21.2.2. 0 0 247 247
Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Energy (Sr Alt Energy Alte Line 3010 Com Otay Mesa Met Total Supply Total MMcfd S Immediate Cur	inhortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas William (William (Willia	156 536 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 21.2.2.1 0 0 156 156 119 Yes	60 440 35 No 0% 0% 47% 0 0 0 0 N/A 21,2,2,2 0 60 60 415 Yes	230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 21.2.2.3 0 0 230 230 307 Yes	230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 21.2.2.4 0 0 230 230 230 347 Yes	244 624 0 No 0% 0% 0% 0 0 0 0 0 0 0 21.2.2.5 0 0 244 244 244 221 Yes	247 627 0 No 0% 0% 0% 0 0 0 0 0 0 0 21.2.2. 0 247 247 278 Yes
Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Energy (Sr Alt Energy Alte Line 3010 Com Otay Mesa Med Total Supply Total MMcfd S Immediate Cur	inortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas Core [# Affected] Gas EG [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Intalli / Otay Medium / L3010 Out Intalli Cymaller-Scale) plete Outage dium Supply Shortfall Intailment to EG Stations? Gas Core [%]	156 536 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 156 156 119 Yes 0%	60 440 35 No 0% 47% 0 0 0 35 0 0 N/A 21.2.2.2 0 60 60 415 Yes 40%	230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 21.2.2.3 0 0 230 230 230 7 Yes 26%	230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 21.2.2.4 0 0 230 230 347 Yes 34%	244 624 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 21.2.2.5 0 244 244 221 Yes 0%	247 627 0 No 0% 0% 0% 0 0 0 0 0 0 0 21.2.2. 247 247 278 Yes 0%
Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Energy (Sr Alt Energy Alte Line 3010 Com Otay Mesa Mec Total Supply Total MMcfd S Immediate Curtailment (%)	inortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] mall) / Otay Medium / L3010 Out rnate (Smaller-Scale) plete Outage dium Supply inortfall rtailment to EG Stations? Gas Core [%] Gas EG [%]	156 536 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 21,2,2,1 0 156 1156 119 Yes 0% 44%	60 440 35 No 0% 0% 47% 0 0 0 35 0 NIA 21.2.2.2 0 60 60 415 Yes 40% 100%	230 610 0 No 0% 0% 0% 0% 0 0 0 0 0 0 21.2.2.3 0 0 230 230 307 Yes 26% 100%	230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 21.2.2.4 0 0 230 230 230 347 Yes 34% 100%	244 624 0 No 0% 0% 0% 0 0 0 0 0 0 0 21.2.2.5 0 0 244 244 221 Yes 0% 66%	247 627 0 No 0% 0% 0% 0 0 0 0 0 0 0 21.2.2. 0 247 247 278 Yes 0% 75%
Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Energy (Sr Alt Energy Alte Line 3010 Com Otay Mesa Met Total Supply Total MMcfd S Immediate Cur Curtailment (%)	inortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas Core [# Affected] Gas EG [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Intalli / Otay Medium / L3010 Out Intalli Cymaller-Scale) plete Outage dium Supply Shortfall Intailment to EG Stations? Gas Core [%]	156 536 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 156 156 119 Yes 0%	60 440 35 No 0% 47% 0 0 0 35 0 0 N/A 21.2.2.2 0 60 60 415 Yes 40%	230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 21.2.2.3 0 0 230 230 230 7 Yes 26%	230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 21.2.2.4 0 0 230 230 347 Yes 34%	244 624 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 21.2.2.5 0 244 244 221 Yes 0%	247 627 0 No 0% 0% 0% 0 0 0 0 0 0 21.2.2.0 0 247 247 278 Yes 0%
Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Energy (Sr Alt Energy Alte Line 3010 Com Otay Mesa Med Total Supply Total MMcfd S Immediate Cur	inortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas EG [# Affected] Gas FG [# Affected] Gas Non-Core Non-EG [# Affected] mall) / Otay Medium / L3010 Out mate (Smaller-Scale) iplete Outage dium Supply shortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%]	156 536 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 156 156 119 Yes 0% 44% 100%	60 440 35 No 0% 0% 47% 0 0 0 35 0 N/A 21.2.2.2 0 60 60 415 Yes 40% 100%	230 610 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 21.2.2.3 0 0 230 230 307 Yes 26% 100%	230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 21.2.2.4 0 0 230 230 230 347 Yes 34% 100%	244 624 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 21.2.2.5 0 0 244 244 221 Yes 0% 66% 100%	247 627 0 No 0% 0% 0% 0 0 0 0 0 0 0 21.2.2. 0 247 247 248 Yes 0% 75% 0 0 0
Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Energy (Sr Alt Energy Alte Line 3010 Com Otay Mesa Med Total Supply Total MMcfd S Immediate Cur Curtailment (%)	inhortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] wall) / Otay Medium / L3010 Out rnate (Smaller-Scale) plete Outage dium Supply chortfall rtailment to EG Stations? Gas Core [%] Gas Core [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd]	156 536 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 21.2.2.1 0 0 156 156 119 Yes 0% 44% 100% 0	60 440 35 No 0% 0% 47% 0 0 0 0 0 0 N/A 21,2,2,2 0 60 60 415 Yes 40% 100% 40	230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 21.2.2.3 0 0 230 230 230 307 Yes 26% 100% 80	230 610 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 21.2.2.4 0 0 230 230 230 347 Yes 34% 100% 120	244 624 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 21.2.2.5 0 0 244 244 244 244 221 Yes 0% 66% 100% 0	247 627 0 No 0% 0% 0% 0 0 0 0 0 0 21.2.2.0 0 247 247 278 Yes 0% 100% 0 0
Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Energy (Sr Alt Energy Alte Line 3010 Com Otay Mesa Met Total Supply Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity)	inortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWhd] Gas EG [MWhd] Gas EG [MWhd] Gas EG [MWhd] Gas Core # Affected] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Mall) / Otay Medium / L3010 Out rnate (Smaller-Scale) plete Outage dium Supply inortfall rtailment to EG Stations? Gas Core [%] Gas Core [MMcfd] Gas EG [%] Gas Core [MMcfd] Gas EG [MWhd] Gas EG [MWhd] Gas EG [MWhd] Gas EG [MWhd] Gas Non-Core Non-EG [MMcfd] Gas EG [MWhd] Gas Non-Core Non-EG [MMcfd] Gas EG [MWhd] Gas Non-Core Non-EG [MMcfd]	156 536 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 156 156 119 Yes 0% 44% 100% 0 5,978	60 440 35 No 0% 0% 47% 0 0 0 35 0 N/A 21.2.2.2 0 60 60 415 Yes 40% 100% 40 40,461 1,686 75	230 610 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 21.2.2.3 0 0 230 230 307 Yes 26% 100% 100% 80 22,253 927 62	230 610 0 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 21,2,2,4 0 0 230 230 230 347 Yes 34% 100% 120 22,253 927 62	244 624 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 21.2.2.5 0 0 244 244 221 Yes 0% 66% 100% 0 19,672	247 627 0 No 0% 0% 0% 0% 0 0 0 0 0 0 21.2.2.6 0 247 247 278 Yes 0% 755% 100% 0 27,355 1,140 75
Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Energy (Sr Alt Energy Alte Line 3010 Com Otay Mesa Med Total Supply Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of	inortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] mall) / Otay Medium / L3010 Out mate (Smaller-Scale) iplete Outage dium Supply chortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	156 536 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 156 156 119 Yes 0% 44% 100% 0 5,978 249 75	60 440 35 No 0% 0% 47% 0 0 0 35 0 0 0 35 0 0 0 135 0 0 415 Yes 40% 100% 40 40,461 1,686 75 349,638	230 610 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 21.2.2.3 0 0 230 230 230 307 Yes 26% 100% 80 22,253 927 62 224,454	230 610 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	244 624 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 0 21.2.2.5 0 0 244 244 244 221 Yes 0% 66% 100% 0 19,672	247 627 0 No 0% 0% 0% 0 0 0 0 0 0 0 21.2.2.0 0 247 247 278 Yes 0% 75% 100% 0 27,355 1,140 0
Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Energy (Sr Alt Energy Alte Line 3010 Com Otay Mesa Met Total Supply Total MMcfd S Immediate Cur Curtailment (%) Curtailment (Capacity)	inortfall rtailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWhd] Gas EG [MWhd] Gas EG [MWhd] Gas EG [MWhd] Gas Core # Affected] Gas EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Mall) / Otay Medium / L3010 Out rnate (Smaller-Scale) plete Outage dium Supply inortfall rtailment to EG Stations? Gas Core [%] Gas Core [MMcfd] Gas EG [%] Gas Core [MMcfd] Gas EG [MWhd] Gas EG [MWhd] Gas EG [MWhd] Gas EG [MWhd] Gas Non-Core Non-EG [MMcfd] Gas EG [MWhd] Gas Non-Core Non-EG [MMcfd] Gas EG [MWhd] Gas Non-Core Non-EG [MMcfd]	156 536 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 156 156 119 Yes 0% 44% 100% 0 5,978	60 440 35 No 0% 0% 47% 0 0 0 35 0 N/A 21.2.2.2 0 60 60 415 Yes 40% 100% 40 40,461 1,686 75	230 610 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 21.2.2.3 0 0 230 230 307 Yes 26% 100% 100% 80 22,253 927 62	230 610 0 0 No 0% 0% 0% 0 0 0 0 0 0 0 0 21,2,2,4 0 0 230 230 230 347 Yes 34% 100% 120 22,253 927 62	244 624 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 21.2.2.5 0 0 244 244 221 Yes 0% 66% 100% 0 19,672	247 627 0 No 0% 0% 0% 0 0 0 0 0 0 0 21.2.2.6 0 247 247 278 Yes 0% 75% 100% 0 27,355 1,140 75

Line No.		APPLICATION 15-09-013 VOLUME III	- CO31-EFFEC		ALTOIS (CORN	LOTEDTEBN	2011)	
			1. Example	2. Example	3. Example	4. Winter 1-	5. Example	6. Example
1			Summer Low- EG Dav	Summer High EG Dav	Winter Day	in-10 Year	Spring Day	Fall Day
			MMcfd	MMcfd	MMcfd	Day MMcfd	MMcfd	MMcfd
2	Α	В	С	D	Е	F	G	Н
2211								
		nall) / Otay Low / L3010 80% nate (Smaller-Scale)	21.1.3.1	21.1.3.2 0	21.1.3.3 0	21.1.3.4 0	21.1.3.5 0	21.1.3.6 0
	Line 3010 at 80		380	380	380	380	380	380
	Otay Mesa Low		33	33	148	148	130	168
<u> </u>	Total Supply		413	413	528	528	510	548
	Total MMcfd Sl	hortfall tailment to EG Stations?	0 No	62 No	9 No	49 No	0 No	0 No
2240		Gas Core [%]	0%	0%	0%	0%	0%	0%
2220	Curtailment (%)	Gas EG [%]	0%	0%	0%	0%	0%	0%
2221	(70)	Gas Non-Core Non-EG [%]	0%	82%	14%	79%	0%	0%
2222 2223	Curtailment	Gas Core [MMcfd] Gas EG [MWh/d]	0	0	0	0	0	0
	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
2225		Gas Non-Core Non-EG [MMcfd]	0	62	9	49	0	0
	Number of	Gas Core [# Affected]	0	0	0	0	0	0
	Customers Affected	Gas EG [# Affected] Gas Non-Core Non-EG [# Affected]	0	N/A	N/A	N/A	0	0
2229								
		nall) / Otay Low / L3010 Out	21.2.3.1	21.2.3.2	21.2.3.3	21.2.3.4	21.2.3.5	21.2.3.6
2231 2232	Alt Energy Alter Line 3010 Com	nate (Smaller-Scale)	0	0	0	0	0	0
	Otay Mesa Low		33	33	148	148	130	168
2234	Total Supply	11.2	33	33	148	148	130	168
	Total MMcfd SI		242	442	389	429	335	357
2227		tailment to EG Stations? Gas Core [%]	Yes 67%	Yes 67%	Yes 52%	Yes 58%	Yes 23%	Yes 7%
2238	Curtailment	Gas EG [%]	100%	100%	100%	100%	100%	100%
2239	(%)	Gas Non-Core Non-EG [%]	100%	100%	100%	100%	100%	100%
2240	Contailment	Gas Core [MMcfd]	67	67	162	202	40	12
	Curtailment (Capacity)	Gas EG [MWh/d] Gas EG [MW]	13,487 562	40,461 1,686	22,253 927	22,253 927	29,671 1,236	36,414 1,517
2243	(Gapacity)	Gas Non-Core Non-EG [MMcfd]	75	75	62	62	75	75
2244	Number of	Gas Core [# Affected]	579,437	579,437	453,758	501,195	203,921	60,119
_	Customers	Gas EG [# Affected]	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
2246 2247	Affected	Gas Non-Core Non-EG [# Affected]	N/A	N/A	IN/A	N/A	N/A	N/A
	Alt Energy (Sn	nall) / Otay Out / L3010 80%	21.1.4.1	21.1.4.2	21.1.4.3	21.1.4.4	21.1.4.5	21.1.4.6
	Alt Energy Alter	nata (Smallar-Scala)	0	0	0	0 380	0	0
	Line 3010 at 80	% Supply	380	380	380		380	380
	Otay Mesa No S	% Supply	0	0	0	0	0	0
2252		% Supply Supply	0 380 0					
2252 2253 2254	Otay Mesa No S Total Supply Total MMcfd Si	% Supply Supply nortfall tailment to EG Stations?	0 380 0 No	0 380 95 Yes	0 380 157 Yes	0 380 197 Yes	0 380 85 Yes	0 380 145 Yes
2252 2253 2254 2255	Otay Mesa No S Total Supply Total MMcfd Si	% Supply Supply hortfall tailment to EG Stations? [Gas Core [%]	0 380 0 No 0%	0 380 95 Yes 0%	0 380 157 Yes 0%	0 380 197 Yes 0%	0 380 85 Yes 0%	0 380 145 Yes 0%
2252 2253 2254 2255 2256	Otay Mesa No S Total Supply Total MMcfd SI Immediate Cur	% Supply Supply hortfall tailment to EG Stations? [Gas Core [%] Gas EG [%]	0 380 0 No	0 380 95 Yes	0 380 157 Yes	0 380 197 Yes	0 380 85 Yes	0 380 145 Yes
2252 2253 2254 2255 2256 2257 2258	Otay Mesa No S Total Supply Total MMcfd Si Immediate Cur Curtailment (%)	% Supply Supply nortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd]	0 380 0 No 0% 0% 0%	0 380 95 Yes 0% 7% 100%	0 380 157 Yes 0% 58% 100%	0 380 197 Yes 0% 82% 100%	0 380 85 Yes 0% 5% 100%	0 380 145 Yes 0% 26% 100%
2252 2253 2254 2255 2256 2257 2258 2259	Otay Mesa No S Total Supply Total MMcfd SI Immediate Cur Curtailment (%) Curtailment	% Supply Supply hortfall tailment to EG Stations? [Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d]	0 380 0 No 0% 0% 0% 0%	0 380 95 Yes 0% 7% 100% 0	0 380 157 Yes 0% 58% 100% 0	0 380 197 Yes 0% 82% 100% 0 18,207	0 380 85 Yes 0% 5% 100% 0	0 380 145 Yes 0% 26% 100% 0
2252 2253 2254 2255 2256 2257 2258 2259	Otay Mesa No S Total Supply Total MMcfd Si Immediate Cur Curtailment (%)	% Supply Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW]	0 380 0 No 0% 0% 0%	0 380 95 Yes 0% 7% 100% 0 2,697	0 380 157 Yes 0% 58% 100%	0 380 197 Yes 0% 82% 100% 0 18,207 759	0 380 85 Yes 0% 5% 100% 0 1,349 56	0 380 145 Yes 0% 26% 100% 0 9,441 393
2252 2253 2254 2255 2256 2257 2258 2259 2260 2261	Otay Mesa No S Total Supply Total MMcfd SI Immediate Cur Curtailment (%) Curtailment	% Supply Supply hortfall tailment to EG Stations? [Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d]	0 380 0 No 0% 0% 0% 0 0	0 380 95 Yes 0% 7% 100% 0	0 380 157 Yes 0% 58% 100% 0	0 380 197 Yes 0% 82% 100% 0 18,207	0 380 85 Yes 0% 5% 100% 0	0 380 145 Yes 0% 26% 100% 0
2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263	Otay Mesa No S Total Supply Total MMcfd SI Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers	% Supply Supply hortfall tailment to EG Stations? [Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected]	0 380 0 No 0% 0% 0 0 0 0	0 380 95 Yes 0% 7% 100% 0 2,697 112 75 0	0 380 157 Yes 0% 58% 100% 0 12,813 534 62 0	0 380 197 Yes 0% 82% 100% 0 18,207 759 62 0	0 380 85 Yes 0% 55% 100% 0 1,349 56 75 0	0 380 145 Yes 0% 26% 100% 0 9,441 393 75 0
2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264	Otay Mesa No S Total Supply Total MMcfd SI Immediate Cur Curtailment (%) Curtailment (Capacity) Number of	% Supply Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0 380 0 No 0% 0% 0% 0 0 0	0 380 95 Yes 0% 7% 100% 0 2,697 112 75 0	0 380 157 Yes 0% 58% 100% 0 12,813 534 62 0	0 380 197 Yes 0% 82% 100% 0 18,207 759 62	0 380 85 Yes 0% 5% 100% 0 1,349 56 75	0 380 145 Yes 0% 26% 100% 0 9,441 393 75 0
2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265	Otay Mesa No S Total Supply Total MMcfd SI Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected	% Supply Supply hortfall tailment to EG Stations? [Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas EG [# Affected]	0 380 0 No 0% 0% 0 0 0 0	0 380 95 Yes 0% 7% 100% 0 2,697 112 75 0	0 380 157 Yes 0% 58% 100% 0 12,813 534 62 0	0 380 197 Yes 0% 82% 100% 0 18,207 759 62 0	0 380 85 Yes 0% 55% 100% 0 1,349 56 75 0	0 380 145 Yes 0% 26% 100% 0 9,441 393 75 0
2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267	Otay Mesa No S Total Supply Total MMcfd Si Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Energy (Sn Alt Energy Alter	% Supply Supply mortfall tailment to EG Stations? [Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] Gas Core [# Affected] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected]	0 380 0 No 0% 0% 0% 0 0 0 0 0 0 0 21.2.4.1	0 380 95 Yes 0% 7% 100% 0 2,697 112 75 0 N/A N/A 21.2.4.2	0 380 157 Yes 0% 58% 100% 0 12,813 534 62 0 N/A N/A	0 380 197 Yes 0% 82% 100% 0 18,207 759 62 0 N/A N/A	0 380 85 Yes 0% 5% 100% 0 1,349 56 75 0 N/A N/A	0 380 145 Yes 0% 26% 100% 0 9,441 393 75 0 N/A N/A
2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268	Otay Mesa No S Total Supply Total MMcfd Si Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Energy (Sn Alt Energy Alter Line 3010 Comp	% Supply Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0 380 0 No 0% 0% 0 0 0 0 0 0 0 0	0 380 95 Yes 0% 7% 100% 0 2,697 112 75 0 N/A N/A 21.2.4.2 0 0	0 380 157 Yes 0% 58% 100% 0 12,813 534 62 0 N/A N/A 21.2.4.3 0 0	0 380 197 Yes 0% 82% 100% 0 18,207 759 62 0 N/A N/A	0 380 85 Yes 0% 5% 100% 0 1,349 56 75 0 N/A N/A 21.2.4.5 0 0	0 380 145 Yes 0% 26% 100% 0 9,441 393 75 0 N/A N/A 21.2.4.6 0 0
2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2269	Otay Mesa No S Total Supply Total MMcfd Si Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Energy (Sn Alt Energy Alter Line 3010 Comp Otay Mesa No S	% Supply Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0 380 0 No 0% 0% 0 0 0 0 0 0 0 0	0 380 95 Yes 0% 7% 100% 0 2,697 112 75 0 N/A N/A 21.2.4.2 0 0 0	0 380 157 Yes 0% 58% 100% 0 12,813 534 62 0 N/A N/A 21.2.4.3 0	0 380 197 Yes 0% 82% 100% 0 18,207 759 62 0 N/A N/A 21.2.4.4 0 0	0 380 85 Yes 0% 5% 100% 0 1,349 56 75 0 N/A N/A 21.2.4.5 0 0	0 380 145 Yes 0% 26% 100% 0 9,441 393 75 0 N/A N/A 21.2.4.6 0 0
2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2269 2270	Otay Mesa No S Total Supply Total MMcfd Si Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Energy (Sn Alt Energy Alter Line 3010 Comp	% Supply Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [MACfd] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Delta (Smaller-Scale) Supply	0 380 0 No 0% 0% 0 0 0 0 0 0 0 0	0 380 95 Yes 0% 7% 100% 0 2,697 112 75 0 N/A N/A 21.2.4.2 0 0	0 380 157 Yes 0% 58% 100% 0 12,813 534 62 0 N/A N/A 21.2.4.3 0 0	0 380 197 Yes 0% 82% 100% 0 18,207 759 62 0 N/A N/A	0 380 85 Yes 0% 5% 100% 0 1,349 56 75 0 N/A N/A 21.2.4.5 0 0	0 380 145 Yes 0% 26% 100% 0 9,441 393 75 0 N/A N/A 21.2.4.6 0 0
2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2269 2270 2271 2272	Otay Mesa No S Total Supply Total MMcfd SI Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Energy (Sm Alt Energy Alter Line 3010 Comp Otay Mesa No S Total Supply Total MMcfd SI	% Supply Supply mortfall tailment to EG Stations? [Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Core [# Affected] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] mail) / Otay Out / L3010 Out mate (Smaller-Scale) olete Outage Supply mortfall tailment to EG Stations?	0 380 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	0 380 95 Yes 0% 7% 100% 0 2,697 112 75 0 N/A N/A 21.2.4.2 0 0 0 475 Yes	0 380 157 Yes 0% 58% 100% 0 12,813 534 62 0 N/A N/A 21.2.4.3 0 0 0 0 0 537 Yes	0 380 197 Yes 0% 82% 100% 0 18,207 759 62 0 N/A N/A 0 0 577 Yes	0 380 85 Yes 0% 5% 100% 0 1,349 56 75 0 N/A N/A 21.2.4.5 0 0 0 465 Yes	0 380 145 Yes 0% 26% 100% 0 9,441 393 75 0 N/A N/A 21.2.4.6 0 0 0 525 Yes
2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2269 2270 2271 2272	Otay Mesa No S Total Supply Total MMcfd SI Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Energy (Sm Alt Energy Alter Line 3010 Comp Otay Mesa No S Total Supply Total MMcfd SI	% Supply Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Oro [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Hortfall Tailment to EG Stations? Gas Core [%]	0 380 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 21.2.4.1 0 0 0 0 275 Yes 100%	0 380 95 Yes 0% 7% 100% 0 2,697 112 75 0 N/A N/A 21.2.4.2 0 0 0 475 Yes 100%	0 380 157 Yes 0% 58% 100% 0 12,813 534 62 0 N/A N/A 21,2,4,3 0 0 0 0 537 Yes 100%	0 380 197 Yes 0% 82% 100% 0 18,207 759 62 0 N/A N/A 0 0 0 0 577 Yes 100%	0 380 85 Yes 0% 5% 100% 0 1,349 56 75 0 N/A N/A 21.2.4.5 0 0 0 465 Yes 100%	0 380 145 Yes 0% 26% 100% 0 9,441 393 75 0 N/A N/A 21.2.4.6 0 0 0 0 525 Yes 100%
2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2269 2270 2271 2272 2273 2274	Otay Mesa No S Total Supply Total MMcfd SI Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Energy (Sn Alt Energy Alter Line 3010 Com Otay Mesa No S Total Supply Total MMcfd SI Immediate Cur	% Supply Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Hortfall tailment to EG Stations? Gas Core [%] Gas Core [%] Gas Core [%]	0 380 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 21.2.4.1 0 0 0 275 Yes 100%	0 380 95 Yes 0% 7% 100% 0 2,697 1112 75 0 N/A N/A 21.2.4.2 0 0 0 475 Yes 100% 100%	0 380 157 Yes 0% 58% 100% 0 12,813 534 62 0 N/A N/A 21.2.4.3 0 0 0 0 537 Yes 100% 100%	0 380 197 Yes 0% 82% 100% 0 18,207 759 62 0 N/A N/A 0 0 0 0 0	0 380 85 Yes 0% 5% 100% 0 1,349 56 75 0 N/A N/A 21.2.4.5 0 0 0 465 Yes 100% 100%	0 380 145 Yes 0% 26% 100% 0 9,441 393 75 0 N/A N/A 21.2.4.6 0 0 0 525 Yes 100%
2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2269 2270 2271 2272 2273	Otay Mesa No S Total Supply Total MMcfd SI Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Energy (Sm Alt Energy Alteries (Sm) Otay Mesa No S Total Supply Total MMcfd SI Immediate Cur Curtailment	% Supply Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Oro [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Hortfall Tailment to EG Stations? Gas Core [%]	0 380 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 21.2.4.1 0 0 0 0 275 Yes 100%	0 380 95 Yes 0% 7% 100% 0 2,697 112 75 0 N/A N/A 21.2.4.2 0 0 0 475 Yes 100%	0 380 157 Yes 0% 58% 100% 0 12,813 534 62 0 N/A N/A 21,2,4,3 0 0 0 0 537 Yes 100%	0 380 197 Yes 0% 82% 100% 0 18,207 759 62 0 N/A N/A 0 0 0 0 577 Yes 100%	0 380 85 Yes 0% 5% 100% 0 1,349 56 75 0 N/A N/A 21.2.4.5 0 0 0 465 Yes 100%	0 380 145 Yes 0% 26% 100% 0 9,441 393 75 0 N/A N/A 21.2.4.6 0 0 0 0 525 Yes 100%
2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2269 2270 2271 2272 2273 2274 2275 2276 2275	Otay Mesa No S Total Supply Total MMcfd Si Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Energy (Sn Alt Energy Alter Line 3010 Comp Otay Mesa No S Total Supply Total MMcfd Si Immediate Cur Curtailment (%) Curtailment	% Supply Supply mortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] wall) / Otay Out / L3010 Out nate (Smaller-Scale) clete Outage Supply mortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MMcfd] Gas EG [MMcfd] Gas EG [MMh/d]	0 380 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 21.2.4.1 0 0 0 275 Yes 100% 100% 100%	0 380 95 Yes 0% 7% 100% 100% 2,697 112 75 0 N/A N/A 21.2.4.2 0 0 0 0 475 Yes 100% 100% 100% 100 40,461	0 380 157 Yes 0% 58% 100% 0 12,813 534 62 0 N/A N/A 21.2.4.3 0 0 0 0 537 Yes 100% 100% 100% 310 22,253	0 380 197 Yes 0% 82% 100% 0 18,207 759 62 0 N/A N/A 21.2.4.4 0 0 0 0 100% 100% 100% 100% 100% 100%	0 380 85 Yes 0% 5% 100% 0 1,349 56 75 0 N/A N/A 21.2.4.5 0 0 0 465 Yes 100% 100% 100% 170 29,671	0 380 145 Yes 0% 26% 100% 0 9,441 393 75 0 N/A N/A 21.2.4.6 0 0 0 0 525 Yes 100% 100% 100% 180 36,414
2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2270 2271 2272 2273 2274 2275 2276 2276 2277 2278	Otay Mesa No S Total Supply Total MMcfd Si Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Energy (Sn Alt Energy Alter Line 3010 Com Otay Mesa No S Total Supply Total MMcfd Si Immediate Cur Curtailment (%)	% Supply Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] Hall) / Otay Out / L3010 Out hall (Smaller-Scale) Delete Outage Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d]	0 380 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 21.2.4.1 0 0 0 275 Yes 100% 100% 100% 13,487 562	0 380 95 Yes 0% 7% 100% 0 2,697 112 75 0 N/A N/A 21.2.4.2 0 0 0 475 Yes 100% 100% 100% 100 40,461 1,686	0 380 157 Yes 0% 58% 100% 0 12,813 534 62 0 N/A N/A 21.2.4.3 0 0 0 0 537 Yes 100% 100% 100% 310 22,253 927	0 380 197 yes 0% 82% 100% 0 18,207 759 62 0 N/A N/A 0 0 0 0 0 0 10,000 0 0 577 Yes 100% 100% 100% 350 22,253	0 380 85 Yes 0% 5% 100% 0 1,349 56 75 0 N/A N/A 21.2.4.5 0 0 0 465 Yes 100% 100% 100% 170 29,671 1,236	0 380 145 Yes 0% 26% 100% 0 9,441 393 75 0 N/A N/A 21.2.4.6 0 0 0 525 Yes 100% 100% 100% 180 36,414 1,517
2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2269 2270 2271 2272 2273 2274 2275 2276 2277 2278 2279	Otay Mesa No S Total Supply Total MMcfd Si Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Energy (Sn Alt Energy Alter Line 3010 Comp Otay Mesa No S Total Supply Total MMcfd Si Immediate Cur Curtailment (%) Curtailment	% Supply Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas Non-Core Non-EG [# Affected] wall) / Otay Out / L3010 Out nate (Smaller-Scale) Dete Outage Supply hortfall tailment to EG Stations? Gas Core [%] Gas Core [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MMcfd] Gas EG [MMcfd]	0 380 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 21.2.4.1 0 0 0 275 Yes 100% 100% 13,487 562 75	0 380 95 Yes 0% 7% 100% 0 2,697 1112 75 0 N/A N/A 21,2,4,2 0 0 0 475 Yes 100% 100% 100% 100% 1,686 75	0 380 157 Yes 0% 58% 100% 0 12,813 534 62 0 N/A N/A 21,2,4,3 0 0 0 0 100% 100% 100% 100% 310 22,253 927 62	0 380 197 Yes 0% 82% 100% 0 18,207 759 62 0 N/A N/A 0 0 0 577 Yes 100% 100% 100% 350 22,253 927 62	0 380 85 Yes 0% 5% 100% 0 1,349 56 75 0 N/A N/A 21,2,4,5 0 0 0 465 Yes 100% 100% 100% 170 29,671 1,236 75	0 380 145 Yes 0% 26% 100% 0 9,441 393 75 0 N/A N/A 21,2,4,6 0 0 0 0 525 Yes 100% 100% 180 36,414 1,517 75
2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2270 2271 2272 2273 2274 2275 2276 2277 2278 2278 2279 2280	Otay Mesa No S Total Supply Total MMcfd Si Immediate Cur Curtailment (%) Curtailment (Capacity) Number of Customers Affected Alt Energy (Sn Alt Energy Alter Line 3010 Com Otay Mesa No S Total Supply Total MMcfd Si Immediate Cur Curtailment (%) Curtailment (%) Curtailment (Capacity)	% Supply Supply hortfall tailment to EG Stations? Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas EG [MWh/d] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected] Gas Core [# Affected] Gas Non-Core Non-EG [# Affected] Gas EG [# Affected] Gas Non-Core Non-EG [# Affected] where the complete of the comp	0 380 0 No 0% 0% 0% 0% 0 0 0 0 0 0 0 21.2.4.1 0 0 0 275 Yes 100% 100% 100% 13,487 562	0 380 95 Yes 0% 7% 100% 0 2,697 112 75 0 N/A N/A 21.2.4.2 0 0 0 475 Yes 100% 100% 100% 100 40,461 1,686	0 380 157 Yes 0% 58% 100% 0 12,813 534 62 0 N/A N/A 21.2.4.3 0 0 0 0 537 Yes 100% 100% 100% 310 22,253 927	0 380 197 yes 0% 82% 100% 0 18,207 759 62 0 N/A N/A 0 0 0 0 0 0 10,000 0 0 577 Yes 100% 100% 100% 350 22,253	0 380 85 Yes 0% 5% 100% 0 1,349 56 75 0 N/A N/A 21.2.4.5 0 0 0 465 Yes 100% 100% 100% 170 29,671 1,236	0 380 145 Yes 0% 26% 100% 0 9,441 393 75 0 N/A N/A 21.2.4.6 0 0 0 525 Yes 100% 100% 100% 180 36,414 1,517

Line No.			0001 211 20		•		,	
			1. Example	2. Example	3. Example	4. Winter 1-	5. Example	6. Example
1				Summer High-	Winter Day	in-10 Year	Spring Day	Fall Day
•			EG Day	EG Day	MMcfd	Day MMcfd	MMcfd	MMcfd
			MMcfd	MMcfd				
2	Α	В	С	D	E	F	G	Н
2283								
2284	Offshore Rout	<u>'e</u>						
2285								
2286		y Full / L3010 80%	15.1.1.1	15.1.1.2	15.1.1.3	15.1.1.4	15.1.1.5	15.1.1.6
2287	Offshore Route		680	680	680	680	680	680
2288	Line 3010 at 80		380 295	380	380	380	380 329	380
2289	Otay Mesa Full	Зирріу		86	313	313		324
2290	Total Supply Total MMcfd S	h = =#f=11	1355	1146	1373	1373	1389	1384
2291 2292		rtailment to EG Stations?	0 No	0 No	0 No	0 No	0 No	0 No
2292		Gas Core [%]	0%	0%	0%	0%	0%	0%
2294	Curtailment	Gas EG [%]	0%	0%	0%	0%	0%	0%
2295	(%)	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
2296		Gas Core [MMcfd]	0	0	0	0	0	0
2297	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
2298	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
2299	` ' '	Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
2300	Number of	Gas Core [# Affected]	0	0	0	0	0	0
2301	Customers	Gas EG [# Affected]	0	0	0	0	0	0
2302	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
2303								
2304		y Full / L3010 Out	15.2.1.1	15.2.1.2	15.2.1.3	15.2.1.4	15.2.1.5	15.2.1.6
2305	Offshore Route		680	680	680	680	680	680
2306	Line 3010 Com	, ,	0	0	0	0	0	0
2307	Otay Mesa Full	Supply	295	86	313	313	329	324
2308	Total Supply		975	766	993	993	1009	1004
2309	Total MMcfd S		0	0	0	0	0	0
2310	Immediate Cui	rtailment to EG Stations?	No	No	No	No	No	No
2311	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
2312	(%)	Gas EG [%]	0%	0%	0%	0%	0%	0%
2313 2314		Gas Non-Core Non-EG [%] Gas Core [MMcfd]	0%	0%	<u>0%</u> 0	0%	<u>0%</u> 0	0%
2314	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
2316	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
2317	(Capacity)	Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
2318	Number of	Gas Core [# Affected]	0	0	0	0	0	0
2319	Customers	Gas EG [# Affected]	0	0	0	0	0	0
2320	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
2321	Ancolou	Cao Horr Coro Horr Eo [ii / tirected]	·	Ū		, ,		, ,
2322	Offshore / Ota	y Medium / L3010 80%	15.1.2.1	15.1.2.2	15.1.2.3	15.1.2.4	15.1.2.5	15.1.2.6
2323	Offshore Route		680	680	680	680	680	680
2324	Line 3010 at 80	% Supply	380	380	380	380	380	380
2325	Otay Mesa Med	dium Supply	156	60	230	230	244	247
2326	Total Supply		1216	1120	1290	1290	1304	1307
2327	Total MMcfd S	hortfall	0	0	0	0	0	0
2328	Immediate Cur	rtailment to EG Stations?	No	No	No	No	No	No
2329	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
2330	(%)	Gas EG [%]	0%	0%	0%	0%	0%	0%
2331	(70)	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
2332	l —	Gas Core [MMcfd]	0	0	0	0	0	0
2333	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
2334	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
2335	Number	Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
2336	Number of	Gas Core [# Affected]	0	0	0	0	0	0
2337	Customers	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
2338	Affected	Gas Non-Core Non-EG [# Affected]	U	U	U	U	U	U
2339 2340	Offshore / Ota	y Medium / L3010 Out	15.2.2.1	15.2.2.2	15.2.2.3	15.2.2.4	15.2.2.5	15.2.2.6
2340 2341	Offshore Route		680	680	680	680	680	680
2342	Line 3010 Com		0	0	0	0	0	0
2342	Otay Mesa Med		156	60	230	230	244	247
2344	Total Supply		836	740	910	910	924	927
2344	Total MMcfd S	hortfall	0	0	0	0	0	0
2346		rtailment to EG Stations?	No	No	No	No	No	No
2347		Gas Core [%]	0%	0%	0%	0%	0%	0%
2348	Curtailment	Gas EG [%]	0%	0%	0%	0%	0%	0%
2349	(%)	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
2350		Gas Core [MMcfd]	0	0	0	0	0	0
2351	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
2352	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
2353	[Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
2354	Number of	Gas Core [# Affected]	0	0	0	0	0	0
2355	Customers	Gas EG [# Affected]	0	0	0	0	0	0
2356	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0

1	Line No.		APPLICATION 15-09-013 VOLUME III	- COST-EFFEC	TIVENESS ANA	ALYSIS (CORR	RECTED FEBR	(UARY 2017)	
2387				Summer Low- EG Day	Summer High EG Day	Winter Day	in-10 Year	Spring Day	Fall Day
	2	Α	В			E	F	G	н
Comparison Com		Offichara / Oto		15 1 2 1	1E 1 2 2	15 1 2 2	1E 1 2 1	15 1 2 5	1F 1 2 6
Clay Meas Low Supply 1093 1093 1298 1298 130 168									
Total Supply									
Total Mikicid Shortfall			Supply						
Curtaliment Gas Core %		Total MMcfd S		0	0	0	0	0	0
Curtailment Gas EG Si O% O% O% O% O% O% O% O									
Capacity) Sas EG IMMY Capacity Capacity Sas EG IMMY Capacity Capacity Capacity Sas EG IMMY Capacity Capacity Capacity Sas EG IMMY Capacity Capacity Sas EG IMMY Capacity Capacity Capacity Capacity Capacity Sas EG IMMY Capacity Capacity Sas EG IMMY Capacity Capacity Capacity Sas EG IMMY Capacity Capacity Capacity Sas EG IMMY Capacity Capacity Sas EG IMMY Capacity Capacity Capacity Capacity Sas EG IMMY Capacity Capacity Capacity Capacity Capacity Sas EG IMMY Capacity Capacity									
Custalment Case EG [MM*Hol] 0 0 0 0 0 0 0 0 0		(%)							
Capacity Capacity		Curtailment							
Number of Gas Core pt Affected 0 0 0 0 0 0 0 0 0	2370		Gas EG [MW]	0	0	0	0	0	0
Customers Case EC ATRICICED 0 0 0 0 0 0 0 0 0		Number of							
2376 Offshore / Offshore College		Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
Offshore Route		Offshore / Ota	v Low / L3010 Out	15.2.3.1	15.2.3.2	15.2.3.3	15.2.3.4	15.2.3.5	15.2.3.6
Disay Mesa Low Supply 33 33 148 148 140 130 168		Offshore Route		680	680	680	680	680	680
Total Supply									
Total Midrid Shortfall			συμριγ						
Curtaliment Gas Core S 0% 0% 0% 0% 0% 0% 0%		Total MMcfd S							
Cartaliment Gas EG [%] 0% 0% 0% 0% 0% 0% 0%		Immediate Cur							
Capacity Gas Non-Core Non-EG % 0 % 0									
Curtailment Gas EG MWh/c 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		(%)							
Capacity Gas EG MW 0		0							
Castomers Gas Core [# Affected] 0 0 0 0 0 0 0 0 0									
Customers Gas EG # Affected 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		(oupdoily)							
Affected Gas Non-Core Non-EG [# Affected] 0 0 0 0 0 0 0 0 0									
2393 2394 2395 2396 2396 2396 2396 2396 2396 2396 2396 2396 2396 2396 2396 2397									
Comparison of	2393					•			
Capacity Capacity									
Total Supply									
Total MMcfd Shortfall			Supply	-					
			houtfall						
Curtailment Gas Core [%] 0% 0% 0% 0% 0% 0% 0%									
Comparison of Case Compari		Curtailment					0%		0%
Curtailment Gas Core MMcfd 0 0 0 0 0 0 0 0 0									
Capacity Gas EG [MW]									
Customers Gas Non-Core Non-EG [MMcfd] O									
Number of Customers Gas Core [# Affected] 0 0 0 0 0 0 0 0 0		(Capacity)							
Affected Gas Non-Core Non-EG [# Affected] 0 0 0 0 0 0 0 0 0	2408		Gas Core [# Affected]	0	0	0	0	0	0
2411 2412 Offshore / Otay Out / L3010 Out									
Offshore / Otay Out / L3010 Out		Allected	TOTAL MOLL COLO MOLLEO [# Milecleu]		U	U	U I		U
Line 3010 Complete Outage 0	2412								
Otay Mesa No Supply O									
Total MMcfd Shortfall 0									
Immediate Curtailment to EG Stations? No			h a utali						
Curtailment (%) Gas Core [%] 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%									
Cas EG [%] 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%									
Case Core Monte Case	2420		Gas EG [%]		0%	0%	0%	0%	
2423 Curtailment Gas EG [MWh/d] 0 0 0 0 0 2424 (Capacity) Gas EG [MW] 0 0 0 0 0 0 2425 Gas Non-Core Non-EG [MMcfd] 0 0 0 0 0 0 2426 Number of Gas Core [# Affected] 0 0 0 0 0 0 2427 Customers Gas EG [# Affected] 0 0 0 0 0									
2424 (Capacity) Gas EG [MW] 0 0 0 0 0 2425 (2425) Gas Non-Core Non-EG [MMcfd] 0 0 0 0 0 2426 Number of Customers Gas Core [# Affected] 0 0 0 0 0 0 2427 Customers Gas EG [# Affected] 0 0 0 0 0 0		Curtailment							
2426 Number of Customers Gas Core [# Affected] 0 0 0 0 0 0 2427 Customers Gas EG [# Affected] 0 0 0 0 0 0 0	2424	(Capacity)	Gas EG [MW]				0		
2427 Customers Gas EG [# Affected] 0 0 0 0 0		Number of							

Line No.			0001 211 20		•		· ·	
			1. Example	2. Example	3. Example	4. Winter 1-	5. Example	6. Example
1				Summer High	Winter Day	in-10 Year	Spring Day	Fall Day
			EG Day	EG Day	MMcfd	Day MMcfd	MMcfd	MMcfd
•			MMcfd	MMcfd	Е	F	G	
2	Α	В	С	D	<u> </u>	F	G	Н
2429 2430	Blythe to Sant	oo Alternate 1						
2431	Diythe to Cant	ee Alternate 1						
2432	Blythe to Sant	ee 1 / Otay Full / L3010 80%	16.1.1.1	16.1.1.2	16.1.1.3	16.1.1.4	16.1.1.5	16.1.1.6
2433	Blythe to Sante	e Alternate 1	680	680	680	680	680	680
2434	Line 3010 at 80		380	380	380	380	380	380
2435	Otay Mesa Full	Supply	295	86	313	313	329	324
2436 2437	Total Supply Total MMcfd S	houtfall	1355 0	1146 0	1373 0	1373	1389 0	1384 0
2437		rtailment to EG Stations?	No	No	No	No	No No	No
2439		Gas Core [%]	0%	0%	0%	0%	0%	0%
2440	Curtailment	Gas EG [%]	0%	0%	0%	0%	0%	0%
2441	(%)	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
2442		Gas Core [MMcfd]	0	0	0	0	0	0
2443	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
2444 2445	(Capacity)	Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
2446	Number of	Gas Core [# Affected]	0	0	0	0	0	0
2447	Customers	Gas EG [# Affected]	0	0	0	0	0	0
2448	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
2449								
2450		ee 1 / Otay Full / L3010 Out	16.2.1.1	16.2.1.2	16.2.1.3	16.2.1.4	16.2.1.5	16.2.1.6
2451	Blythe to Sante		680	680	680	680	680	680
2452 2453	Line 3010 Com Otay Mesa Full		0 295	0 86	0 313	0 313	0 329	0 324
2453 2454	Total Supply	Сирріу	975	766	993	993	1009	1004
2455	Total MMcfd S	hortfall	0	0	0	0	0	0
2456		rtailment to EG Stations?	No	No	No	No	No	No
2457	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
2458	(%)	Gas EG [%]	0%	0%	0%	0%	0%	0%
2459	(70)	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
2460	Curtailmant	Gas Core [MMcfd]	0	0	0	0	0	0
2461 2462	Curtailment (Capacity)	Gas EG [MWh/d] Gas EG [MW]	0	0	0	0	0	0
2462	(Capacity)	Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
2464	Number of	Gas Core [# Affected]	0	0	0	0	0	0
2465	Customers	Gas EG [# Affected]	0	0	0	0	0	0
2466	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
2467			10.10.1	10.100	10.10.0	10.10.1	10.10.5	10.10.0
2468	Blythe to Sante	ee 1 / Otay Medium / L3010 80%	16.1.2.1 680	16.1.2.2 680	16.1.2.3 680	16.1.2.4 680	16.1.2.5 680	16.1.2.6 680
2469 2470	Line 3010 at 80		380	380	380	380	380	380
2471	Otay Mesa Med		156	60	230	230	244	247
2472	Total Supply		1216	1120	1290	1290	1304	1307
2473	Total MMcfd S	hortfall	0	0	0	0	0	0
2474	Immediate Cur	rtailment to EG Stations?	No	No	No	No	No	No
2475	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
2476	(%)	Gas EG [%]	0%	0%	0%	0%	0%	0%
2477 2478	F	Gas Non-Core Non-EG [%] Gas Core [MMcfd]	0%	0% 0	0% 0	0%	0% 0	0% 0
2478 2479	Curtailment	Gas Core [MMcrd] Gas EG [MWh/d]	0	0	0	0	0	0
2480	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
2481	,	Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
2482	Number of	Gas Core [# Affected]	0	0	0	0	0	0
2483	Customers	Gas EG [# Affected]	0	0	0	0	0	0
2484	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
2485 2486	Blythe to Sant	ee 1 / Otay Medium / L3010 Out	16.2.2.1	16.2.2.2	16.2.2.3	16.2.2.4	16.2.2.5	16.2.2.6
2487	Blythe to Sante		680	680	680	680	680	680
2488	Line 3010 Com		0	0	0	0	0	0
2489	Otay Mesa Med	dium Supply	156	60	230	230	244	247
2490	Total Supply		836	740	910	910	924	927
2491	Total MMcfd S		0	0	0	0	0	0
2492	Immediate Cui	rtailment to EG Stations?	No 0%/	No 0%	No 09/	No ov	No 0%	No 0%
2493	Curtailment	Gas Core [%] Gas EG [%]	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%
2494 2495	(%)	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
2496		Gas Core [MMcfd]	0	0	0	0	0	0
2497	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
2498	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
2499	Name to a	Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
2500	Number of	Gas Core [# Affected]	0	0	0	0	0	0
2501 2502	Customers Affected	Gas EG [# Affected] Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
		LOGO ITON OUTO ITON LO # ANGUICU						

WORK PAPER TABLE - SCENARIO ANALYSIS GAS DEMAND AND SUPPLY (SA 1.1

EXAMPLE DAY OF GAS DEMAND AND SUPPLY FOR CUSTOMER CLASSES DURING SEASONAL VARIATIONS FOR ANALYSIS OF CURTAILMENT AND CUSTOMERS AFFECTED FOR EACH PROJECT ALTERNATE

APPLICATION 15-09-013 VOLUME III - COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 2017) Line No. 2. Example 1. Example 3. Example 4. Winter 1-5. Example 6. Example Summer Low- Summer High 1 Winter Day in-10 Year **Spring Day** Fall Day **EG Dav EG** Dav MMcfd Day MMcfd MMcfd MMcfd MMcfd MMcfd 2 В C ם F F G н 2503 2504 Blythe to Santee 1 / Otay Low / L3010 80% 16.1.3.1 16.1.3.2 16.1.3.3 16.1.3.4 16.1.3.5 16.1.3.6 Blythe to Santee Alternate 1 2505 680 680 680 ine 3010 at 80% Supply 2506 380 380 380 380 380 2507 Otay Mesa Low Supply 33 33 148 148 130 168 Total Supply 1093 1093 1208 1208 1190 1228 2508 Total MMcfd Shortfall 2509 0 0 0 0 0 0 Immediate Curtailment to EG Stations? No No No No No 2510 No 2511 Gas Core [%] 0% 0% 0% 0% 0% 0% Curtailment 2512 0% 0% 0% 0% 0% Gas EG [%] 0% (%) Gas Non-Core Non-EG [%] 2513 0% 0% 0% 0% 0% 0% Gas Core [MMcfd] 2514 0 0 0 0 0 0 Gas EG [MWh/d] Curtailment 0 0 0 0 2515 0 0 Gas EG [MW] (Capacity) 0 0 0 0 2516 0 0 Gas Non-Core Non-EG [MMcfd] 0 0 0 0 0 2517 0 Number of Gas Core [# Affected] 0 0 0 0 0 0 2518 Customers Gas EG [# Affected] 2519 0 0 0 0 0 0 2520 Affected Gas Non-Core Non-EG [# Affected] 0 0 0 0 0 0 2521 Blythe to Santee 1 / Otay Low / L3010 Out 16.2.3.1 16.2.3.2 16.2.3.3 16.2.3.4 16.2.3.5 16.2.3.6 2522 2523 Blythe to Santee Alternate 1 680 680 680 680 680 680 Line 3010 Complete Outage 0 0 0 0 0 2524 0 Otay Mesa Low Supply 33 33 148 148 130 168 2525 2526 **Total Supply** 713 713 828 828 810 848 Total MMcfd Shortfall 2527 0 0 0 0 0 2528 Immediate Curtailment to EG Stations? No No No No No No 2529 Gas Core [%] 0% 0% 0% 0% 0% 0% Curtailment 2530 Gas EG [%] 0% 0% 0% 0% 0% 0% (%) 2531 Gas Non-Core Non-EG [%] 0% 0% 0% 0% 0% 0% 2532 Gas Core [MMcfd] 0 0 0 0 0 0 2533 Curtailment Gas EG [MWh/d] 0 0 0 0 0 0 2534 (Capacity) Gas EG [MW] 0 0 0 0 0 2535 Gas Non-Core Non-EG [MMcfd] 0 0 0 0 0 0 2536 Number of Gas Core [# Affected] 0 0 0 0 0 2537 Customers Gas EG [# Affected] 0 0 0 0 0 0 2538 Affected Gas Non-Core Non-EG [# Affected] 0 0 0 0 0 2539 16.1.4.1 16.1.4.2 16.1.4.3 16.1.4.5 2540 Blythe to Santee 1 / Otay Out / L3010 80% 16.1.4.4 16.1.4.6 2541 Blythe to Santee Alternate 1 680 680 680 680 680 680 2542 Line 3010 at 80% Supply 380 380 380 380 380 380 2543 Otav Mesa No Supply Λ Λ 2544 Total Supply 1060 1060 1060 1060 1060 1060 2545 Total MMcfd Shortfall 2546 Immediate Curtailment to EG Stations? 2547 Gas Core [%] 0% 0% 0% 0% Curtailment 2548 Gas EG [%] 0% 0% 0% 0% 0% 0% (%) 2549 Gas Non-Core Non-EG [%] 0% 0% 0% 0% 0% 0% 2550 Gas Core [MMcfd] 0 0 0 0 0 0 Curtailment Gas EG [MWh/d] 2551 0 0 0 0 0 0 2552 (Capacity) Gas EG [MW] 0 0 0 0 0 0 2553 Gas Non-Core Non-EG [MMcfd] 0 0 0 0 0 0 2554 Gas Core [# Affected] 0 0 2555 Customers Gas EG [# Affected] 0 2556 Affected Gas Non-Core Non-EG [# Affected] 2557 Blythe to Santee 1 / Otay Out / L3010 Out 16.2.4.1 16.2.4.3 16.2.4.5 2558 16.2.4.6 Blythe to Santee Alternate 1 680 2559 680 680 680 680 680 2560 ine 3010 Complete Outage 0 0 0 0 0 0 2561 Otay Mesa No Supply Total Supply
Total MMcfd Shortfall 680 680 680 680 680 2562 680 2563 0 0 0 0 0 0 Immediate Curtailment to EG Stations? 2564 No No No No No No 2565 Gas Core [%] 0% 0% 0% 0% 0% 0% Curtailment 2566 Gas EG [%] 0% 0% 0% 0% 0% 0% (%) Gas Non-Core Non-EG [%] 2567 0% 0% 0% 0% 0% 0% Gas Core [MMcfd] 2568 0 0 0 0 0 0 Curtailment Gas EG [MWh/d] 0 0 0 0 0 0 2569 Gas EG [MW] 2570 (Capacity) 0 0 0 0 0 0 Gas Non-Core Non-EG [MMcfd]

0

0

0

2571

2572

2573

2574

Number of

Customers

Affected

Gas Core [# Affected]

Gas Non-Core Non-EG [# Affected]

Gas EG [# Affected]

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

1. Example Summer Low- EG Day MMcfd 2	4. Winter 1- in-10 Year Day MMcfd F	5. Example Spring Day MMcfd G	6. Example Fall Day MMcfd
2 A B C D E 2575 2576 2576 2577 2578 Blythe to Santee 2 / Otay Full / L3010 80% 17.1.1.1 17.1.1.2 17.1.1.3 2579 Blythe to Santee Alternate 2 680 680 680			MMcfd
2 A B C D E 2575 2576 2576 2577 2578 Blythe to Santee Alternate 2 2579 Blythe to Santee 2 / Otay Full / L3010 80% 17.1.1.1 17.1.1.2 17.1.1.3 Blythe to Santee Alternate 2 680 680 680	F	•	
Blythe to Santee Alternate 2 2577 2578 Blythe to Santee 2 / Otay Full / L3010 80% 17.1.1.1 17.1.1.2 17.1.1.3 2579 Blythe to Santee Alternate 2 680 680 680		G	н
2577 2578 Blythe to Santee 2 / Otay Full / L3010 80% 17.1.1.1 17.1.1.2 17.1.1.3 2579 Blythe to Santee Alternate 2 680 680 680			
2579 Blythe to Santee Alternate 2 680 680 680			171 1 2
	17.1.1.4 680	17.1.1.5 680	17.1.1.6 680
2580 Line 3010 at 80% Supply 380 380 380	380	380	380
2581 Otay Mesa Full Supply 295 86 313	313	329	324
2582 Total Supply 1355 1146 1373	1373	1389	1384
2583 Total MMcfd Shortfall 0 0 0	0	0	0
2584 Immediate Curtailment to EG Stations? No No No	No	No	No
2585 Curtailment Gas Core [%] 0% 0% 0%	0%	0%	0%
2586 Gas EG [%] 0% 0% 0%	0%	0%	0%
Gas Non-Core Non-EG [%] 0% 0% 0%	0%	0%	0%
2588 Gas Core [MMcfd] 0 0 0 2589 Curtailment Gas EG [MWh/d] 0 0 0	0	0	0
2590 (Capacity) Gas EG [MW] 0 0 0	0	0	0
2591 Gas Non-Core Non-EG [MMcfd] 0 0 0	0	0	0
2592 Number of Gas Core [# Affected] 0 0 0	0	0	0
2593 Customers Gas EG [# Affected] 0 0 0	0	0	0
2594 Affected Gas Non-Core Non-EG [# Affected] 0 0 0	0	0	0
2595	47.044	17.0.1.	47.04.0
2596 Blythe to Santee 2 / Otay Full / L3010 Out 17.2.1.1 17.2.1.2 17.2.1.3	17.2.1.4	17.2.1.5	17.2.1.6
2597 Blythe to Santee Alternate 2 680 680 680 2598 Line 3010 Complete Outage 0 0 0	680 0	680 0	680
2599 Otay Mesa Full Supply 295 86 313	313	329	324
2600 Total Supply 975 766 993	993	1009	1004
2601 Total MMcfd Shortfall 0 0 0	0	0	0
2602 Immediate Curtailment to EG Stations? No No No No	No	No	No
2603 Curtailment Gas Core [%] 0% 0% 0%	0%	0%	0%
2604 (%) Gas EG [%] 0% 0% 0%	0%	0%	0%
2605 Gas Non-Cole Non-EG [%] 0% 0%	0%	0%	0%
2606 Gas Core [MMcfd] 0 0 0	0	0	0
2607 Curtailment Gas EG [MWh/d] 0 0 0	0	0	0
2608 (Capacity) Gas EG [MW] 0 0 0 2609 Gas Non-Core Non-EG [MMcfd] 0 0 0	0	0	0
2609 Gas Non-Core Non-EG [MMcfd] 0 0 0 2610 Number of Gas Core [# Affected] 0 0 0	0	0	0
2611 Customers Gas EG [# Affected] 0 0 0	0	0	0
2612 Affected Gas Non-Core Non-EG [# Affected] 0 0 0	0	0	0
2613			
2614 Blythe to Santee 2 / Otay Medium / L3010 80% 17.1.2.1 17.1.2.2 17.1.2.3	17.1.2.4	17.1.2.5	17.1.2.6
2615 Blythe to Santee Alternate 2 680 680 680	680	680	680
2616 Line 3010 at 80% Supply 380 380 380	380	380	380
2617 Otay Mesa Medium Supply 156 60 230	230	244	247
2618 Total Supply 1216 1120 1290	1290	1304	1307
2619 Total MMcfd Shortfall 0 0 0	0 No	0 No	0
2620 Immediate Curtailment to EG Stations? No No No 2621 Gas Core [%] 0% 0% 0%	0%	0%	No 0%
Curtailment Gas FG [%] 0% 0% 0%	0%	0%	0%
2623 (%) Gas Non-Core Non-EG [%] 0% 0% 0%	0%	0%	0%
2624 Gas Core [MMcfd] 0 0 0	0	0	0
2625 Curtailment Gas EG [MWh/d] 0 0 0	0	0	0
2626 (Capacity) Gas EG [MW] 0 0 0	0	0	0
2627 Gas Non-Core Non-EG [MMcfd] 0 0 0	0	0	0
2628 Number of Customers Gas Core [# Affected] 0 0 0 2629 Customers Gas EG [# Affected] 0 0 0	0	0	0
2629 Customers Gas EG [# Affected] 0 0 0 2630 Affected Gas Non-Core Non-EG [# Affected] 0 0 0	0	0	0
2631	J	U	U
2632 Blythe to Santee 2 / Otay Medium / L3010 Out 17.2.2.1 17.2.2.2 17.2.2.3	17.2.2.4	17.2.2.5	17.2.2.6
2633 Blythe to Santee Alternate 2 680 680 680	680	680	680
2634 Line 3010 Complete Outage 0 0 0	0	0	0
2635 Otay Mesa Medium Supply 156 60 230	230	244	247
2636 Total Supply 836 740 910	910	924	927
2637 Total MMcfd Shortfall 0 0 0	0	0	0
2638 Immediate Curtailment to EG Stations? No No No No	No 0%	No 0%	No 0%
2639 2640	0% 0%	0% 0%	0% 0%
2640 (%) Gas Non-Core Non-EG [%] 0% 0% 0%	0%	0%	0%
2642 Gas Core [MMcfd] 0 0 0	0	0	0
2643 Curtailment Gas EG [MWh/d] 0 0 0	0	0	0
2644 (Capacity) Gas EG [MW] 0 0 0	0	0	0
2645 Gas Non-Core Non-EG [MMcfd] 0 0 0	0	0	0
Number of Gas Core [# Affected] 0 0 0	0	0	0
2647 Customers Gas EG [# Affected] 0 0 0	0	0	0
2648 Affected Gas Non-Core Non-EG [# Affected] 0 0 0	0	0	0

WORK PAPER TABLE - SCENARIO ANALYSIS GAS DEMAND AND SUPPLY (SA 1.1

EXAMPLE DAY OF GAS DEMAND AND SUPPLY FOR CUSTOMER CLASSES DURING SEASONAL VARIATIONS FOR ANALYSIS OF CURTAILMENT AND CUSTOMERS AFFECTED FOR EACH PROJECT ALTERNATE

APPLICATION 15-09-013 VOLUME III - COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 2017) Line No. 2. Example 1. Example 3. Example 4. Winter 1-5. Example 6. Example Summer Low- Summer High 1 Winter Day in-10 Year **Spring Day** Fall Day **EG Dav EG** Dav MMcfd Day MMcfd MMcfd MMcfd MMcfd MMcfd 2 В C ם F F G н 2649 2650 Blythe to Santee 2 / Otay Low / L3010 80% 17.1.3.1 17.1.3.2 17.1.3.3 17.1.3.4 17.1.3.5 17.1.3.6 Blythe to Santee Alternate 2 2651 680 ine 3010 at 80% Supply 2652 380 380 380 380 380 2653 Otay Mesa Low Supply 33 33 148 148 130 168 Total Supply 1093 1093 1208 1208 1190 1228 2654 Total MMcfd Shortfall 2655 0 0 0 0 0 0 Immediate Curtailment to EG Stations? No No No No 2656 No No 2657 Gas Core [%] 0% 0% 0% 0% 0% 0% Curtailment 2658 0% 0% 0% 0% 0% Gas EG [%] 0% Gas Non-Core Non-EG [%] 2659 0% 0% 0% 0% 0% 0% Gas Core [MMcfd] 2660 0 0 0 0 0 0 Gas EG [MWh/d] Curtailment 0 0 0 0 2661 0 0 Gas EG [MW] (Capacity) 0 0 0 0 2662 0 0 Gas Non-Core Non-EG [MMcfd] 0 0 0 0 0 2663 0 Number of 2664 Gas Core [# Affected] 0 0 0 0 0 0 Customers Gas EG [# Affected] 2665 0 0 0 0 0 0 2666 Affected Gas Non-Core Non-EG [# Affected] 0 0 0 0 0 0 2667 Blythe to Santee 2 / Otay Low / L3010 Out 17.2.3.1 17.2.3.2 17.2.3.3 17.2.3.4 17.2.3.5 17.2.3.6 2668 2669 Blythe to Santee Alternate 2 680 680 680 680 680 680 Line 3010 Complete Outage 0 0 0 0 0 2670 0 Otay Mesa Low Supply 33 33 148 148 130 168 2671 2672 **Total Supply** 713 713 828 828 810 848 Total MMcfd Shortfall 2673 0 0 0 0 0 2674 Immediate Curtailment to EG Stations? No No No No No No 2675 Gas Core [%] 0% 0% 0% 0% 0% 0% Curtailment 2676 Gas EG [%] 0% 0% 0% 0% 0% 0% (%) 2677 Gas Non-Core Non-EG [%] 0% 0% 0% 0% 0% 0% 2678 Gas Core [MMcfd] 0 0 0 0 0 0 2679 Curtailment Gas EG [MWh/d] 0 0 0 0 0 0 2680 (Capacity) Gas EG [MW] 0 0 0 0 0 2681 Gas Non-Core Non-EG [MMcfd] 0 0 0 0 0 0 Number of 2682 Gas Core [# Affected] 0 0 0 0 0 2683 Customers Gas EG [# Affected] 0 0 0 0 0 0 2684 Affected Gas Non-Core Non-EG [# Affected] 0 0 0 0 0 2685 17.1.4.1 17.1.4.2 17.1.4.3 17.1.4.5 2686 Blythe to Santee 2 / Otay Out / L3010 80% 17.1.4.4 17.1.4.6 2687 Blythe to Santee Alternate 2 680 680 680 680 680 680 2688 Line 3010 at 80% Supply 380 380 380 380 380 380 2689 Otav Mesa No Supply Λ Λ 2690 Total Supply 1060 1060 1060 1060 1060 1060 2691 Total MMcfd Shortfall 2692 Immediate Curtailment to EG Stations? Gas Core [%] 0% 0% 0% 0% 2693 Curtailment Gas EG [%] 0% 0% 0% 0% 0% 2694 (%) 2695 Gas Non-Core Non-EG [%] 0% 0% 0% 0% 0% 0% 2696 Gas Core [MMcfd] 0 0 0 0 0 0 Curtailment Gas EG [MWh/d] 2697 0 0 0 0 0 0 2698 (Capacity) Gas EG [MW] 0 0 0 0 0 0 2699 Gas Non-Core Non-EG [MMcfd] 0 0 0 0 0 0 2700 Gas Core [# Affected] 0 0 2701 Customers Gas EG [# Affected] 0 2702 Affected Gas Non-Core Non-EG [# Affected] 2703 Blythe to Santee 2 / Otay Out / L3010 Out 17.2.4.1 17.2.4. 17.2.4.5 2704 17.2.4.3 17.2.4.6 Blythe to Santee Alternate 2 2705 680 680 680 680 680 680 2706 ine 3010 Complete Outage 0 0 0 0 0 0 2707 Otay Mesa No Supply Total Supply
Total MMcfd Shortfall 680 680 680 680 680 680 2708 2709 0 0 0 0 0 0 Immediate Curtailment to EG Stations? 2710 No No No No No No 2711 Gas Core [%] 0% 0% 0% 0% 0% 0% Curtailment 2712 Gas EG [%] 0% 0% 0% 0% 0% 0% (%) Gas Non-Core Non-EG [%] 2713 0% 0% 0% 0% 0% 0% Gas Core [MMcfd] 2714 0 0 0 0 0 0 Curtailment Gas EG [MWh/d] 0 0 0 0 0 0 2715 Gas EG [MW] 2716 (Capacity) 0 0 0 0 0 0 Gas Non-Core Non-EG [MMcfd] 0 0 0 2717 0 0 0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

Number of

Customers

Affected

Gas Core [# Affected]

Gas Non-Core Non-EG [# Affected]

Gas EG [# Affected]

2718

2719

Line No.		APPLICATION 15-09-013 VOLUME II			ALTSIS (CORR	ECTED FEBR	(UAR 1 2017)	
			1. Example Summer Low-	2. Example Summer High-	3. Example	4. Winter 1-	5. Example	6. Example
1			EG Day	EG Day	Winter Day	in-10 Year	Spring Day	Fall Day
			MMcfd	MMcfd	MMcfd	Day MMcfd	MMcfd	MMcfd
2	Α	В	С	D	E	F	G	Н
2721 2722	Cactus City to	San Diego Alternate						
2723 2724	Cactus City to	SD / Otay Full / L3010 80%	18.1.1.1	18.1.1.2	18.1.1.3	18.1.1.4	18.1.1.5	18.1.1.6
2725		San Diego Alternate	680	680	680	680	680	680
2726	Line 3010 at 80		380	380	380	380	380	380
2727 2728	Otay Mesa Full Total Supply	Supply	295 1355	86 1146	313 1373	313 1373	329 1389	324 1384
2729	Total MMcfd S	hortfall	0	0	0	0	0	0
2730		rtailment to EG Stations?	No	No	No	No	No	No
2731	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
2732 2733	(%)	Gas EG [%] Gas Non-Core Non-EG [%]	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%
2734		Gas Core [MMcfd]	0	0	0	0	0	0
2735	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
2736	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
2737 2738	Number of	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0	0	0	0	0	0
2736 2739	Customers	Gas Core [# Affected] Gas EG [# Affected]	0	0	0	0	0	0
2740	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
2741	Cootus Cit	250 / Otay Full / L 2010 Oct	10.2.4.1	10.2.4.0	10.2.4.0	10.2.4.4	10.2.4.5	19.2.4-6
2742 2743		SD / Otay Full / L3010 Out San Diego Alternate	18.2.1.1 680	18.2.1.2 680	18.2.1.3 680	18.2.1.4 680	18.2.1.5 680	18.2.1.6 680
2743 2744	Line 3010 Com		0	0	0	0	0	0
2745	Otay Mesa Full	Supply	295	86	313	313	329	324
2746	Total Supply		975	766	993	993	1009	1004
2747 2748	Total MMcfd S	hortfall rtailment to EG Stations?	0 No	0 No	0 No	0 No	0 No	0 No
2749		Gas Core [%]	0%	0%	0%	0%	0%	0%
2750	Curtailment (%)	Gas EG [%]	0%	0%	0%	0%	0%	0%
2751	(70)	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
2752 2753	Curtailment	Gas Core [MMcfd] Gas EG [MWh/d]	0	0	0	0	0	0
2754	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
2755	,	Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
2756	Number of	Gas Core [# Affected]	0	0	0	0	0	0
2757 2758	Customers Affected	Gas EG [# Affected] Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
2759	Allected	Gas Non Cole Non EG [# Allected]	Ü	Ū	· ·		•	· ·
2760		SD / Otay Medium / L3010 80%	18.1.2.1	18.1.2.2	18.1.2.3	18.1.2.4	18.1.2.5	18.1.2.6
2761 2762	Cactus City to S Line 3010 at 80	San Diego Alternate	680 380	680 380	680 380	680 380	680 380	680 380
2762	Otay Mesa Med		156	60	230	230	244	247
2764	Total Supply		1216	1120	1290	1290	1304	1307
2765	Total MMcfd S		0	0	0	0	0	0
2766 2767	Immediate Cui	rtailment to EG Stations? Gas Core [%]	No 0%	No 0%	No 0%	No 0%	No 0%	No 0%
2768	Curtailment	Gas EG [%]	0%	0%	0%	0%	0%	0%
2769	(%)	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
2770	Comtailerent	Gas Core [MMcfd]	0	0	0	0	0	0
2771 2772	Curtailment (Capacity)	Gas EG [MWh/d] Gas EG [MW]	0	0	0	0	0	0
2773	(Sapacity)	Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
2774	Number of	Gas Core [# Affected]	0	0	0	0	0	0
2775	Customers	Gas EG [# Affected]	0	0	0	0	0	0
2776 2777	Affected	Gas Non-Core Non-EG [# Affected]	U	U	U	U	U	U
2778	Cactus City to	SD / Otay Medium / L3010 Out	18.2.2.1	18.2.2.2	18.2.2.3	18.2.2.4	18.2.2.5	18.2.2.6
2779		San Diego Alternate	680	680	680	680	680	680
2780	Line 3010 Com Otay Mesa Med		156	0 60	230	230	0 244	247
2781 2782	Total Supply	ант Эирргу	836	740	910	910	924	927
2783	Total MMcfd S	hortfall	0	0	0	0	0	0
2784		rtailment to EG Stations?	No	No	No	No	No	No
2785	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
2786 2787	(%)	Gas EG [%] Gas Non-Core Non-EG [%]	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%
2788		Gas Core [MMcfd]	0	0	0	0	0	0
2789	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
2790	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
2791 2792	Number of	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0	0	0	0	0	0
2793	Customers	Gas EG [# Affected]	0	0	0	0	0	0
2794	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0

WORK PAPER TABLE - SCENARIO ANALYSIS GAS DEMAND AND SUPPLY (SA 1.1

EXAMPLE DAY OF GAS DEMAND AND SUPPLY FOR CUSTOMER CLASSES DURING SEASONAL VARIATIONS FOR ANALYSIS OF

APPLICATION 15-09-013 VOLUME III - COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 2017) Line No. 2. Example 1. Example 3. Example 4. Winter 1-5. Example 6. Example Summer Low- Summer High 1 Winter Day in-10 Year **Spring Day** Fall Day **EG Dav EG** Dav MMcfd Day MMcfd MMcfd MMcfd MMcfd MMcfd 2 В C ם F F G н 2795 2796 Cactus City to SD / Otay Low / L3010 80% 18.1.3.1 8.1.3.2 18.1.3.3 18.1.3.4 18.1.3.5 18.1.3.6 Cactus City to San Diego Alternate 2797 680 680 2798 ine 3010 at 80% Supply 380 380 380 380 380 2799 Otay Mesa Low Supply 33 33 148 148 130 168 Total Supply 1093 1093 1208 1208 1190 1228 2800 2801 Total MMcfd Shortfall 0 0 0 0 0 0 Immediate Curtailment to EG Stations? No No No No No 2802 No 2803 Gas Core [%] 0% 0% 0% 0% 0% 0% Curtailment 2804 0% 0% 0% 0% 0% Gas EG [%] 0% (%) Gas Non-Core Non-EG [%] 2805 0% 0% 0% 0% 0% 0% Gas Core [MMcfd] 2806 0 0 0 0 0 0 Gas EG [MWh/d] Curtailment 0 0 0 0 2807 0 0 Gas EG [MW] (Capacity) 0 0 0 0 0 2808 0 Gas Non-Core Non-EG [MMcfd] 2809 0 0 0 0 0 0 Number of 2810 Gas Core [# Affected] 0 0 0 0 0 0 Customers Gas EG [# Affected] 2811 0 0 0 0 0 0 2812 Affected Gas Non-Core Non-EG [# Affected] 0 0 0 0 0 0 2813 Cactus City to SD / Otay Low / L3010 Out 18.2.3.1 18.2.3.2 18.2.3.3 18.2.3.4 18.2.3.5 18.2.3.6 2814 2815 Cactus City to San Diego Alternate 680 680 680 680 680 680 Line 3010 Complete Outage 0 0 0 0 0 2816 0 Otay Mesa Low Supply 33 33 148 148 130 168 2817 2818 Total Supply 713 713 828 828 810 848 Total MMcfd Shortfall 2819 0 0 0 0 0 2820 Immediate Curtailment to EG Stations? No No No No No No 2821 Gas Core [%] 0% 0% 0% 0% 0% 0% Curtailment 2822 Gas EG [%] 0% 0% 0% 0% 0% 0% (%) 2823 Gas Non-Core Non-EG [%] 0% 0% 0% 0% 0% 0% 2824 Gas Core [MMcfd] 0 0 0 0 0 0 2825 Curtailment Gas EG [MWh/d] 0 0 0 0 0 0 2826 (Capacity) Gas EG [MW] 0 0 0 0 0 2827 Gas Non-Core Non-EG [MMcfd] 0 0 0 0 0 0 Number of 2828 Gas Core [# Affected] 0 0 0 0 0 2829 Customers Gas EG [# Affected] 0 0 0 0 0 0 2830 Affected Gas Non-Core Non-EG [# Affected] 0 0 0 0 0 2831 18.1.4.1 18.1.4.2 18.1.4.3 18.1.4.5 2832 Cactus City to SD / Otay Out / L3010 80% 18.1.4.4 18.1.4.6 2833 Cactus City to San Diego Alternate 680 680 680 680 680 680 2834 Line 3010 at 80% Supply 380 380 380 380 380 380 2835 Otav Mesa No Supply Λ Λ Λ 2836 Total Supply 1060 1060 1060 1060 1060 1060 2837 Total MMcfd Shortfall 2838 Immediate Curtailment to EG Stations? No No No 2839 Gas Core [%] 0% 0% 0% 0% Curtailment 2840 Gas EG [%] 0% 0% 0% 0% 0% 0% (%) 2841 Gas Non-Core Non-EG [%] 0% 0% 0% 0% 0% 0% 2842 Gas Core [MMcfd] 0 0 0 0 0 0 Curtailment Gas EG [MWh/d] 2843 0 0 0 0 0 0 2844 (Capacity) Gas EG [MW] 0 0 0 0 0 0 2845 Gas Non-Core Non-EG [MMcfd] 0 0 0 0 0 0 2846 Gas Core [# Affected] 0 0 Gas EG [# Affected] 2847 Customers 0 2848 Affected Gas Non-Core Non-EG [# Affected] 2849 Cactus City to SD / Otay Out / L3010 Out 18.2.4.1 18.2.4.3 18.2.4.5 2850 18.2.4.6 Cactus City to San Diego Alternate 680 2851 680 680 680 680 680 2852 ine 3010 Complete Outage 0 0 0 0 0 0 2853 Otay Mesa No Supply Total Supply
Total MMcfd Shortfall 680 680 680 680 680 2854 680 2855 0 0 0 0 0 0 Immediate Curtailment to EG Stations? 2856 No No No No No No 2857 Gas Core [%] 0% 0% 0% 0% 0% 0% Curtailment 2858 Gas EG [%] 0% 0% 0% 0% 0% 0% (%) Gas Non-Core Non-EG [%] 2859 0% 0% 0% 0% 0% 0% Gas Core [MMcfd] 2860 0 0 0 0 0 0 Curtailment Gas EG [MWh/d] 0 0 0 0 0 0 2861 Gas EG [MW] 2862 (Capacity) 0 0 0 0 0 0 Gas Non-Core Non-EG [MMcfd] 0 0 0 2863 0 0 0

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Number of

Customers

Affected

Gas Core [# Affected]

Gas Non-Core Non-EG [# Affected]

Gas EG [# Affected]

2864

2865

Line No.		APPLICATION 15-09-013 VOLUME III		TIVEINESS AIN	ALTOIO (COIN	COTEDTEDI	(OAIX1 2017)	
1			1. Example Summer Low- EG Day	EG Day	3. Example Winter Day MMcfd	4. Winter 1- in-10 Year Day MMcfd	5. Example Spring Day MMcfd	6. Example Fall Day MMcfd
2	A	В	MMcfd C	MMcfd D	E	F F	G	Н
2867 2868		ne Along L3010 Alternate						
2869 2870	Second Pipelin	ne Along L3010 / Otay Full / L3010 80%	19.1.1.1	19.1.1.2	19.1.1.3	19.1.1.4	19.1.1.5	19.1.1.6
2871	Second Pipeline	e Along L3010 Alternate	680	680	680	680	680	680
2872 2873	Line 3010 at 80 Otay Mesa Full		380 295	380 86	380 313	380 313	380 329	380 324
2874	Total Supply		1355	1146	1373	1373	1389	1384
2875 2876	Total MMcfd SI	hortfall tailment to EG Stations?	0 No	0 No	0 No	0 No	0 No	0 No
2877	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
2878 2879	(%)	Gas EG [%] Gas Non-Core Non-EG [%]	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%
2880		Gas Core [MMcfd]	0	0	0	0	0	0
2881	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
2882 2883	(Capacity)	Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
2884	Number of	Gas Core [# Affected]	0	0	0	0	0	0
2885 2886	Customers Affected	Gas EG [# Affected] Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
2887								
2888 2889		ne Along L3010 / Otay Full / L3010 Out	19.2.1.1 680	19.2.1.2 680	19.2.1.3 680	19.2.1.4 680	19.2.1.5 680	19.2.1.6 680
2890	Line 3010 Com	plete Outage	0	0	0	0	0	0
2891 2892	Otay Mesa Full Total Supply	Supply	295 975	86 766	313 993	313 993	329 1009	324 1004
2893	Total MMcfd Si	hortfall	0	0	0	993	0	0
2894	Immediate Cur	tailment to EG Stations?	No oo/	No oo/	No	No	No	No
2895 2896	Curtailment	Gas Core [%] Gas EG [%]	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%
2897	(%)	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
2898 2899	Curtailment	Gas Core [MMcfd] Gas EG [MWh/d]	0	0	0	0	0	0
2900	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
2901 2902	Number of	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0	0	0	0	0	0
2903	Customers	Gas EG [# Affected]	0	0	0	0	0	0
2904 2905	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
2906		ne Along L3010 / Otay Medium / L3010 80		19.1.2.2	19.1.2.3	19.1.2.4	19.1.2.5	19.1.2.6
2907 2908	Second Pipeline Line 3010 at 80	e Along L3010 Alternate	680 380	680 380	680 380	680 380	680 380	680 380
2909	Otay Mesa Med		156	60	230	230	244	247
2910	Total Supply		1216	1120	1290	1290	1304	1307
2911 2912	Total MMcfd Si Immediate Cur	tailment to EG Stations?	0 No	0 No	0 No	0 No	0 No	0 No
2913	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
2914 2915	(%)	Gas EG [%] Gas Non-Core Non-EG [%]	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%
2916		Gas Core [MMcfd]	0	0	0	0	0	0
2917 2918	Curtailment (Capacity)	Gas EG [MWh/d] Gas EG [MW]	0	0	0	0	0	0
2919	(Сараску)	Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
2920	Number of Customers	Gas Core [# Affected]	0	0	0	0	0	0
2921 2922	Affected	Gas EG [# Affected] Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
2923			10.2.2.4	10.2.2.0	10.2.2.0	10.2.2.4	10.0.0.5	10.2.2.6
2924 2925		ne Along L3010 / Otay Medium / L3010 O e Along L3010 Alternate	19.2.2.1 680	19.2.2.2 680	19.2.2.3 680	19.2.2.4 680	19.2.2.5 680	19.2.2.6 680
2926	Line 3010 Com	plete Outage	0	0	0	0	0	0
2927 2928	Otay Mesa Med Total Supply	lium Supply	156 836	60 740	230 910	230 910	244 924	247 927
2929	Total MMcfd Si	hortfall	0	0	0	0	0	0
2930	Immediate Cur	tailment to EG Stations?	No oo/	No 09/	No oo/	No 0%	No 0%	No oo/
2931 2932	Curtailment	Gas Core [%] Gas EG [%]	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%
2933	(%)	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
2934 2935	Curtailment	Gas Core [MMcfd] Gas EG [MWh/d]	0	0	0	0	0	0
2936	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
2937		Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
2938 2939	Number of Customers	Gas Core [# Affected] Gas EG [# Affected]	0	0	0	0	0	0
2940	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0

Line No.

<u>Line No.</u> 1			1. Example Summer Low- EG Day MMcfd	2. Example Summer High EG Day MMcfd	3. Example Winter Day MMcfd	4. Winter 1- in-10 Year Day MMcfd	5. Example Spring Day MMcfd	6. Example Fall Day MMcfd
2	Α	В	С	D	Е	F	G	н
2941 2942	Second Pipelin	ne Along L3010 / Otay Low / L3010 80%	19.1.3.1	19.1.3.2	19.1.3.3	19.1.3.4	19.1.3.5	19.1.3.6
2943		e Along L3010 Alternate	680	680	680	680	680	680
2944	Line 3010 at 80		380	380	380	380	380	380
2945	Otay Mesa Low	Supply	33	33	148	148	130	168
2946 2947	Total Supply Total MMcfd Si	hortfall	1093	1093 0	1208 0	1208 0	1190 0	1228 0
2948		tailment to EG Stations?	No	No	No	No	No	No
2949	Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	0%
2950	(%)	Gas EG [%] Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
2951 2952	. ,	Gas Core [MMcfd]	0%	0%	<u>0%</u> 0	0%	0% 0	0%
2953	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
2954	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
2955	Noveberet	Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
2956 2957	Number of Customers	Gas Core [# Affected] Gas EG [# Affected]	0	0	0	0	0	0
2958	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
2959								•
2960		ne Along L3010 / Otay Low / L3010 Out	19.2.3.1	19.2.3.2	19.2.3.3	19.2.3.4	19.2.3.5	19.2.3.6
2961 2962	Second Pipeline Line 3010 Comp	e Along L3010 Alternate	680 0	680 0	680 0	680 0	680 0	680
2962 2963	Otay Mesa Low		33	33	148	148	130	168
2964	Total Supply		713	713	828	828	810	848
2965	Total MMcfd SI		0	0	0	0	0	0
2966	Immediate Cur	tailment to EG Stations?	No	No 00/	No oo/	No oo/	No	No
2967 2968	Curtailment	Gas Core [%] Gas EG [%]	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%
2969	(%)	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
2970		Gas Core [MMcfd]	0	0	0	0	0	0
2971	Curtailment	Gas EG [MWh/d]	0	0	0	0	0	0
2972	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
2973 2974	Number of	Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0	0	0	0	0	0
2975	Customers	Gas EG [# Affected]	0	0	0	0	0	0
2976	Affected	Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
2977	Casand Binalin	12040 (04 0 (12040 80%)	10.1.1.1	10.1.1.2	10.1.1.2	10.1.1.1	10.1.1.5	10.1.1.6
2978 2979		e Along L3010 / Otay Out / L3010 80% Along L3010 Alternate	19.1.4.1 680	19.1.4.2 680	19.1.4.3 680	19.1.4.4 680	19.1.4.5 680	19.1.4.6 680
2980	Line 3010 at 80		380	380	380	380	380	380
2981	Otay Mesa No S	Supply	0	0	0	0	0	0
2982	Total Supply		1060	1060	1060	1060	1060	1060
2983 2984	Total MMcfd SI	nortfall tailment to EG Stations?	0 No	0 No	0 No	0 No	0 No	0 No
2985		Gas Core [%]	0%	0%	0%	0%	0%	0%
2986	Curtailment	Gas EG [%]	0%	0%	0%	0%	0%	0%
2987	(%)	Gas Non-Core Non-EG [%]	0%	0%	0%	0%	0%	0%
2988 2989	Curtailment	Gas Core [MMcfd] Gas EG [MWh/d]	0	0	0	0	0	0
2999	(Capacity)	Gas EG [MW]	0	0	0	0	0	0
2991		Gas Non-Core Non-EG [MMcfd]	0	0	0	0	0	0
2992	Number of	Gas Core [# Affected]	0	0	0	0	0	0
2993 2994	Customers Affected	Gas EG [# Affected] Gas Non-Core Non-EG [# Affected]	0	0	0	0	0	0
2994 2995	Ancoleu	Toda Hon Gold Hon EO [# Allected]	· ·	· ·		U		
2996		ne Along L3010 / Otay Out / L3010 Out	19.2.4.1	19.2.4.2	19.2.4.3	19.2.4.4	19.2.4.5	19.2.4.6
2997		e Along L3010 Alternate	680	680	680	680	680	680
2998 2999	Line 3010 Comp Otay Mesa No S		0	0	0	0	0	0
3000	Total Supply	~~PF.)	680	680	680	680	680	680
3001	Total MMcfd SI	hortfall	0	0	0	0	0	0
				No	No	No	No	No
3002		tailment to EG Stations?	No	No				
3002 3003		Gas Core [%]	0%	0%	0%	0%	0%	0%
3002 3003 3004	Immediate Cur	Gas Core [%] Gas EG [%]	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%	0%
3002 3003	Immediate Cur Curtailment	Gas Core [%]	0%	0%	0%	0%	0%	
3002 3003 3004 3005 3006 3007	Immediate Cur Curtailment (%) Curtailment	Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d]	0% 0% 0% 0	0% 0% 0% 0	0% 0% 0% 0	0% 0% 0% 0	0% 0% 0% 0	0% 0% 0
3002 3003 3004 3005 3006 3007 3008	Immediate Cur Curtailment (%)	Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWr/d] Gas EG [MW]	0% 0% 0% 0 0	0% 0% 0% 0 0	0% 0% 0% 0 0	0% 0% 0% 0 0	0% 0% 0% 0 0	0% 0% 0 0
3002 3003 3004 3005 3006 3007 3008 3009	Immediate Cur Curtailment (%) Curtailment (Capacity)	Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd]	0% 0% 0% 0 0	0% 0% 0% 0 0	0% 0% 0% 0 0 0	0% 0% 0% 0 0 0	0% 0% 0% 0 0 0	0% 0% 0 0 0
3002 3003 3004 3005 3006 3007 3008 3009 3010	Immediate Cur Curtailment (%) Curtailment	Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWr/d] Gas EG [MW]	0% 0% 0% 0 0	0% 0% 0% 0 0	0% 0% 0% 0 0	0% 0% 0% 0 0 0 0	0% 0% 0% 0 0 0	0% 0% 0 0
3002 3003 3004 3005 3006 3007 3008 3009	Immediate Cur Curtailment (%) Curtailment (Capacity) Number of	Gas Core [%] Gas EG [%] Gas Non-Core Non-EG [%] Gas Core [MMcfd] Gas EG [MWh/d] Gas EG [MW] Gas Non-Core Non-EG [MMcfd] Gas Core [# Affected]	0% 0% 0% 0 0 0	0% 0% 0% 0 0 0	0% 0% 0% 0 0 0 0	0% 0% 0% 0 0 0	0% 0% 0% 0 0 0	0% 0% 0 0 0 0

1		1. Example Summer Low-EG Day MW	2. Example Summer High-EG Day MW	3. Example Winter Day MW	4. Winter 1-in-10 Year Day MW	5. Example Spring Day MW	6. Example Fall Day MW
2	A B	С	D	E	F	G	Н
3	Model Inputs						
4							
5	Date Ranges						
6	Date Ranges for Seasonal Demand Conditions	8/2/2015	8/8/2015	1/2/2015	1/14/2013	5/9/2015	11/23/2015
7							
8	Electric Demand (MW)						
9	Peak Electric Demand	3062	3723	2969	3328	2693	3019
10	T1 1 0 1 (1810)						
11	Electric Supply (MW)	500	4.000	207	007	4.000	4.547
12	NG-Fired Electric Gen	562	1,686	927	927	1,236	1,517
13	Other In-Basin Electric Gen	70	70	70	70	70	70
14 15	Electric Import Capacity	2500	2500	2500	2500	2500	2500
16 17 18	Notes: 1. SDG&E electric peak demand data and renewable of 2. Current state estimate of electric import capacity process. 3. For the Alt Energy Alternative, it was assumed that	ovided by SDG&E Grid	Operations. Capacity	expected to increa	,		•
19 20	Capacity (MW)	1,686		kup to the EG static	ons (equivalent to me	ix LO demand for go	as)

1		1. Example	2. Example				
2		Summer Low-EG Day MW	Summer High-EG Day MW	3. Example Winter Day MW	4. Winter 1-in-10 Year Day MW	5. Example Spring Day MW	6. Example Fall Day MW
	A B	C	Davimov	Е	F	G	Н
28	Line 1600 (Pre/Post Hydrotesting)						
	L1600 / Otay Full / L3010 80%	1.1.1.1	1.1.1.2	1.1.1.3	1.1.1.4	1.1.1.5	1.1.1.6
	Curtailed NG-Fired Electric Gen (MW)	3132	0 4256	0 3497	0 3497	0 3806	0 4087
	Total Supply Elec Curtailment (MWh)	0	0	0	0	0	0
	Elec Curtailment (WWT) Elec Curtailment Duration (h)	0	0	0	0	0	0
	Avg Elec Curtailment (MW)	0	0	0	0	0	0
	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
	Elec Curtailment (# of Customers)	0	0	0	0	0	0
37	·	<u> </u>	•				·
	L1600 / Otay Full / L3010 Out	1.2.1.1	1.2.1.2	1.2.1.3	1.2.1.4	1.2.1.5	1.2.1.6
	Curtailed NG-Fired Electric Gen (MW)	0	920	69	293	0	0
	Total Supply	3132	3335	3429	3204	3806	4087
	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	2,043 9	0	249 3	0	0
	Avg Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	221	0	83	0	0
	Elec Curtailment (%)	0%	6%	0%	2%	0%	0%
	Elec Curtailment (# of Customers)	0	83,073	0	34,869	0	0
46	Liec Guitaiment (# Of Gustomers)	U	65,075	<u> </u>	34,009	0	
	L1600 / Otay Medium / L3010 80%	1.1.2.1	1.1.2.2	1.1.2.3	1.1.2.4	1.1.2.5	1.1.2.6
	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
	Total Supply	3132	4256	3497	3497	3806	4087
	Elec Curtailment (MWh)	0	0	0	0	0	0
	Elec Curtailment Duration (h)	0	0	0	0	0	0
	Avg Elec Curtailment (MW)	0	0	0	0	0	0
	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
54 55	Elec Curtailment (# of Customers)	0	0	0	0	0	0
	L1600 / Otay Medium / L3010 Out	1.2.2.1	1.2.2.2	1.2.2.3	1.2.2.4	1.2.2.5	1.2.2.6
	Curtailed NG-Fired Electric Gen (MW)	0	1069	534	759	0	297
58	Total Supply	3132	3187	2963	2738	3806	3790
59	Elec Curtailment (MWh)	0	3,554	1	2,886	0	0
	Elec Curtailment Duration (h)	0	11	0	11	0	0
	Avg Elec Curtailment (MW)	0	323	6	268	0	0
	Elec Curtailment (%)	0%	9%	0%	8%	0%	0%
	Elec Curtailment (# of Customers)	0	121,504	2,665	112,935	0	0
64 65	L1600 / Otay Low / L3010 80%	1.1.3.1	1.1.3.2	1.1.3.3	1.1.3.4	1.1.3.5	1.1.3.6
66	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
	Total Supply	3132	4256	3497	3497	3806	4087
	Elec Curtailment (MWh)	0	0	0	0	0	0
69	Elec Curtailment Duration (h)	0	0	0	0	0	0
	Avg Elec Curtailment (MW)	0	0	0	0	0	0
	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
	Elec Curtailment (# of Customers)	0	0	0	0	0	0
73 74	L1600 / Otay Low / L3010 Out	1.2.3.1	1.2.3.2	1.2.3.3	1.2.3.4	1.2.3.5	1.2.3.6
	Curtailed NG-Fired Electric Gen (MW)	1.2.3.1 94	1.2.3.2 1218	1.2.3.3 927	1.2.3.4 927	1.2.3.5 618	7.2.3.6 744
	Total Supply	3038	3038	2570	2570	3189	3343
	Elec Curtailment (MWh)	12	5,303	1,450	5,152	0	0
	Elec Curtailment Duration (h)	1	13	5	17	0	0
	Avg Elec Curtailment (MW)	23	424	276	308	0	0
80	Elec Curtailment (%)	1%	11%	9%	9%	0%	0%
81	Elec Curtailment (# of Customers)	10,621	159,543	130,224	129,384	0	0

<u>Line No</u>	<u>.</u>							
1			1. Example Summer Low-EG Day MW	2. Example Summer High-EG Day MW	3. Example Winter Day MW	4. Winter 1-in-10 Year Day MW	5. Example Spring Day MW	6. Example Fall Day MW
2	Α	В	С	D	Е	F	G	Н
82								
83		Out / L3010 80%	1.1.4.1	1.1.4.2	1.1.4.3	1.1.4.4	1.1.4.5	1.1.4.6
84	Curtailed NG-F	ired Electric Gen (MW)	0	0	0	0	0	0
85	Total Supply		3132	4256	3497	3497	3806	4087
86	Elec Curtailme	ent (MWh)	0	0	0	0	0	0
87	Elec Curtailme	ent Duration (h)	0	0	0	0	0	0
88	Avg Elec Curt	ailment (MW)	0	0	0	0	0	0
89	Elec Curtailme	ent (%)	0%	0%	0%	0%	0%	0%
90	Elec Curtailme	ent (# of Customers)	0	0	0	0	0	0
91							•	
92	L1600 / Otay C	Out / L3010 Out	1.2.4.1	1.2.4.2	1.2.4.3	1.2.4.4	1.2.4.5	1.2.4.6
93	Curtailed NG-F	ired Electric Gen (MW)	281	1405	927	927	1236	1517
94	Total Supply		2851	2851	2570	2570	2570	2570
95	Elec Curtailme	ent (MWh)	720	7,881	1,450	5,152	150	1,636
96	Elec Curtailme	ent Duration (h)	6	15	5	17	2	8
97	Avg Elec Curt	ailment (MW)	120	534	276	308	86	204
98	Elec Curtailme	ent (%)	4%	14%	9%	9%	3%	7%
99	Elec Curtailme	ent (# of Customers)	54.877	200.930	130.224	129.384	44.549	94.833

5.	1. Example Summer Low-EG Day MW	2. Example Summer High-EG Dav MW	3. Example Winter Day MW	4. Winter 1-in-10 Year Day MW	5. Example Spring Day MW	6. Example Fa
A B	С	D	Е	F	G	Н
Line 3602 (Proposed Project)						
L3602 / Otay Full / L3010 80%	2.1.1.1	2.1.1.2	2.1.1.3	2.1.1.4	2.1.1.5	2.1.1.6
Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
Total Supply Elec Curtailment (MWh)	3132	4256 0	3497 0	3497	3806	4087
Elec Curtailment (MWII) Elec Curtailment Duration (h)	0	0	0	0	0	0
Avg Elec Curtailment (MW)	0	0	0	0	0	0
Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
Elec Curtailment (# of Customers)	0	0	0	0	0	0
10000 / 0:		22.42				
L3602 / Otay Full / L3010 Out Curtailed NG-Fired Electric Gen (MW)	2.2.1.1	2.2.1.2 0	2.2.1.3 0	2.2.1.4	2.2.1.5	2.2.1.6 0
Total Supply	3132	4256	3497	3497	3806	4087
Elec Curtailment (MWh)	0	0	0	0	0	0
Elec Curtailment Duration (h)	0	0	0	0	0	0
Avg Elec Curtailment (MW)	0	0	0	0	0	0
Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
Elec Curtailment (# of Customers)	0	0	0	0	0	0
L3602 / Otay Medium / L3010 80%	2.1.2.1	2.1.2.2	2.1.2.3	2.1.2.4	2.1.2.5	2.1.2.6
Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
Total Supply	3132	4256	3497	3497	3806	4087
Elec Curtailment (MWh)	0	0	0	0	0	0
Elec Curtailment Duration (h)	0	0	0	0	0	0
Avg Elec Curtailment (MW) Elec Curtailment (%)	0	0	0 0%	0 0%	0	0
Elec Curtailment (# of Customers)	0	0	0%	0	0	0%
Eleo ourtainnent (# or oustomers)	· ·	U	· ·	· ·	· ·	J
L3602 / Otay Medium / L3010 Out	2.2.2.1	2.2.2.2	2.2.2.3	2.2.2.4	2.2.2.5	2.2.2.6
Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
Total Supply	3132	4256	3497	3497	3806	4087
Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0
Avg Elec Curtailment (MW)	0	0	0	0	0	0
Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
Elec Curtailment (# of Customers)	0	0	0	0	0	0
	•	•		•	•	•
L3602 / Otay Low / L3010 80% Curtailed NG-Fired Electric Gen (MW)	2.1.3.1	2.1.3.2 0	2.1.3.3 0	2.1.3.4 0	2.1.3.5 0	2.1.3.6
Total Supply	3132	4256	3497	3497	3806	4087
Elec Curtailment (MWh)	0	0	0	0	0	0
Elec Curtailment Duration (h)	0	0	0	0	0	0
Avg Elec Curtailment (MW)	0	0	0	0	0	0
Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
Elec Curtailment (# of Customers)	0	0	0	0	0	0
10000 / 0/ 1 / 10040 0	2224	2222	0000	0004	0005	0000
L3602 / Otay Low / L3010 Out Curtailed NG-Fired Electric Gen (MW)	2.2.3.1	2.2.3.2	2.2.3.3	2.2.3.4	2.2.3.5	2.2.3.6
Total Supply	3132	4256	3497	3497	3806	4087
Elec Curtailment (MWh)	0	0	0	0	0	0
Elec Curtailment Duration (h)	0	0	0	0	0	0
Avg Elec Curtailment (MW)	0	0	0	0	0	0
Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
Elec Curtailment (# of Customers)	0	0	0	0	0	0
L3602 / Otay Out / L3010 80%	2.1.4.1	2.1.4.2	2.1.4.3	2.1.4.4	2.1.4.5	2.1.4.6
Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
Total Supply	3132	4256	3497	3497	3806	4087
Elec Curtailment (MWh)	0	0	0	0	0	0
Elec Curtailment Duration (h)	0	0	0	0	0	0
Avg Elec Curtailment (MW)	0	0	0	0	0	0
Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
Elec Curtailment (# of Customers)	0	0	0	0	0	0
L3602 / Otay Out / L3010 Out	2.2.4.1	2.2.4.2	2.2.4.3	2.2.4.4	2.2.4.5	2.2.4.6
Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
Curtailed 146 Tiled Electric Cerr (WW)	3132	4256	3497	3497	3806	4087
Total Supply	3132					
Total Supply Elec Curtailment (MWh)	0	0	0	0	0	0
Total Supply Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0
Total Supply Elec Curtailment (MWh)	0					

Line No.							
_		1. Example	2. Example	3. Example	4. Winter 1-in-10	5. Example	6. Example Fall
1			Summer High-EG	Winter Day MW	Year Day MW	Spring Day MW	Day MW
2	A B	Dav MW C	Dav MW D	E E	F	G	Н
174	Α Β	C	D		r	· · ·	
175	Line 1600 (During Hydrotesting)						
176	•						
177	Hydrotesting / Otay Full / L3010 80%	3.1.1.1	3.1.1.2	3.1.1.3	3.1.1.4	3.1.1.5	3.1.1.6
178	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
179 180	Total Supply Elec Curtailment (MWh)	3132 0	4256 0	3497 0	3497 0	3806 0	4087 0
181	Elec Curtailment Duration (h)	0	0	0	0	0	0
182	Avg Elec Curtailment (MW)	0	0	0	0	0	0
183	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
184	Elec Curtailment (# of Customers)	0	0	0	0	0	0
185							
186 187	Hydrotesting / Otay Full / L3010 Out Curtailed NG-Fired Electric Gen (MW)	3.2.1.1 0	3.2.1.2 1686	3.2.1.3 912	3.2.1.4 927	3.2.1.5 343	3.2.1.6 710
188	Total Supply	3132	2570	2586	2570	3463	3377
189	Elec Curtailment (MWh)	0	12,380	1,368	5,152	0	0
190	Elec Curtailment Duration (h)	0	18	5	17	0	0
191	Avg Elec Curtailment (MW)	0	697	261	308	0	0
192	Elec Curtailment (%)	0%	19%	9%	9%	0%	0%
193	Elec Curtailment (# of Customers)	0	262,272	122,837	129,384	0	0
194 195	Hydrotesting / Otay Medium / L3010 80%	3.1.2.1	3.1.2.2	3.1.2.3	3.1.2.4	3.1.2.5	3.1.2.6
196	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
197	Total Supply	3132	4256	3497	3497	3806	4087
198	Elec Curtailment (MWh)	0	0	0	0	0	0
199	Elec Curtailment Duration (h)	0	0	0	0	0	0
200	Avg Elec Curtailment (MW)	0	0	0	0	0	0
201	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
202 203	Elec Curtailment (# of Customers)	0	0	0	0	0	0
203	Hydrotesting / Otay Medium / L3010 Out	3.2.2.1	3.2.2.2	3.2.2.3	3.2.2.4	3.2.2.5	3.2.2.6
205	Curtailed NG-Fired Electric Gen (MW)	249	1686	927	927	820	1140
	Total Supply	2883	2570	2570	2570	2987	2947
207	Elec Curtailment (MWh)	542	12,380	1,450	5,152	0	70
208	Elec Curtailment Duration (h)	5	18	5	17	0	2
209	Avg Elec Curtailment (MW)	103	697	276	308	0	46
210	Elec Curtailment (%)	3% 47,219	19% 262,272	9% 130,224	9% 129,384	0% 0	2% 21,550
211 212	Elec Curtailment (# of Customers)	41,219	202,212	130,224	129,304	U	21,550
213	Hydrotesting / Otay Low / L3010 80%	3.1.3.1	3.1.3.2	3.1.3.3	3.1.3.4	3.1.3.5	3.1.3.6
214	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
215	Total Supply	3132	4256	3497	3497	3806	4087
216	Elec Curtailment (MWh)	0	0	0	0	0	0
217	Elec Curtailment Duration (h)	0	0	0	0	0	0
218 219	Avg Elec Curtailment (MW) Elec Curtailment (%)	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%
	Elec Curtailment (# of Customers)	0	0	0	0	0	0
221	<u> </u>						
222	Hydrotesting / Otay Low / L3010 Out	3.2.3.1	3.2.3.2	3.2.3.3	3.2.3.4	3.2.3.5	3.2.3.6
223	Curtailed NG-Fired Electric Gen (MW)	562	1686	927	927	1236	1517
	Total Supply	2570	2570	2570	2570	2570	2570
225 226	Elec Curtailment (MWh) Elec Curtailment Duration (h)	2,873 9	12,380 18	1,450 5	5,152 17	150 2	1,636 8
227	Avg Elec Curtailment (MW)	311	697	276	308	86	204
228	Elec Curtailment (%)	10%	19%	9%	9%	3%	7%
229	Elec Curtailment (# of Customers)	142,040	262,272	130,224	129,384	44,549	94,833
230	Understanding (Oten Ont / Least 200)	24-4-	24-40	24-40	24-4-	24-5	24.40
231 232	Hydrotesting / Otay Out / L3010 80% Curtailed NG-Fired Electric Gen (MW)	3.1.4.1 0	3.1.4.2 112	3.1.4.3 534	3.1.4.4 759	3.1.4.5 56	3.1.4.6 393
232							
234	Total Supply Elec Curtailment (MWh)	3132 0	4143 0	2963 1	2739 2,881	3750 0	3694 0
235	Elec Curtailment Duration (h)	0	0	0	11	0	0
236	Avg Elec Curtailment (MW)	0	0	5	268	0	0
237	Elec Curtailment (%)	0%	0%	0%	8%	0%	0%
238	Elec Curtailment (# of Customers)	0	0	2,440	112,734	0	0
239 240	Hydrotesting / Otay Out / L3010 Out	3.2.4.1	3.2.4.2	3.2.4.3	3.2.4.4	3.2.4.5	3.2.4.6
	Curtailed NG-Fired Electric Gen (MW)	562	1686	927	927	1236	1517
242	Total Supply	2570	2570	2570	2570	2570	2570
243	Elec Curtailment (MWh)	2,873	12,380	1,450	5,152	150	1,636
244	Elec Curtailment Duration (h)	9	18	5	17	2	8
245	Avg Elec Curtailment (MW)	311	697	276	308	86	204
246	Elec Curtailment (%)	10%	19%	9%	9%	3%	7%
247	Elec Curtailment (# of Customers)	142,040	262,272	130,224	129,384	44,549	94,833

Line No		9-013 VOLUME III – COS		07.11.12.1010 (001.1		(1 2017)	
1		1. Example Summer Low-EG		3. Example Winter Day MW	4. Winter 1-in-10 Year Day MW	5. Example Spring Day MW	6. Example Fall Day MW
2	A B	Dav MW C	Dav MW D	E	F	G	H
248 249	Alternate Diameter Pipeline 10"	Ü	5	_		J	
250 251	Alt Diameter 10" / Otay Full / L3010 80%	4.1.1.1	4.1.1.2	4.1.1.3	4.1.1.4	4.1.1.5	4.1.1.6
252	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
253	Total Supply	3132 0	4256	3497 0	3497	3806	4087
254 255	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0
256	Avg Elec Curtailment (MW)	0	0	0	0	0	0
257 258	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0% 0	0% 0	0% 0	0% 0	0% 0
259							
260 261	Alt Diameter 10" / Otay Full / L3010 Out Curtailed NG-Fired Electric Gen (MW)	4.2.1.1 0	4.2.1.2 1482	4.2.1.3 631	4.2.1.4 855	4.2.1.5 62	4.2.1.6 429
262	Total Supply	3132	2773	2867	2642	3744	3658
263	Elec Curtailment (MWh)	0	9,051 16	172 3	4,053 14	0	0
264 265	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	584	62	300	0	0
266	Elec Curtailment (%)	0%	16%	2%	9%	0%	0%
267 268	Elec Curtailment (# of Customers)	0	219,576	29,432	126,283	0	0
269	Alt Diameter 10" / Otay Medium / L3010 80%	4.1.2.1	4.1.2.2	4.1.2.3	4.1.2.4	4.1.2.5	4.1.2.6
270 271	Curtailed NG-Fired Electric Gen (MW) Total Supply	0 3132	0 4256	0 3497	0 3497	0 3806	0 4087
271	Elec Curtailment (MWh)	0	0	0	0	0	0
273	Elec Curtailment Duration (h)	0	0	0	0	0	0
274 275	Avg Elec Curtailment (MW) Elec Curtailment (%)	0	0 0%	0 0%	0 0%	0 0%	0 0%
276	Elec Curtailment (# of Customers)	0	0	0	0	0	0
277 278	Alt Diameter 10" / Otay Medium / L3010 Out	4.2.2.1	4.2.2.2	4.2.2.3	4.2.2.4	4.2.2.5	4.2.2.6
279	Curtailed NG-Fired Electric Gen (MW)	0	1631	927	927	539	859
280	Total Supply	3132	2625	2570	2570	3268	3228
281 282	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	11,438 17	1,450 5	5,152 17	0	0
283	Avg Elec Curtailment (MW)	0	683	276	308	0	0
284 285	Elec Curtailment (%)	0%	18% 256,793	9% 130,224	9% 129,384	0% 0	0% 0
286	Elec Curtailment (# of Customers)	U	230,733	130,224	123,304	U	•
287	Alt Diameter 10" / Otay Low / L3010 80%	4.1.3.1 0	4.1.3.2 0	<i>4.1.3.3</i> 0	4.1.3.4 0	4.1.3.5 0	4.1.3.6
288 289	Curtailed NG-Fired Electric Gen (MW) Total Supply			U		U	0
		3132	4256	3497	3497	3806	0 4087
290	Elec Curtailment (MWh)	3132 0	4256 0	3497 0	3497 0	3806 0	4087 0
291	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	4087 0 0
	Elec Curtailment (MWh)	0	0	0	0	0	4087 0
291 292 293 294	Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	4087 0 0
291 292 293	Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (MW) Elec Curtailment (%) Elec Curtailment (# of Customers)	0 0 0 0%	0 0 0 0%	0 0 0 0%	0 0 0 0%	0 0 0 0%	4087 0 0 0 0
291 292 293 294 295 296 297	Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (MW) Elec Curtailment (%) Elec Curtailment (# of Customers) Alt Diameter 10" / Otay Low / L3010 Out Curtailed NG-Fired Electric Gen (MW)	0 0 0 0% 0 0 4.2.3.1	0 0 0 0% 0 4.2.3.2 1686	0 0 0 0% 0 4.2.3.3	0 0 0 0% 0 4.2.3.4 927	0 0 0 0% 0 4.2.3.5	4087 0 0 0 0 0% 0 4.2.3.6 1306
291 292 293 294 295 296 297 298	Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (MW) Elec Curtailment (%) Elec Curtailment (# of Customers) Alt Diameter 10" / Otay Low / L3010 Out Curtailed NG-Fired Electric Gen (MW) Total Supply	0 0 0 0% 0 4.2.3.1 562 2570	0 0 0 0% 0 4.2.3.2 1686 2570	0 0 0 0% 0 4.2.3.3 927 2570	0 0 0 0% 0 4.2.3.4 927 2570	0 0 0 0% 0 4.2.3.5 1180 2627	4087 0 0 0 0 0% 0 4.2.3.6 1306 2781
291 292 293 294 295 296 297 298 299 300	Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (MW) Elec Curtailment (%) Elec Curtailment (# of Customers) Alt Diameter 10" / Otay Low / L3010 Out Curtailed NG-Fired Electric Gen (MW) Total Supply Elec Curtailment (MWh) Elec Curtailment Duration (h)	0 0 0,0% 0 4.2.3.1 562 2570 2,873 9	0 0 0 0% 0 4.2.3.2 1686 2570 12,380	0 0 0 0% 0 0 4.2.3.3 927 2570 1,450 5	0 0 0 0% 0 0 4.2.3.4 927 2570 5,152 17	0 0 0 0% 0 4.2.3.5 1180 2627 58 2	4087 0 0 0 0 0% 0 4.2.3.6 1306 2781 473 3
291 292 293 294 295 296 297 298 299 300 301	Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (MW) Elec Curtailment (%) Elec Curtailment (# of Customers) Alt Diameter 10" / Otay Low / L3010 Out Curtailed NG-Fired Electric Gen (MW) Total Supply Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0 0 0,0% 0 4.2.3.1 562 2570 2,873 9 311	0 0 0 0% 0 42.3.2 1686 2570 12,380 18 697	0 0 0 0% 0 4.2.3.3 927 2570 1,450 5	0 0 0 0% 0 4.2.3.4 927 2570 5,152 17 308	0 0 0 0% 0 4.2.3.5 1180 2627 58 2 38	4087 0 0 0 0 0 0 4.2.3.6 1306 2781 473 3 146
291 292 293 294 295 296 297 298 299 300	Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (MW) Elec Curtailment (%) Elec Curtailment (# of Customers) Alt Diameter 10" / Otay Low / L3010 Out Curtailed NG-Fired Electric Gen (MW) Total Supply Elec Curtailment (MWh) Elec Curtailment Duration (h)	0 0 0,0% 0 4.2.3.1 562 2570 2,873 9	0 0 0 0% 0 4.2.3.2 1686 2570 12,380	0 0 0 0% 0 0 4.2.3.3 927 2570 1,450 5	0 0 0 0% 0 0 4.2.3.4 927 2570 5,152 17	0 0 0 0% 0 4.2.3.5 1180 2627 58 2	4087 0 0 0 0 0% 0 4.2.3.6 1306 2781 473 3
291 292 293 294 295 296 297 298 299 300 301 302 303 304	Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (MW) Elec Curtailment (%) Elec Curtailment (# of Customers) Alt Diameter 10" / Otay Low / L3010 Out Curtailed NG-Fired Electric Gen (MW) Total Supply Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (MW) Elec Curtailment (W) Elec Curtailment (%) Elec Curtailment (%)	0 0 0 0% 0 4.2.3.1 562 2570 2,873 9 311 10% 142,040	0 0 0 0% 0 42.3.2 1686 2570 12,380 18 697 19% 262,272	0 0 0 0% 0 4.2.3.3 927 2570 1,450 5 276 9% 130,224	0 0 0 0% 0 42.3.4 927 2570 5,152 17 308 9% 129,384	0 0 0 0% 0 4.2.3.5 1180 2627 58 2 38 1% 19,934	4087 0 0 0 0 0 0 4.2.3.6 1306 2781 473 3 146 5% 67,529
291 292 293 294 295 296 297 298 299 300 301 302 303	Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (MW) Elec Curtailment (%) Elec Curtailment (# of Customers) Alt Diameter 10" / Otay Low / L3010 Out Curtailed NG-Fired Electric Gen (MW) Total Supply Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (MW) Elec Curtailment (MW) Elec Curtailment (MW) Elec Curtailment (MW)	0 0 0 0% 0 4.2.3.1 562 2570 2,873 9 311 10%	0 0 0 0% 0 4.2.3.2 1686 2570 12,380 18 697 19%	0 0 0 0% 0 4.2.3.3 927 2570 1,450 5 276 9%	0 0 0 0% 0 4.2.3.4 927 2570 5,152 17 308 9%	0 0 0 0% 0 4.2.3.5 1180 2627 58 2 38 1%	4087 0 0 0 0 0% 0 4.2.3.6 1306 2781 473 3 146 5%
291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307	Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (WW) Elec Curtailment (%) Elec Curtailment (# of Customers) Alt Diameter 10" / Otay Low / L3010 Out Curtailed NG-Fired Electric Gen (MW) Total Supply Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (WW) Elec Curtailment (%) Elec Curtailment (# of Customers) Alt Diameter 10" / Otay Out / L3010 80% Curtailed NG-Fired Electric Gen (MW) Total Supply	0 0 0 0% 0 4.2.3.1 562 2570 2,873 9 311 10% 142,040 4.1.4.1 0 3132	0 0 0 0% 0 0 4.2.3.2 1686 2570 12,380 18 697 19% 262,272 4.1.4.2 0	0 0 0 0 0% 0 4.2.3.3 927 2570 1,450 5 276 9% 130,224 4.1.4.3 253 3244	0 0 0 0 0% 0 4.2.3.4 927 2570 5,152 17 308 9% 129,384 4.1.4.4 478 3020	0 0 0 0% 0 4.2.3.5 1180 2627 58 2 38 1% 19,934 4.1.4.5 0	4087 0 0 0 0 0 0 4.2.3.6 1306 2781 473 3 146 5% 67,529 4.1.4.6 112 3975
291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306	Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (MW) Elec Curtailment (WW) Elec Curtailment (*) Elec Curtailment (*) Elec Curtailment (*) Alt Diameter 10" / Otay Low / L3010 Out Curtailed NG-Fired Electric Gen (MW) Total Supply Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (WW) Elec Curtailment (*) Elec Curtailment (*) Elec Curtailment (*) Elec Curtailment (*) Elec Curtailment (# of Customers) Alt Diameter 10" / Otay Out / L3010 80% Curtailed NG-Fired Electric Gen (MW) Total Supply Elec Curtailment (MWh)	0 0 0 0% 0 4.2.3.1 562 2570 2,873 9 311 10% 142,040 4.1.4.1 0 3132	0 0 0 0% 0 4.2.3.2 1686 2570 12,380 18 697 19% 262,272 4.1.4.2 0 4256	0 0 0 0% 0 0 4.2.3.3 927 2570 1,450 5 276 9% 130,224 4.1.4.3 253 3244 0	0 0 0 0% 0 0 4.2.3.4 927 2570 5,152 17 308 9% 129,384 4.1.4.4 478 3020 912	0 0 0 0% 0 0 4.2.3.5 1180 2627 58 2 38 1% 19,934 4.1.4.5 0 3806 0	4087 0 0 0 0 0 0 4.2.3.6 1306 2781 473 3 146 5% 67,529 4.1.4.6 112 3975 0
291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307	Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (WW) Elec Curtailment (%) Elec Curtailment (# of Customers) Alt Diameter 10" / Otay Low / L3010 Out Curtailed NG-Fired Electric Gen (MW) Total Supply Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (WW) Elec Curtailment (%) Elec Curtailment (# of Customers) Alt Diameter 10" / Otay Out / L3010 80% Curtailed NG-Fired Electric Gen (MW) Total Supply	0 0 0 0 0% 0 4.2.3.1 562 2570 2,873 9 311 10% 142,040 4.1.4.1 0 3132 0	0 0 0 0% 0 0 42.3.2 1686 2570 12,380 18 697 19% 262,272 4.1.4.2 0 4256 0	0 0 0 0 0% 0 4.2.3.3 927 2570 1,450 5 276 9% 130,224 4.1.4.3 253 3244 0 0	0 0 0 0 0% 0 4.2.3.4 927 2570 5,152 17 308 9% 129,384 4.1.4.4 478 3020	0 0 0 0 0% 0 4.2.3.5 1180 2627 58 2 38 1% 19,934 4.1.4.5 0 3806 0	4087 0 0 0 0 0 0 4.2.3.6 1306 2781 473 3 146 5% 67,529 4.1.4.6 112 3975 0 0
291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311	Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (MW) Elec Curtailment (%) Elec Curtailment (# of Customers) Alt Diameter 10" / Otay Low / L3010 Out Curtailed NG-Fired Electric Gen (MW) Total Supply Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (%) Elec Curtailment (# of Customers) Alt Diameter 10" / Otay Out / L3010 80% Curtailed NG-Fired Electric Gen (MW) Total Supply Elec Curtailment (# of Customers) Alt Diameter 10" / Otay Out / L3010 80% Curtailled NG-Fired Electric Gen (MW) Total Supply Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment Duration (h) Avg Elec Curtailment (MWh) Elec Curtailment Duration (h) Elec Curtailment (WW)	0 0 0 0% 0 4.2.3.1 562 2570 2,873 9 311 10% 142,040 4.1.4.1 0 3132 0 0	0 0 0 0% 0 4.2.3.2 1686 2570 12,380 18 697 19% 262,272 4.1.4.2 0 4256 0 0	0 0 0 0% 0 0 4.2.3.3 927 2570 1,450 5 276 9% 130,224 4.1.4.3 253 3244 0 0 0	0 0 0 0% 0 0 4.2.3.4 927 2570 5,152 17 308 9% 129,384 4.1.4.4 478 3020 912 4 4 215 6%	0 0 0 0 0% 0 4.2.3.5 1180 2627 58 2 38 1% 19,934 4.1.4.5 0 3806 0 0	4087 0 0 0 0 0 0 4.2.3.6 1306 2781 473 3 146 5% 67,529 4.1.4.6 112 3975 0 0 0
291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310	Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (%) Elec Curtailment (%) Elec Curtailment (# of Customers) Alt Diameter 10" / Otay Low / L3010 Out Curtailed NG-Fired Electric Gen (MW) Total Supply Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (%) Elec Curtailment (%) Elec Curtailment (%) Elec Curtailment (# of Customers) Alt Diameter 10" / Otay Out / L3010 80% Curtailed NG-Fired Electric Gen (MW) Total Supply Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment Duration (h) Avg Elec Curtailment (MWh)	0 0 0 0 0% 0 4.2.3.1 562 2570 2,873 9 311 10% 142,040 4.1.4.1 0 3132 0	0 0 0 0% 0 0 42.3.2 1686 2570 12,380 18 697 19% 262,272 4.1.4.2 0 4256 0	0 0 0 0 0% 0 4.2.3.3 927 2570 1,450 5 276 9% 130,224 4.1.4.3 253 3244 0 0	0 0 0 0 0% 0 4.2.3.4 927 2570 5,152 17 308 9% 129,384 4.1.4.4 478 3020 912 4 4	0 0 0 0 0% 0 4.2.3.5 1180 2627 58 2 38 1% 19,934 4.1.4.5 0 3806 0	4087 0 0 0 0 0 0 4.2.3.6 1306 2781 473 3 146 5% 67,529 4.1.4.6 112 3975 0 0
291 292 293 294 295 296 297 298 300 301 302 303 304 305 306 307 308 309 311 312 313	Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (MW) Elec Curtailment (%) Elec Curtailment (# of Customers) Alt Diameter 10" / Otay Low / L3010 Out Curtailed NG-Fired Electric Gen (MW) Total Supply Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (W) Elec Curtailment (%) Elec Curtailment (# of Customers) Alt Diameter 10" / Otay Out / L3010 80% Curtailed NG-Fired Electric Gen (MW) Total Supply Elec Curtailment (MWh) Elec Curtailment (W)	0 0 0 0 0% 0 4.2.3.1 562 2570 2,873 9 311 10% 142,040 4.1.4.1 0 3132 0 0 0 0% 0	0 0 0 0% 0 4.2.3.2 1686 2570 12,380 18 697 19% 262,272 4.1.4.2 0 4256 0 0 0 0 0 0	0 0 0 0% 0 0 4.2.3.3 927 2570 1,450 5 276 9% 130,224 4.1.4.3 253 3244 0 0 0 0 0 0 4.2.4.3	0 0 0 0% 0 0 4.2.3.4 927 2570 5,152 17 308 9% 129,384 4.1.4.4 478 3020 912 4 215 6% 90,313	0 0 0 0 0% 0 4.2.3.5 1180 2627 58 2 38 1% 19,934 4.1.4.5 0 3806 0 0 0	4087 0 0 0 0 0 0 4.2.3.6 1306 2781 473 3 146 5% 67,529 4.1.4.6 112 3975 0 0 0 0 4.2.4.6
291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315	Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (MW) Elec Curtailment (%) Elec Curtailment (%) Elec Curtailment (# of Customers) Alt Diameter 10" / Otay Low / L3010 Out Curtailed NG-Fired Electric Gen (MW) Total Supply Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (MW) Elec Curtailment (%) Elec Curtailment (%) Elec Curtailment (# of Customers) Alt Diameter 10" / Otay Out / L3010 80% Curtailed NG-Fired Electric Gen (MW) Total Supply Elec Curtailment (MWh) Elec Curtailment (%) Flec Curtailment (%) Elec Curtailment (%)	0 0 0 0 0% 0 4.2.3.1 562 2570 2,873 9 311 10% 142,040 4.1.4.1 0 3132 0 0 0 0 0 0	0 0 0 0 0% 0 4.2.3.2 1686 2570 12,380 18 697 19% 262,272 4.1.4.2 0 4256 0 0 0 0 0 0	0 0 0 0% 0 0 4.2.3.3 927 2570 1,450 5 276 9% 130,224 4.1.4.3 253 3244 4.0 0 0 0 0 0 0 0	0 0 0 0 0% 0 0 4.2.3.4 927 2570 5,152 17 308 9% 129,384 4.1.4.4 478 3020 912 4 215 6% 90,313	0 0 0 0 0% 0 4.2.3.5 1180 2627 58 2 38 1% 19,934 4.1.4.5 0 3806 0 0 0 0 0 0	4087 0 0 0 0 0 0 4.2.3.6 1306 1306 2781 473 3 146 5% 67,529 4.1.4.6 112 3975 0 0 0 0 0 4.2.4.6 1517
291 292 293 294 295 296 297 298 300 301 302 303 304 305 306 307 308 309 311 312 313	Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (MW) Elec Curtailment (%) Elec Curtailment (# of Customers) Alt Diameter 10" / Otay Low / L3010 Out Curtailed NG-Fired Electric Gen (MW) Total Supply Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (W) Elec Curtailment (%) Elec Curtailment (# of Customers) Alt Diameter 10" / Otay Out / L3010 80% Curtailed NG-Fired Electric Gen (MW) Total Supply Elec Curtailment (MWh) Elec Curtailment (W)	0 0 0 0 0% 0 4.2.3.1 562 2570 2,873 9 311 10% 142,040 4.1.4.1 0 3132 0 0 0 0% 0	0 0 0 0 0% 0 4.2.3.2 1686 2570 12,380 18 697 19% 262,272 4.1.4.2 0 4256 0 0 0 0 0 0 0 4.2.4.2 1686	0 0 0 0% 0 0 4.2.3.3 927 2570 1,450 5 276 9% 130,224 4.1.4.3 253 3244 0 0 0 0 0 0 4.2.4.3	0 0 0 0% 0 0 4.2.3.4 927 2570 5,152 17 308 9% 129,384 4.1.4.4 478 3020 912 4 215 6% 90,313	0 0 0 0 0% 0 4.2.3.5 1180 2627 58 2 38 1% 19,934 4.1.4.5 0 3806 0 0 0 0 0 0 4.2.4.5 1236 2570 150	4087 0 0 0 0 0 0 4.2.3.6 1306 2781 473 3 146 5% 67,529 4.1.4.6 112 3975 0 0 0 0 4.2.4.6
291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318	Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (MW) Elec Curtailment (%) Elec Curtailment (%) Elec Curtailment (# of Customers) Alt Diameter 10" / Otay Low / L3010 Out Curtailed NG-Fired Electric Gen (MW) Total Supply Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (MW) Elec Curtailment (%) Elec Curtailment (%) Elec Curtailment (# of Customers) Alt Diameter 10" / Otay Out / L3010 80% Curtailed NG-Fired Electric Gen (MW) Total Supply Elec Curtailment (MWh) Elec Curtailment (MWh) Elec Curtailment (MWh) Elec Curtailment (MWh) Elec Curtailment (# of Customers) Alt Diameter 10" / Otay Out / L3010 Out Curtailed NG-Fired Electric Gen (MW) Total Supply Elec Curtailment (# of Customers)	0 0 0 0 0% 0 4.2.3.1 562 2570 2,873 9 311 10% 142,040 4.1.4.1 0 3132 0 0 0 0 0 0 0 0 4.2.4.1 562 2570 2,873 9	0 0 0 0 0% 0 1686 2570 12,380 18 697 19% 262,272 4.1.4.2 0 4256 0 0 0 0 0 0 0 0 42.4.2 1686 2570 0	0 0 0 0 0% 0 0 4.2.3.3 927 2570 1,450 5 276 9% 130,224 4.1.4.3 253 3244 0 0 0 0 0 0 0 0 4.2.4.3 927 2570 0	0 0 0 0 0% 0 0 4.2.3.4 927 2570 5,152 17 308 9% 129,384 4.1.4.4 478 3020 912 4 215 6% 90,313 4.2.4.4 927 2570 5,152 17	0 0 0 0 0% 0 0 4.2.3.5 1180 2627 58 2 38 1% 19,934 4.1.4.5 0 3806 0 0 0 0 0 0 0 4.2.4.5 1236 2570 0	4087 0 0 0 0 0 0 4.2.3.6 1306 2781 473 3 146 5% 67,529 4.1.4.6 112 3975 0 0 0 0% 0 4.2.4.6 1517 2570 1,636 8
291 292 293 294 295 296 297 298 300 301 302 303 304 305 306 307 308 309 311 312 313 314 315 316 317	Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (MW) Elec Curtailment (W) Elec Curtailment (# of Customers) Alt Diameter 10" / Otay Low / L3010 Out Curtailed NG-Fired Electric Gen (MW) Total Supply Elec Curtailment (MWh) Elec Curtailment Duration (h) Avg Elec Curtailment (W) Elec Curtailment (MWh) Elec Curtailment (MWh) Elec Curtailment (MWh) Elec Curtailment (W)	0 0 0 0 0 0 4.2.3.1 562 2570 2,873 9 311 10% 142,040 4.1.4.1 0 3132 0 0 0 0% 0	0 0 0 0 0% 0 4.2.3.2 1686 2570 12,380 18 697 19% 262,272 4.1.4.2 0 4256 0 0 0 0 0 0 0 4.2.4.2 1686	0 0 0 0% 0 0 4.2.3.3 927 2570 1,450 5 276 9% 130,224 4.1.4.3 253 3244 0 0 0 0 0 0 0 0 4.2.4.3 927	0 0 0 0 0% 0 4.2.3.4 927 2570 5,152 17 308 9% 129,384 4.1.4.4 478 3020 912 4 4 215 6% 90,313 4.2.4.4 927 2570 5,152	0 0 0 0 0% 0 4.2.3.5 1180 2627 58 2 38 1% 19,934 4.1.4.5 0 3806 0 0 0 0 0 0 4.2.4.5 1236 2570 150	4087 0 0 0 0 0 0 4.2.3.6 1306 2781 473 3 146 5% 67,529 4.1.4.6 112 3975 0 0 0 0 4.2.4.6 1517 151

Line No.	APPLICATION 15-09-0	13 VOLUME III – COS	ST-EFFECTIVENES	S ANALYSIS (COR	RECTED FEBRUAR	(Y 2017)	
1		1. Example Summer Low-EG		3. Example Winter Day MW	4. Winter 1-in-10 Year Day MW	5. Example Spring Day MW	6. Example Fall Day MW
2	A B	Dav MW C	Dav MW D	E	F	G	Н
322 323	Alternate Diameter Pipeline 12"		-				
324 325	Alt Diameter 12" / Otay Full / L3010 80%	5.1.1.1	5.1.1.2	5.1.1.3	5.1.1.4	5.1.1.5	5.1.1.6
326	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
327 328	Total Supply Elec Curtailment (MWh)	3132 0	4256 0	3497 0	3497 0	3806 0	4087 0
329	Elec Curtailment Duration (h)	0	0	0	0	0	0
330	Avg Elec Curtailment (MW)	0	0	0	0	0	0
331 332	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0% 0	0% 0	0% 0	0% 0	0% 0
333		•					
334 335	Alt Diameter 12" / Otay Full / L3010 Out Curtailed NG-Fired Electric Gen (MW)	5.2.1.1	5.2.1.2 1370	<i>5.2.1.3</i> 518	5.2.1.4 743	5.2.1.5 0	5.2.1.6 317
336	Total Supply	3132	2886	2979	2754	3806	3771
337	Elec Curtailment (MWh)	0	7,374	0	2,716	0	0
338	Elec Curtailment Duration (h)	0	15	0	11	0	0
339 340	Avg Elec Curtailment (MW) Elec Curtailment (%)	0%	509 14%	0 0%	259 8%	0 0%	0 0%
341	Elec Curtailment (# of Customers)	0	191,226	0	108,815	0	0
342 343	Alt Diameter 12" / Otay Medium / L3010 80%	5.1.2.1	5.1.2.2	5.1.2.3	5.1.2.4	5.1.2.5	5.1.2.6
344	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
345	Total Supply	3132	4256	3497	3497	3806	4087
346 347	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0
347	Avg Elec Curtailment (MW)	0	0	0	0	0	0
349	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
350 351	Elec Curtailment (# of Customers)	0	0	0	0	0	0
352	Alt Diameter 12" / Otay Medium / L3010 Out	5.2.2.1	5.2.2.2	5.2.2.3	5.2.2.4	5.2.2.5	5.2.2.6
353	Curtailed NG-Fired Electric Gen (MW)	0	1519	927	927	426	746
354 355	Total Supply Elec Curtailment (MWh)	3132 0	2737 9,618	2570 1,450	2570 5,152	3380 0	3341 0
356	Elec Curtailment (MWH) Elec Curtailment Duration (h)	0	16	5	17	0	0
357	Avg Elec Curtailment (MW)	0	601	276	308	0	0
358 359	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	16% 226,051	9% 130,224	9% 129,384	0% 0	0% 0
360		V	220,031	130,224	123,304	U	•
361	Alt Diameter 12" / Otay Low / L3010 80%	5.1.3.1	5.1.3.2	5.1.3.3	5.1.3.4	5.1.3.5	5.1.3.6
362 363	Curtailed NG-Fired Electric Gen (MW) Total Supply	3132	0 4256	0 3497	0 3497	0 3806	0 4087
364	Elec Curtailment (MWh)	0	0	0	0	0	0
365	Elec Curtailment Duration (h)	0	0	0	0	0	0
366 367	Avg Elec Curtailment (MW)	0	0 0%	0 0%	0 0%	0 0%	0 0%
368	Elec Curtailment (%) Elec Curtailment (# of Customers)	0	0	0	0	0	0
369							
370 371	Alt Diameter 12" / Otay Low / L3010 Out Curtailed NG-Fired Electric Gen (MW)	5.2.3.1 543	5.2.3.2 1667	5.2.3.3 927	5.2.3.4 927	5.2.3.5 1067	5.2.3.6 1194
372	Total Supply	2589	2589	2570	2570	2739	2893
373	Elec Curtailment (MWh)	2,701	12,054	1,450	5,152	0	170
374 375	Elec Curtailment Duration (h)	9 292	18 689	<u>5</u> 276	17 308	0	76
375 376	Avg Elec Curtailment (MW) Elec Curtailment (%)	10%	19%	9%	9%	0%	3%
377	Elec Curtailment (# of Customers)	133,537	259,014	130,224	129,384	0	35,092
378 379	Alt Diameter 12" / Otay Out / L3010 80%	5.1.4.1	5.1.4.2	5.1.4.3	5.1.4.4	5.1.4.5	5.1.4.6
380	Curtailed NG-Fired Electric Gen (MW)	0	0	140	365	0	0
381	Total Supply	3132	4256	3357	3132	3806	4087
382 383	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	486 4	0	0
383 384	Avg Elec Curtailment (MW)	0	0	0	139	0	0
385	Elec Curtailment (%)	0%	0%	0%	4%	0%	0%
386 387	Elec Curtailment (# of Customers)	0	0	0	58,403	0	0
388	Alt Diameter 12" / Otay Out / L3010 Out	5.2.4.1	5.2.4.2	5.2.4.3	5.2.4.4	5.2.4.5	5.2.4.6
389	Curtailed NG-Fired Electric Gen (MW)	562	1686	927	927	1236	1517
390	Total Supply	2570	2570	2570	2570	2570	2570
391 392	Elec Curtailment (MWh) Elec Curtailment Duration (h)	2,873 9	12,380 18	1,450 5	5,152 17	150 2	1,636 8
393	Avg Elec Curtailment (MW)	311	697	276	308	86	204
394	Elec Curtailment (%) Elec Curtailment (# of Customers)	10% 142,040	19% 262,272	9% 130,224	9% 129,384	3% 44,549	7% 94,833
395					1.50 38V	7/15/10	44 XXX

Line No.	APPLICATION 15-09-0	13 VOLUME III – COS	ST-EFFECTIVENES	S ANALYSIS (COR	RECTED FEBRUAR	Y 2017)	
1		1. Example Summer Low-EG		3. Example Winter Day MW	4. Winter 1-in-10 Year Day MW	5. Example Spring Day MW	6. Example Fall Day MW
2	A B	Dav MW C	Dav MW D	E	F	G	Н
396 397	Alternate Diameter Pipeline 16"	J	J			Ü	
398 399	Alt Diameter 16" / Otay Full / L3010 80%	6.1.1.1	6.1.1.2	6.1.1.3	6.1.1.4	6.1.1.5	6.1.1.6
400	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
401 402	Total Supply Elec Curtailment (MWh)	3132 0	4256 0	3497 0	3497 0	3806 0	4087 0
403	Elec Curtailment Duration (h)	0	0	0	0	0	0
404	Avg Elec Curtailment (MW)	0	0	0	0	0	0
405 406	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0% 0	0% 0	0% 0	0% 0	0% 0
407	Liec curtainnent (# or customers)	Ü	Ū	•	, , ,	U	· ·
408 409	Alt Diameter 16" / Otay Full / L3010 Out Curtailed NG-Fired Electric Gen (MW)	6.2.1.1 0	6.2.1.2 864	6.2.1.3 12	6.2.1.4 237	6.2.1.5 0	6.2.1.6 0
410	Total Supply	3132	3392	3485	3260	3806	4087
411	Elec Curtailment (MWh)	0	1,539	0	105	0	0
412	Elec Curtailment Duration (h)	0	9	0	2	0	0
413 414	Avg Elec Curtailment (MW) Elec Curtailment (%)	0	181 5%	0 0%	47 1%	0 0%	0 0%
415	Elec Curtailment (# of Customers)	0	68,106	0	19,607	0	0
416 417	Alt Diameter 16" / Otay Medium / L3010 80%	6.1.2.1	6.1.2.2	6.1.2.3	6.1.2.4	6.1.2.5	6.1.2.6
417	Curtailed NG-Fired Electric Gen (MW)	0	0.1.2.2	0.1.2.3	0.1.2.4	0.1.2.5	0.1.2.0
419	Total Supply	3132	4256	3497	3497	3806	4087
420	Elec Curtailment (MWh)	0	0	0	0	0	0
421 422	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0
423	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
424	Elec Curtailment (# of Customers)	0	0	0	0	0	0
425 426	Alt Diameter 16" / Otay Medium / L3010 Out	6.2.2.1	6.2.2.2	6.2.2.3	6.2.2.4	6.2.2.5	6.2.2.6
427	Curtailed NG-Fired Electric Gen (MW)	0	1013	478	703	0	241
428	Total Supply	3132	3243	3019	2794	3806	3847
429	Elec Curtailment (MWh)	0	2,953	0	2,315	0	0
430 431	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	11 281	0	9 250	0	0
432	Elec Curtailment (%)	0%	8%	0%	8%	0%	0%
433	Elec Curtailment (# of Customers)	0	105,754	0	105,273	0	0
434 435	Alt Diameter 16" / Otay Low / L3010 80%	6.1.3.1	6.1.3.2	6.1.3.3	6.1.3.4	6.1.3.5	6.1.3.6
436	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
437	Total Supply	3132	4256	3497	3497	3806	4087
438	Elec Curtailment (MWh)	0	0	0	0	0	0
439 440	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0
441	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
442 443	Elec Curtailment (# of Customers)	0	0	0	0	0	0
443 444	Alt Diameter 16" / Otay Low / L3010 Out	6.2.3.1	6.2.3.2	6.2.3.3	6.2.3.4	6.2.3.5	6.2.3.6
445	Curtailed NG-Fired Electric Gen (MW)	38	1162	927	927	561	688
446	Total Supply	3094	3094	2570	2570	3245	3399
447 448	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	4,618 12	1,450 5	5,152 17	0	0
449	Avg Elec Curtailment (MW)	0	385	276	308	0	0
450	Elec Curtailment (%)	0%	10%	9%	9%	0%	0%
451 452	Elec Curtailment (# of Customers)	0	144,719	130,224	129,384	0	0
453	Alt Diameter 16" / Otay Out / L3010 80%	6.1.4.1	6.1.4.2	6.1.4.3	6.1.4.4	6.1.4.5	6.1.4.6
454	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
455 456	Total Supply Elec Curtailment (MWh)	3132 0	4256 0	3497 0	3497 0	3806 0	4087 0
457	Elec Curtailment Duration (h)	0	0	0	0	0	0
458	Avg Elec Curtailment (MW)	0	0	0	0	0	0
459 460	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0% 0	0%	0% 0	0% 0	0%
461		•					
462	Alt Diameter 16" / Otay Out / L3010 Out	6.2.4.1	6.2.4.2	6.2.4.3	6.2.4.4	6.2.4.5	6.2.4.6
463 464	Curtailed NG-Fired Electric Gen (MW) Total Supply	225 2907	1349 2907	927 2570	927 2570	1236 2570	1517 2570
464 465	Elec Curtailment (MWh)	417	7,065	1,450	5,152	150	1,636
466	Elec Curtailment Duration (h)	5	15	5	17	2	8
467	Avg Elec Curtailment (MW)	83	487	276	308	86	204
468 469	Elec Curtailment (%) Elec Curtailment (# of Customers)	3% 38,177	13% 183,210	9% 130,224	9% 129,384	3% 44,549	7% 94,833
		,	,		,00.	,• .•	,000

Line No.	APPLICATION 15-09-0			(,	
1		1. Example Summer Low-EG	2. Example	3. Example	4. Winter 1-in-10	5. Example	6. Example Fall
•		Day MW	Dav MW	Winter Day MW	Year Day MW	Spring Day MW	Day MW
2	A B	С	D	Е	F	G	Н
470 471	Alternate Diameter Pipeline 20"						
472	· · · · · · · · · · · · · · · · · · ·						
473	Alt Diameter 20" / Otay Full / L3010 80%	20.1.1.1	20.1.1.2	20.1.1.3	20.1.1.4	20.1.1.5	20.1.1.6
474	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
475 476	Total Supply Elec Curtailment (MWh)	3132 0	4256 0	3497 0	3497 0	3806 0	4087 0
477	Elec Curtailment (MWII)	0	0	0	0	0	0
478	Avg Elec Curtailment (MW)	0	0	0	0	0	0
479	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
480 481	Elec Curtailment (# of Customers)	0	0	0	0	0	0
482	Alt Diameter 20" / Otay Full / L3010 Out	20.2.1.1	20.2.1.2	20.2.1.3	20.2.1.4	20.2.1.5	20.2.1.6
483	Curtailed NG-Fired Electric Gen (MW)	0	358	0	0	0	0
484	Total Supply	3132	3897	3497	3497	3806	4087
485	Elec Curtailment (MWh)	0	0	0	0	0	0
486 487	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0
48 <i>1</i> 488	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
489	Elec Curtailment (# of Customers)	0	0	0	0	0	0
490	A/4 Diamatan 2011 / Otan Marking (1 2004 2004	20.4.8.4	20.4.0.0	20.4.0.0	20.4.0.4	20.4.0.5	20 4-0-0
491 492	Alt Diameter 20" / Otay Medium / L3010 80% Curtailed NG-Fired Electric Gen (MW)	20.1.2.1	20.1.2.2 0	20.1.2.3 0	20.1.2.4 0	20.1.2.5 0	20.1.2.6 0
492 493	Total Supply	3132	4256	3497	3497	3806	4087
494	Elec Curtailment (MWh)	0	0	0	0	0	0
495	Elec Curtailment Duration (h)	0	0	0	0	0	0
496	Avg Elec Curtailment (MW)	0	0	0	0	0	0
497 498	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0% 0	0% 0	0% 0	0% 0	0% 0
499	Liec ourtainment (# or oustomers)	U	U	U .	U		· ·
500	Alt Diameter 20" / Otay Medium / L3010 Out	20.2.2.1	20.2.2.2	20.2.2.3	20.2.2.4	20.2.2.5	20.2.2.6
501	Curtailed NG-Fired Electric Gen (MW)	0	507	0	197	0	0
502	Total Supply	3132	3749	3497 0	3300	3806	4087
503 504	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	28 1	0	0
505	Avg Elec Curtailment (MW)	Ö	0	0	23	0	0
506	Elec Curtailment (%)	0%	0%	0%	1%	0%	0%
507	Elec Curtailment (# of Customers)	0	0	0	9,493	0	0
508 509	Alt Diameter 20" / Otay Low / L3010 80%	20.1.3.1	20.1.3.2	20.1.3.3	20.1.3.4	20.1.3.5	20.1.3.6
510	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
511	Total Supply	3132	4256	3497	3497	3806	4087
512	Elec Curtailment (MWh)	0	0	0	0	0	0
513 514	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0
515	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
516	Elec Curtailment (# of Customers)	0	0	0	0	0	0
517	A14 D	00001	22.2.2.2	22.2.2.2	22.2.4	00000	00.000
518 519	Alt Diameter 20" / Otay Low / L3010 Out Curtailed NG-Fired Electric Gen (MW)	20.2.3.1	20.2.3.2 656	20.2.3.3 432	20.2.3.4 657	20.2.3.5 56	20.2.3.6 182
520	Total Supply	3132	3600	3065	2840	3751	3905
521	Elec Curtailment (MWh)	0	297	0	1,906	0	0
522	Elec Curtailment Duration (h)	0	4	0	8	0	0
523 524	Avg Elec Curtailment (MW)	0	85	0	231 7%	0	0
524 525	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	2% 31,857	0% 0	97,165	0% 0	0% 0
526							
527	Alt Diameter 20" / Otay Out / L3010 80%	20.1.4.1	20.1.4.2	20.1.4.3	20.1.4.4	20.1.4.5	20.1.4.6
528	Curtailed NG-Fired Electric Gen (MW)	0	0	0	2407	0	0
529 530	Total Supply Elec Curtailment (MWh)	3132 0	4256 0	3497 0	3497 0	3806 0	4087 0
531	Elec Curtailment Duration (h)	0	0	0	0	0	0
532	Avg Elec Curtailment (MW)	0	0	0	0	0	0
533	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
534 535	Elec Curtailment (# of Customers)	0	0	0	0	0	0
536	Alt Diameter 20" / Otay Out / L3010 Out	20.2.4.1	20.2.4.2	20.2.4.3	20.2.4.4	20.2.4.5	20.2.4.6
537	Curtailed NG-Fired Electric Gen (MW)	0	843	927	927	787	1124
538	Total Supply	3132	3413	2570	2570	3020	2963
539	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	1,363	1,450	5,152	0	49
540 541	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	8 165	5 276	17 308	0	1 39
542	Elec Curtailment (WW)	0%	4%	9%	9%	0%	1%
543	Elec Curtailment (# of Customers)	0	62,123	130,224	129,384	0	18,018

Line No.	ALL EIGHTON 15-05-	-013 VOLOME III – CO		071117121010 (0011	NEOTED TEBROTIN	1 2017)	
1		1. Example Summer Low-EG Day MW	2. Example Summer High-EG Day MW	3. Example Winter Day MW	4. Winter 1-in-10 Year Day MW	5. Example Spring Day MW	6. Example Fall Day MW
2	A B	C	Dav WVV	E	F	G	Н
544 545 546	Alternate Diameter Pipeline 24"						
547	Alt Diameter 24" / Otay Full / L3010 80%	7.1.1.1	7.1.1.2	7.1.1.3	7.1.1.4	7.1.1.5	7.1.1.6
548	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
549 550	Total Supply Elec Curtailment (MWh)	3132 0	4256 0	3497 0	3497 0	3806 0	4087 0
551	Elec Curtailment (wwn)	0	0	0	0	0	0
552	Avg Elec Curtailment (MW)	0	0	0	0	0	0
553	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
554 555	Elec Curtailment (# of Customers)	0	0	0	0	0	0
556	Alt Diameter 24" / Otay Full / L3010 Out	7.2.1.1	7.2.1.2	7.2.1.3	7.2.1.4	7.2.1.5	7.2.1.6
557	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
558 559	Total Supply Elec Curtailment (MWh)	3132 0	4256 0	3497 0	3497 0	3806 0	4087 0
560	Elec Curtailment Duration (h)	0	0	0	0	0	0
561	Avg Elec Curtailment (MW)	0	0	0	0	0	0
562 563	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0%	0% 0	0%	0% 0	0%
564	Liec ourtainnent (# or oustomers)	v	v	-	Ū	· ·	Ü
565	Alt Diameter 24" / Otay Medium / L3010 80%	7.1.2.1	7.1.2.2	7.1.2.3	7.1.2.4	7.1.2.5	7.1.2.6
566 567	Curtailed NG-Fired Electric Gen (MW) Total Supply	3132	0 4256	0 3497	0 3497	0 3806	0 4087
568	Elec Curtailment (MWh)	0	0	0	0	0	0
569	Elec Curtailment Duration (h)	0	0	0	0	0	0
570 571	Avg Elec Curtailment (MW) Elec Curtailment (%)	0	0 0%	0 0%	0 0%	0 0%	0 0%
572	Elec Curtailment (%)	0	0	0	0	0	0
573		•	•				
574	Alt Diameter 24" / Otay Medium / L3010 Out Curtailed NG-Fired Electric Gen (MW)	7.2.2.1	7.2.2.2 0	7.2.2.3 0	7.2.2.4 0	7.2.2.5 0	7.2.2.6
575 576	Total Supply	3132	4256	3497	3497	3806	4087
577	Elec Curtailment (MWh)	0	0	0	0	0	0
578	Elec Curtailment Duration (h)	0	0	0	0	0	0
579 580	Avg Elec Curtailment (MW) Elec Curtailment (%)	0%	0%	0 0%	0%	0 0%	0 0%
581	Elec Curtailment (# of Customers)	0	0	0	0	0	0
582	Alt Diameter 24" / Otay Low / L3010 80%	7.1.3.1	7.1.3.2	7.1.3.3	7.1.3.4	7.1.3.5	7.1.3.6
583 584	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
585	Total Supply	3132	4256	3497	3497	3806	4087
586	Elec Curtailment (MWh)	0	0	0	0	0	0
587 588	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0
589	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
590	Elec Curtailment (# of Customers)	0	0	0	0	0	0
591 592	Alt Diameter 24" / Otay Low / L3010 Out	7.2.3.1	7.2.3.2	7.2.3.3	7.2.3.4	7.2.3.5	7.2.3.6
593	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
594	Total Supply	3132	4256	3497	3497	3806	4087
595 596	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0
597	Avg Elec Curtailment (MW)	0	0	0	0	0	0
598	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0%	0% 0	0%	0% 0	0%
599 600	Elec Curtailment (# or Customers)	U	U	U	U	U	U
601	Alt Diameter 24" / Otay Out / L3010 80%	7.1.4.1	7.1.4.2	7.1.4.3	7.1.4.4	7.1.4.5	7.1.4.6
602	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
603 604	Total Supply Elec Curtailment (MWh)	3132 0	4256 0	3497 0	3497 0	3806 0	4087 0
605	Elec Curtailment Duration (h)	0	0	0	0	0	0
606	Avg Elec Curtailment (MW)	0	0	0	0	0	0
607 608	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0%	0%	0%	0% 0	0%
609		•	•				
610	Alt Diameter 24" / Otay Out / L3010 Out	7.2.4.1	7.2.4.2	7.2.4.3	7.2.4.4	7.2.4.5	7.2.4.6
611 612	Curtailed NG-Fired Electric Gen (MW) Total Supply	3132	0 4256	3076	646 2851	0 3806	281 3806
613	Elec Curtailment (MWh)	0	0	0	1,819	0	0
614	Elec Curtailment Duration (h)	0	0	0	8	0	0
615 616	Avg Elec Curtailment (MW) Elec Curtailment (%)	0	0 0%	0 0%	227 7%	0 0%	0 0%
617	Elec Curtailment (%) Elec Curtailment (# of Customers)	0	0	0	95,660	0	0

Line No.		013 VOLUME III – COS		071117121010 (0011	NEOTED TEBROAR	(1 2017)	
1			2. Example Summer High-EG	3. Example Winter Day MW	4. Winter 1-in-10 Year Day MW	5. Example Spring Day MW	6. Example Fall Day MW
2	A B	Dav MW C	Dav MW D	E	F	G	Н
618		•					
619 620	Alternate Diameter Pipeline 30"						
621	Alt Diameter 30" / Otay Full / L3010 80%	8.1.1.1	8.1.1.2	8.1.1.3	8.1.1.4	8.1.1.5	8.1.1.6
622 623	Curtailed NG-Fired Electric Gen (MW) Total Supply	0 3132	0 4256	0 3497	0 3497	0 3806	0 4087
624	Elec Curtailment (MWh)	0	0	0	0	0	0
625 626	Elec Curtailment Duration (h)	0	0	0	0	0	0
627	Avg Elec Curtailment (MW) Elec Curtailment (%)	0%	0 0%	0 0%	0 0%	0 0%	0
628	Elec Curtailment (# of Customers)	0	0	0	0	0	0
629 630	Alt Diameter 30" / Otay Full / L3010 Out	8.2.1.1	8.2.1.2	8.2.1.3	8.2.1.4	8.2.1.5	8.2.1.6
631	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
632	Total Supply	3132 0	4256 0	3497 0	3497 0	3806 0	4087
633 634	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0
635	Avg Elec Curtailment (MW)	0	0	0	0	0	0
636 637	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0% 0	0% 0	0%	0%	0%
638						•	
639 640	Alt Diameter 30" / Otay Medium / L3010 80% Curtailed NG-Fired Electric Gen (MW)	8.1.2.1 0	8.1.2.2 0	8.1.2.3 0	8.1.2.4 0	8.1.2.5 0	8.1.2.6 0
641	Total Supply	3132	4256	3497	3497	3806	4087
642	Elec Curtailment (MWh)	0	0	0	0	0	0
643 644	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0
645	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
646 647	Elec Curtailment (# of Customers)	0	0	0	0	0	0
648	Alt Diameter 30" / Otay Medium / L3010 Out	8.2.2.1	8.2.2.2	8.2.2.3	8.2.2.4	8.2.2.5	8.2.2.6
649	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
650 651	Total Supply Elec Curtailment (MWh)	3132 0	4256 0	3497 0	3497 0	3806 0	4087 0
652	Elec Curtailment Duration (h)	0	0	0	0	0	0
653 654	Avg Elec Curtailment (MW) Elec Curtailment (%)	0	0 0%	0 0%	0 0%	0 0%	0 0%
655	Elec Curtailment (# of Customers)	0	0	0	0	0	0
656 657	Alt Diameter 30" / Otay Low / L3010 80%	8.1.3.1	8.1.3.2	8.1.3.3	8.1.3.4	8.1.3.5	8.1.3.6
658	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
659	Total Supply	3132	4256	3497	3497	3806	4087
660 661	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0
662	Avg Elec Curtailment (MW)	0	0	0	0	0	0
663 664	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0% 0	0% 0	0%	0%	0%
665					•	•	
666 667	Alt Diameter 30" / Otay Low / L3010 Out Curtailed NG-Fired Electric Gen (MW)	8.2.3.1	8.2.3.2 0	8.2.3.3 0	8.2.3.4 0	8.2.3.5 0	8.2.3.6 0
668	Total Supply	3132	4256	3497	3497	3806	4087
669	Elec Curtailment (MWh)	0	0	0	0	0	0
670 671	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0
672	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
673 674	Elec Curtailment (# of Customers)	0	0	0	0	0	0
675	Alt Diameter 30" / Otay Out / L3010 80%	8.1.4.1	8.1.4.2	8.1.4.3	8.1.4.4	8.1.4.5	8.1.4.6
676	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
677 678	Total Supply Elec Curtailment (MWh)	3132 0	4256 0	3497 0	3497 0	3806	4087 0
679	Elec Curtailment Duration (h)	0	0	0	0	0	0
680 681	Avg Elec Curtailment (MW) Elec Curtailment (%)	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%
682	Elec Curtailment (# of Customers)	0	0	0	0	0	0
683 684	Alt Diameter 30" / Otay Out / L3010 Out	8.2.4.1	8.2.4.2	8.2.4.3	8.2.4.4	8.2.4.5	8.2.4.6
685	Curtailed NG-Fired Electric Gen (MW)	0.2.4.1	0	0	0	0	0
686	Total Supply	3132	4256	3497	3497	3806	4087
687 688	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0
689	Avg Elec Curtailment (MW)	0	0	0	0	0	0
690 691	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0% 0	0% 0	0%	0%	0%
091	Lieu oditalililetti (# 01 odstolllets)	U	V	J	J	U	U

Line No		·013 VOLUME III – COS		S ANALYSIS (COR	RECTED FEBRUAR	(Y 2017)	
1		1. Example Summer Low-EG	2. Example Summer High-EG	3. Example Winter Day MW	4. Winter 1-in-10 Year Day MW	5. Example Spring Day MW	6. Example Fall Day MW
2	A B	Dav MW C	Dav MW D	E	F	G G	H
692 693	Alternate Diameter Pipeline 42"		-	_		,	
694 695	Alt Diameter 42" / Otay Full / L3010 80%	9.1.1.1	9.1.1.2	9.1.1.3	9.1.1.4	9.1.1.5	9.1.1.6
696	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
697 698	Total Supply Elec Curtailment (MWh)	3132 0	4256 0	3497 0	3497 0	3806 0	4087 0
699	Elec Curtailment Duration (h)	0	0	0	0	0	0
700 701	Avg Elec Curtailment (MW) Elec Curtailment (%)	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%
702	Elec Curtailment (# of Customers)	0	0	0	0	0	0
703 704	Alt Diameter 42" / Otay Full / L3010 Out	9.2.1.1	9.2.1.2	9.2.1.3	9.2.1.4	9.2.1.5	9.2.1.6
705	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
706	Total Supply	3132	4256	3497	3497	3806	4087
707 708	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0
709	Avg Elec Curtailment (MW)	0	0	0	0	0	0
710 711	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0% 0	0%	0% 0	0% 0	0% 0
712							
713 714	Alt Diameter 42" / Otay Medium / L3010 80% Curtailed NG-Fired Electric Gen (MW)	9.1.2.1	9.1.2.2 0	9.1.2.3 0	9.1.2.4 0	9.1.2.5 0	9.1.2.6 0
715	Total Supply	3132	4256	3497	3497	3806	4087
716	Elec Curtailment (MWh)	0	0	0	0	0	0
717 718	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0
719	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
720 721	Elec Curtailment (# of Customers)	0	0	0	0	0	0
722	Alt Diameter 42" / Otay Medium / L3010 Out	9.2.2.1	9.2.2.2	9.2.2.3	9.2.2.4	9.2.2.5	9.2.2.6
723 724	Curtailed NG-Fired Electric Gen (MW) Total Supply	0 3132	0 4256	0 3497	0 3497	0 3806	0 4087
725	Elec Curtailment (MWh)	0	0	0	0	0	0
726	Elec Curtailment Duration (h)	0	0	0	0	0	0
727 728	Avg Elec Curtailment (MW) Elec Curtailment (%)	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%
729	Elec Curtailment (# of Customers)	0	0	0	0	0	0
730 731	Alt Diameter 42" / Otay Low / L3010 80%	9.1.3.1	9.1.3.2	9.1.3.3	9.1.3.4	9.1.3.5	9.1.3.6
732	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
733 734	Total Supply Elec Curtailment (MWh)	3132 0	4256 0	3497 0	3497 0	3806 0	4087 0
734 735	Elec Curtailment (MWII)	0	0	0	0	0	0
736	Avg Elec Curtailment (MW)	0	0	0	0	0	0
737 738	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0% 0	0% 0	0% 0	0% 0	0% 0
739							
740 741	Alt Diameter 42" / Otay Low / L3010 Out Curtailed NG-Fired Electric Gen (MW)	9.2.3.1	9.2.3.2 0	9.2.3.3 0	9.2.3.4 0	9.2.3.5	9.2.3.6 0
742	Total Supply	3132	4256	3497	3497	3806	4087
743 744	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0
744	Avg Elec Curtailment (MW)	0	0	0	0	0	0
746	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
747 748	Elec Curtailment (# of Customers)	U	0	0	0	0	0
749	Alt Diameter 42" / Otay Out / L3010 80%	9.1.4.1	9.1.4.2	9.1.4.3	9.1.4.4	9.1.4.5	9.1.4.6
750 751	Curtailed NG-Fired Electric Gen (MW) Total Supply	0 3132	0 4256	0 3497	0 3497	0 3806	0 4087
752	Elec Curtailment (MWh)	0	0	0	0	0	0
753 754	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0
754 755	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
756	Elec Curtailment (# of Customers)	0	0	0	0	0	0
757 758	Alt Diameter 42" / Otay Out / L3010 Out	9.2.4.1	9.2.4.2	9.2.4.3	9.2.4.4	9.2.4.5	9.2.4.6
759	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
760 761	Total Supply Elec Curtailment (MWh)	3132 0	4256 0	3497 0	3497 0	3806 0	4087 0
762	Elec Curtailment Duration (h)	0	0	0	0	0	0
763	Avg Elec Curtailment (MW)	0	0	0	0	0	0
764 765	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0% 0	0% 0	0.0%	0% 0	0% 0

	1. Example	2. Example Summer High-EG	3. Example	4. Winter 1-in-10	5. Example	6. Example Fa
	Dav MW	Dav MW	Winter Day MW	Year Day MW	Spring Day MW	Day MW
A B	С	D	Е	F	G	Н
L1600 In-Kind Replacement						
L1600 In-Kind / Otay Full / L3010 80%	10.1.1.1	10.1.1.2	10.1.1.3	10.1.1.4	10.1.1.5	10.1.1.6
Curtailed NG-Fired Electric Gen (MW) Total Supply	3132	0 4256	0 3497	0 3497	3806	0 4087
Elec Curtailment (MWh)	0	0	0	0	0	0
Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0
Elec Curtailment (WV)	0%	0%	0%	0%	0%	0%
Elec Curtailment (# of Customers)	0	0	0	0	0	0
L1600 In-Kind / Otay Full / L3010 Out	10.2.1.1	10.2.1.2	10.2.1.3	10.2.1.4	10.2.1.5	10.2.1.6
Curtailed NG-Fired Electric Gen (MW)	0	864	12	237	0	0
Total Supply Elec Curtailment (MWh)	3132 0	3392 1,539	3485 0	3260 105	3806 0	4087
Elec Curtailment Duration (h)	0	9	0	2	0	0
Avg Elec Curtailment (MW) Elec Curtailment (%)	0%	181 5%	0 0%	47 1%	0 0%	0 0%
Elec Curtailment (#)	0	68,106	0	19,607	0	0
	10.1.2.1	10.1.2.2	10.1.2.3	10.1.2.4	10.1.2.5	10.1.2.6
L1600 In-Kind / Otay Medium / L3010 80% Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	10.1.2.6 0
Total Supply	3132	4256	3497	3497	3806	4087
Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0
Avg Elec Curtailment (MW)	0	0	0	0	0	0
Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0%	0%	0%	0%	0%
Elec Curtailment (# or Customers)	U	U	0	0	U	U
L1600 In-Kind / Otay Medium / L3010 Out	10.2.2.1	10.2.2.2	10.2.2.3	10.2.2.4	10.2.2.5 0	10.2.2.6
Curtailed NG-Fired Electric Gen (MW) Total Supply	0 3132	1013 3243	478 3019	703 2794	3806	241 3847
Elec Curtailment (MWh)	0	2,953	0	2,315	0	0
Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	11 281	0	9 250	0	0
Elec Curtailment (%)	0%	8%	0%	8%	0%	0%
Elec Curtailment (# of Customers)	0	105,754	0	105,273	0	0
L1600 In-Kind / Otay Low / L3010 80%	10.1.3.1	10.1.3.2	10.1.3.3	10.1.3.4	10.1.3.5	10.1.3.6
Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
Total Supply Elec Curtailment (MWh)	3132 0	4256 0	3497 0	3497 0	3806 0	4087 0
Elec Curtailment Duration (h)	0	0	0	0	0	0
Avg Elec Curtailment (MW) Elec Curtailment (%)	0	0	0 0%	0 0%	0 0%	0 0%
Elec Curtailment (# of Customers)	0	0	0	0	0	0
L1600 In-Kind / Otay Low / L3010 Out	10.2.3.1	10.2.3.2	10.2.3.3	10.2.3.4	10.2.3.5	10.2.3.6
Curtailed NG-Fired Electric Gen (MW)	38	1162	927	927	561	688
Total Supply	3094	3094	2570	2570	3245	3399
Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	4,618 12	1,450 5	5,152 17	0	0
Avg Elec Curtailment (MW)	0	385	276	308	0	0
Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	10% 144,719	9% 130,224	9% 129,384	0%	0% 0
			· ·	•		
L1600 In-Kind / Otay Out / L3010 80% Curtailed NG-Fired Electric Gen (MW)	10.1.4.1	10.1.4.2	10.1.4.3	10.1.4.4	10.1.4.5	10.1.4.6
Total Supply	3132	4256	3497	3497	3806	4087
Elec Curtailment (MWh)	0	0	0	0	0	0
Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0
Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
Elec Curtailment (# of Customers)	0	0	0	0	0	0
L1600 In-Kind / Otay Out / L3010 Out	10.2.4.1	10.2.4.2	10.2.4.3	10.2.4.4	10.2.4.5	10.2.4.6
Curtailed NG-Fired Electric Gen (MW) Total Supply	225 2907	1349 2907	927 2570	927 2570	1236 2570	1517 2570
Elec Curtailment (MWh)	417	7,065	1,450	5,152	150	1,636
Elec Curtailment Duration (h)	5	15	5	17	2	8
Avg Elec Curtailment (MW) Elec Curtailment (%)	83 3%	487 13%	276 9%	308 9%	86 3%	204 7%
Elec Curtailment (# of Customers)	38,177	183,210	130,224	129,384	44,549	94,833

Line No.							
		1. Example	2. Example	3. Example	4. Winter 1-in-10	5. Example	6. Example Fall
1		Day MW	Summer High-EG Dav MW	Winter Day MW	Year Day MW	Spring Day MW	Day MW
2	A B	C	Dav Mvv D	E	F	G	н
840	n 5	· ·	J				••
841	Otay Mesa Alternate						
842							
843	Otay Mesa Alternate / Otay Full / L3010 80% Curtailed NG-Fired Electric Gen (MW)	11.1.1.1	11.1.1.2 0	11.1.1.3 0	11.1.1.4 0	11.1.1.5 0	11.1.1.6 0
844 845	Total Supply	3132	4256	3497	3497	3806	4087
846	Elec Curtailment (MWh)	0	0	0	0	0	0
847	Elec Curtailment Duration (h)	0	0	0	0	0	0
848	Avg Elec Curtailment (MW)	0	0	0	0	0	0
849	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
	Elec Curtailment (# of Customers)	0	0	0	0	0	0
851 852	Otay Mesa Alternate / Otay Full / L3010 Out	11.2.1.1	11.2.1.2	11.2.1.3	11.2.1.4	11.2.1.5	11.2.1.6
853	Curtailed NG-Fired Electric Gen (MW)	0	1686	912	927	343	710
854	Total Supply	3132	2570	2586	2570	3463	3377
855	Elec Curtailment (MWh)	0	12,380	1,368	5,152	0	0
856	Elec Curtailment Duration (h)	0	18	5	17	0	0
857	Avg Elec Curtailment (MW)	0	697	261	308	0	0 0%
858 859	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	19% 262,272	9% 122,837	9% 129,384	0% 0	0%
860	Liec Curtailinent (# or Customers)	U	202,212	122,007	123,304	<u> </u>	U
861	Otay Mesa Alternate / Otay Medium / L3010 80%	11.1.2.1	11.1.2.2	11.1.2.3	11.1.2.4	11.1.2.5	11.1.2.6
862	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
863	Total Supply	3132	4256	3497	3497	3806	4087
864	Elec Curtailment (MWh)	0	0	0	0	0	0
865 866	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0
867	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
	Elec Curtailment (# of Customers)	0	0	0	0	0	0
869	<u> </u>	•					
	Otay Mesa Alternate / Otay Medium / L3010 Out	11.2.2.1	11.2.2.2	11.2.2.3	11.2.2.4	11.2.2.5	11.2.2.6
871	Curtailed NG-Fired Electric Gen (MW)	249	1686	927	927	820	1140
872 873	Total Supply Elec Curtailment (MWh)	2883 542	2570 12,380	2570 1,450	2570 5,152	2987 0	2947 70
874	Elec Curtailment (MWH)	5	18	5	17	0	2
875	Avg Elec Curtailment (MW)	103	697	276	308	0	46
876	Elec Curtailment (%)	3%	19%	9%	9%	0%	2%
	Elec Curtailment (# of Customers)	47,219	262,272	130,224	129,384	0	21,550
878 879	Otay Mesa Alternate / Otay Low / L3010 80%	11.1.3.1	11.1.3.2	11.1.3.3	11.1.3.4	11.1.3.5	11.1.3.6
880	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
881	Total Supply	3132	4256	3497	3497	3806	4087
882	Elec Curtailment (MWh)	0	0	0	0	0	0
883	Elec Curtailment Duration (h)	0	0	0	0	0	0
884	Avg Elec Curtailment (MW)	0	0	0	0	0	0
885	Elec Curtailment (%)	0%	0%	0%	0%	0% 0	0%
886 887	Elec Curtailment (# of Customers)	U	U	U	U	U	U
888	Otay Mesa Alternate / Otay Low / L3010 Out	11.2.3.1	11.2.3.2	11.2.3.3	11.2.3.4	11.2.3.5	11.2.3.6
889	Curtailed NG-Fired Electric Gen (MW)	562	1686	927	927	1236	1517
	Total Supply	2570	2570	2570	2570	2570	2570
891	Elec Curtailment (MWh)	2,873	12,380	1,450	5,152	150	1,636
892 893	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	9 311	18 697	<u>5</u> 276	17 308	2 86	8 204
894	Elec Curtailment (%)	10%	19%	9%	9%	3%	7%
	Elec Curtailment (# of Customers)	142,040	262,272	130,224	129,384	44,549	94,833
896		,,,	.,		.,		
	Otay Mesa Alternate / Otay Out / L3010 80%	11.1.4.1	11.1.4.2	11.1.4.3	11.1.4.4	11.1.4.5	11.1.4.6
	Curtailed NG-Fired Electric Gen (MW)	0	112	534	759	56 2750	393
899 900	Total Supply Elec Curtailment (MWh)	3132 0	4143 0	2963 1	2739 2,881	3750 0	3694 0
901	Elec Curtailment (MWYI) Elec Curtailment Duration (h)	0	0	0	11	0	0
902	Avg Elec Curtailment (MW)	0	0	5	268	0	0
903	Elec Curtailment (%)	0%	0%	0%	8%	0%	0%
	Elec Curtailment (# of Customers)	0	0	2,440	112,734	0	0
905	Otay Mesa Alternate / Otay Out / L3010 Out	11.2.4.1	11.2.4.2	11.2.4.3	11.2.4.4	11.2.4.5	11.2.4.6
	Curtailed NG-Fired Electric Gen (MW)	11.2.4.1 562	11.2.4.2 1686	927	927	11.2.4.5	11.2.4.6 1517
908	Total Supply	2570	2570	2570	2570	2570	2570
909	Elec Curtailment (MWh)	2,873	12,380	1,450	5,152	150	1,636
910	Elec Curtailment Duration (h)	9	18	5	17	2	8
911	Avg Elec Curtailment (MW)	311	697	276	308	86	204
912	Elec Curtailment (%)	10%	19%	9%	9%	3%	7%
913	Elec Curtailment (# of Customers)	142,040	262,272	130,224	129,384	44,549	94,833

Line No.	AFFLICATION 13-03	-013 VOLUME III – CO		3 ANALTSIS (COR	RECTED TEBROAR	1 2017)	
1			2. Example Summer High-EG	3. Example Winter Day MW	4. Winter 1-in-10 Year Day MW	5. Example Spring Day MW	6. Example Fall Day MW
2	A B	Dav MW C	Dav MW D	E	F	G	Н
914 915	LNG Storage Alternate						
916 917	LNG Storage / Otay Full / L3010 80%	13.1.1.1	13.1.1.2	13.1.1.3	13.1.1.4	13.1.1.5	13.1.1.6
918	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
919	Total Supply	3132	4256	3497	3497	3806	4087
920	Elec Curtailment (MWh)	0	0	0	0	0	0
921 922	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0
923	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
924	Elec Curtailment (# of Customers)	0	0	0	0	0	0
925							
926	LNG Storage / Otay Full / L3010 Out Curtailed NG-Fired Electric Gen (MW)	13.2.1.1	13.2.1.2 0	13.2.1.3 0	13.2.1.4 0	13.2.1.5	13.2.1.6
927 928	Total Supply	3132	4256	3497	3497	3806	0 4087
929	Elec Curtailment (MWh)	0	0	0	0	0	0
930	Elec Curtailment Duration (h)	0	0	0	0	0	0
931	Avg Elec Curtailment (MW)	0	0	0	0	0	0
932 933	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0%	0% 0	0%	0% 0	0%
934	Elec Curtaiment (# or Customers)	U	U		U	•	· ·
935	LNG Storage / Otay Medium / L3010 80%	13.1.2.1	13.1.2.2	13.1.2.3	13.1.2.4	13.1.2.5	13.1.2.6
936	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
937 938	Total Supply Elec Curtailment (MWh)	3132 0	4256 0	3497 0	3497 0	3806 0	4087 0
939	Elec Curtailment Duration (h)	0	0	0	0	0	0
940	Avg Elec Curtailment (MW)	0	0	0	0	0	0
941	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
942	Elec Curtailment (# of Customers)	0	0	0	0	0	0
943 944	LNG Storage / Otay Medium / L3010 Out	13.2.2.1	13.2.2.2	13.2.2.3	13.2.2.4	13.2.2.5	13.2.2.6
945	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
946	Total Supply	3132	4256	3497	3497	3806	4087
947	Elec Curtailment (MWh)	0	0	0	0	0	0
948 949	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0
950	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
951	Elec Curtailment (# of Customers)	0	0	0	0	0	0
952	LNG Storage / Otay Low / L3010 80%	13.1.3.1	13.1.3.2	13.1.3.3	13.1.3.4	13.1.3.5	13.1.3.6
953 954	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
955	Total Supply	3132	4256	3497	3497	3806	4087
956	Elec Curtailment (MWh)	0	0	0	0	0	0
957	Elec Curtailment Duration (h)	0	0	0	0	0	0
958 959	Avg Elec Curtailment (MW) Elec Curtailment (%)	0	0 0%	0 0%	0	0 0%	0 0%
960	Elec Curtailment (# of Customers)	0	0	0	0	0	0
961		•					
962	LNG Storage / Otay Low / L3010 Out	13.2.3.1	13.2.3.2	13.2.3.3 0	13.2.3.4	13.2.3.5 0	13.2.3.6
963 964	Curtailed NG-Fired Electric Gen (MW) Total Supply	3132	4256	3497	3497	3806	4087
965	Elec Curtailment (MWh)	0	0	0	0	0	0
966	Elec Curtailment Duration (h)	0	0	0	0	0	0
967	Avg Elec Curtailment (MW)	0	0	0	0	0	0
968 969	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0%	0% 0	0%	0% 0	0%
970			, ,	,	, ,		J
971	LNG Storage / Otay Out / L3010 80%	13.1.4.1	13.1.4.2	13.1.4.3	13.1.4.4	13.1.4.5	13.1.4.6
972	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
973 974	Total Supply Elec Curtailment (MWh)	3132 0	4256 0	3497 0	3497 0	3806 0	4087 0
974	Elec Curtailment Duration (h)	0	0	0	0	0	0
976	Avg Elec Curtailment (MW)	0	0	0	0	0	0
977	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
978 979	Elec Curtailment (# of Customers)	0	0	0	0	0	0
980	LNG Storage / Otay Out / L3010 Out	13.2.4.1	13.2.4.2	13.2.4.3	13.2.4.4	13.2.4.5	13.2.4.6
981	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
982	Total Supply	3132	4256	3497	3497	3806	4087
983 984	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0
985	Avg Elec Curtailment (MW)	0	0	0	0	0	0
986	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
987	Elec Curtailment (# of Customers)	0	0	0	0	0	0

Line No.	ALL EIGHTON 15-05-	013 VOLOME III – CO		O ANALTOIO (CON	RECTED LEDICOAL	1 2017)	
1		1. Example Summer Low-EG Day MW	2. Example Summer High-EG Day MW	3. Example Winter Day MW	4. Winter 1-in-10 Year Day MW	5. Example Spring Day MW	6. Example Fall Day MW
2	A B	C	Dav WVV	E	F	G	н
988 989 990	Alt Energy Alternate (Grid-Scale)						
991	Alt Energy (Grid) / Otay Full / L3010 80%	14.1.1.1	14.1.1.2	14.1.1.3	14.1.1.4	14.1.1.5	14.1.1.6
992	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
993 994	Total Supply Elec Curtailment (MWh)	4818 0	5942 0	5183 0	5183 0	5492 0	5773 0
995	Elec Curtailment Duration (h)	0	0	0	0	0	0
996	Avg Elec Curtailment (MW)	0	0	0	0	0	0
997 998	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0% 0	0% 0	0% 0	0% 0	0%
999	Elec Curtaiment (# 01 Customers)	U	Ū	•	· ·	Ů.	Ū
1000	Alt Energy (Grid) / Otay Full / L3010 Out	14.2.1.1	14.2.1.2	14.2.1.3	14.2.1.4	14.2.1.5	14.2.1.6
1001 1002	Curtailed NG-Fired Electric Gen (MW)	4818	1686 4256	912 4272	927	343 5149	710
1002	Total Supply Elec Curtailment (MWh)	0	0	0	4256 0	0	5063 0
1004	Elec Curtailment Duration (h)	0	0	0	0	0	0
1005	Avg Elec Curtailment (MW)	0	0	0	0	0	0
1006 1007	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0%	0% 0	0%	0% 0	0%
1008							
1009	Alt Energy (Grid) / Otay Medium / L3010 80%	14.1.2.1	14.1.2.2 0	14.1.2.3 0	14.1.2.4 0	14.1.2.5 0	14.1.2.6 0
1010 1011	Curtailed NG-Fired Electric Gen (MW) Total Supply	0 4818	5942	5183	5183	5492	5773
1012	Elec Curtailment (MWh)	0	0	0	0	0	0
1013	Elec Curtailment Duration (h)	0	0	0	0	0	0
1014 1015	Avg Elec Curtailment (MW) Elec Curtailment (%)	0	0 0%	0 0%	0 0%	0 0%	0 0%
1016	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1017		44004	44000			// 22 2	// 0.0.0
1018 1019	Alt Energy (Grid) / Otay Medium / L3010 Out Curtailed NG-Fired Electric Gen (MW)	14.2.2.1 249	14.2.2.2 1686	14.2.2.3 927	14.2.2.4 927	14.2.2.5 820	14.2.2.6 1140
1019	Total Supply	4569	4256	4256	4256	4672	4633
1021	Elec Curtailment (MWh)	0	0	0	0	0	0
1022 1023	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0
1023	Elec Curtailment (WW)	0%	0%	0%	0%	0%	0%
1025	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1026 1027	Alt Energy (Grid) / Otay Low / L3010 80%	14.1.3.1	14.1.3.2	14.1.3.3	14.1.3.4	14.1.3.5	14.1.3.6
1027	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1029	Total Supply	4818	5942	5183	5183	5492	5773
1030 1031	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0
1031	Avg Elec Curtailment (MW)	0	0	0	0	0	0
1033	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
1034 1035	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1036	Alt Energy (Grid) / Otay Low / L3010 Out	14.2.3.1	14.2.3.2	14.2.3.3	14.2.3.4	14.2.3.5	14.2.3.6
1037	Curtailed NG-Fired Electric Gen (MW)	562	1686	927	927	1236	1517
1038 1039	Total Supply Elec Curtailment (MWh)	4256 0	4256 0	4256 0	4256 0	4256 0	4256 0
1040	Elec Curtailment Duration (h)	0	0	0	0	0	0
1041	Avg Elec Curtailment (MW)	0	0	0	0	0	0
1042 1043	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0%	0% 0	0%	0% 0	0%
1044							
1045	Alt Energy (Grid) / Otay Out / L3010 80%	14.1.4.1	14.1.4.2	14.1.4.3	14.1.4.4	14.1.4.5	14.1.4.6
1046 1047	Curtailed NG-Fired Electric Gen (MW) Total Supply	0 4818	112 5829	534 4649	759 4424	56 5436	393 5380
1047	Elec Curtailment (MWh)	0	0	0	0	0	0
1049	Elec Curtailment Duration (h)	0	0	0	0	0	0
1050 1051	Avg Elec Curtailment (MW) Elec Curtailment (%)	0%	0	0 0%	0 0%	0 0%	0 0%
1051	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1053	,	•					
1054 1055	Alt Energy (Grid) / Otay Out / L3010 Out Curtailed NG-Fired Electric Gen (MW)	14.2.4.1 562	14.2.4.2 1686	14.2.4.3 927	14.2.4.4 927	14.2.4.5 1236	14.2.4.6 1517
1055	Total Supply	4256	4256	4256	4256	4256	4256
1057	Elec Curtailment (MWh)	0	0	0	0	0	0
1058	Elec Curtailment Duration (h)	0	0	0	0	0	0
1059 1060	Avg Elec Curtailment (MW) Elec Curtailment (%)	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%
1061	Elec Curtailment (# of Customers)	0	0	0	0	0	0

Line No.	APPLICATION 15-09-013 VOLUME III – COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 2017) ine No.							
1		1. Example Summer Low-EG	2. Example Summer High-EG	3. Example Winter Day MW	4. Winter 1-in-10 Year Day MW	5. Example Spring Day MW	6. Example Fall Day MW	
2	A B	Dav MW C	Dav MW D	E	F	G G	H	
1062		U	ъ		r	G	. "	
1063 1064	Alt Energy Alternate (Smaller-Scale)							
1065	Alt Energy (Small) / Otay Full / L3010 80%	21.1.1.1	21.1.1.2	21.1.1.3	21.1.1.4	21.1.1.5	21.1.1.6	
1066 1067	Curtailed NG-Fired Electric Gen (MW)	0 4818	0 5942	0 5183	0 5183	0 5492	0 5773	
1067	Total Supply Elec Curtailment (MWh)	0	0	0	0	0	0	
1069	Elec Curtailment Duration (h)	0	0	0	0	0	0	
1070 1071	Avg Elec Curtailment (MW) Elec Curtailment (%)	0 0%	0%	0 0%	0 0%	0 0%	0 0%	
1072	Elec Curtailment (# of Customers)	0	0	0	0	0	0	
1073 1074	Alt Energy (Small) / Otay Full / L3010 Out	21.2.1.1	21.2.1.2	21.2.1.3	21.2.1.4	21.2.1.5	21.2.1.6	
1075	Curtailed NG-Fired Electric Gen (MW)	0	1686	912	927	343	710	
1076 1077	Total Supply Elec Curtailment (MWh)	4818 0	4256 0	4272 0	4256 0	5149 0	5063 0	
1078	Elec Curtailment Duration (h)	0	0	0	0	0	0	
1079 1080	Avg Elec Curtailment (MW) Elec Curtailment (%)	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	
1081	Elec Curtailment (# of Customers)	0	0	0	0	0	0	
1082 1083	Alt Energy (Small) / Otay Medium / L3010 80%	21.1.2.1	21.1.2.2	21.1.2.3	21.1.2.4	21.1.2.5	21.1.2.6	
1084	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0	
1085	Total Supply	4818	5942	5183	5183	5492	5773	
1086 1087	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0	
1088	Avg Elec Curtailment (MW)	0	0	0 0%	0	0	0	
1089 1090	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0% 0	0%	0%	0% 0	0% 0	
1091		24.0.0.4	24.2.2.2	24.2.2.2	24.2.2.4	04.0.0.5	04.0.0.0	
1092 1093	Alt Energy (Small) / Otay Medium / L3010 Out Curtailed NG-Fired Electric Gen (MW)	21.2.2.1 249	21.2.2.2 1686	21.2.2.3 927	21.2.2.4 927	21.2.2.5 820	21.2.2.6 1140	
1094	Total Supply	4569	4256	4256	4256	4672	4633	
1095 1096	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0	
1097	Avg Elec Curtailment (MW)	0	0	0	0	0	0	
1098 1099	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0% 0	0% 0	0% 0	0% 0	0% 0	
1100								
1101 1102	Alt Energy (Small) / Otay Low / L3010 80% Curtailed NG-Fired Electric Gen (MW)	21.1.3.1 0	21.1.3.2 0	21.1.3.3 0	21.1.3.4 0	21.1.3.5 0	21.1.3.6	
1103	Total Supply	4818	5942	5183	5183	5492	5773	
1104 1105	Elec Curtailment (MWh)	0	0	0	0	0	0	
1105	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0	
1107	Elec Curtailment (%)	0%	0% 0	0% 0	0% 0	0% 0	0% 0	
1108 1109	Elec Curtailment (# of Customers)	•						
1110	Alt Energy (Small) / Otay Low / L3010 Out Curtailed NG-Fired Electric Gen (MW)	21.2.3.1	21.2.3.2	21.2.3.3 927	21.2.3.4	21.2.3.5 1236	21.2.3.6	
1111 1112	Total Supply	562 4256	1686 4256	4256	927 4256	4256	1517 4256	
1113	Elec Curtailment (MWh)	0	0	0	0	0	0	
1114 1115	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0	
1116	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%	
1117 1118	Elec Curtailment (# of Customers)	0	0	0	0	0	0	
1119	Alt Energy (Small) / Otay Out / L3010 80%	21.1.4.1	21.1.4.2	21.1.4.3	21.1.4.4	21.1.4.5	21.1.4.6	
1120 1121	Curtailed NG-Fired Electric Gen (MW) Total Supply	0 4818	112 5829	534 4649	759 4424	56 5436	393 5380	
1122	Elec Curtailment (MWh)	0	0	0	0	0	0	
1123 1124	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0	
1125	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%	
1126 1127	Elec Curtailment (# of Customers)	0	0	0	0	0	0	
1128	Alt Energy (Small) / Otay Out / L3010 Out	21.2.4.1	21.2.4.2	21.2.4.3	21.2.4.4	21.2.4.5	21.2.4.6	
1129 1130	Curtailed NG-Fired Electric Gen (MW) Total Supply	562 4256	1686 4256	927 4256	927 4256	1236 4256	1517 4256	
1131	Elec Curtailment (MWh)	0	0	0	0	0	0	
1132 1133	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0	
1134	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%	
1135	Elec Curtailment (# of Customers)	0	0	0	0	0	0	

Line No.	AFFEICATION 15-05-	013 VOLOME III – CO		3 ANALI 313 (COR	RECTED LEBROAR	1 2017)	
1			2. Example Summer High-EG	3. Example Winter Day MW	4. Winter 1-in-10 Year Day MW	5. Example Spring Day MW	6. Example Fall Day MW
2	A B	Dav MW C	Dav MW D	E	F	G	Н
1136 1137	Offshore Route		•				
1138 1139	Offshore / Otay Full / L3010 80%	15.1.1.1	15.1.1.2	15.1.1.3	15.1.1.4	15.1.1.5	15.1.1.6
1140	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1141	Total Supply	3132	4256	3497	3497	3806	4087
1142 1143	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0
1144	Avg Elec Curtailment (MW)	Ö	0	0	0	0	0
1145	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
1146 1147	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1148	Offshore / Otay Full / L3010 Out	15.2.1.1	15.2.1.2	15.2.1.3	15.2.1.4	15.2.1.5	15.2.1.6
1149	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1150	Total Supply	3132	4256	3497	3497	3806	4087
1151 1152	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0
1153	Avg Elec Curtailment (MW)	0	0	0	0	0	0
1154	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
1155 1156	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1157	Offshore / Otay Medium / L3010 80%	15.1.2.1	15.1.2.2	15.1.2.3	15.1.2.4	15.1.2.5	15.1.2.6
1158	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1159	Total Supply	3132	4256	3497	3497	3806	4087
1160 1161	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0
1162	Avg Elec Curtailment (MW)	0	0	0	0	0	0
1163	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
1164 1165	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1166	Offshore / Otay Medium / L3010 Out	15.2.2.1	15.2.2.2	15.2.2.3	15.2.2.4	15.2.2.5	15.2.2.6
1167	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1168	Total Supply	3132	4256	3497	3497	3806	4087
1169 1170	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0
1171	Avg Elec Curtailment (MW)	0	0	0	0	0	0
1172	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
1173 1174	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1175	Offshore / Otay Low / L3010 80%	15.1.3.1	15.1.3.2	15.1.3.3	15.1.3.4	15.1.3.5	15.1.3.6
1176	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1177	Total Supply	3132	4256	3497	3497	3806	4087
1178 1179	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0
1180	Avg Elec Curtailment (MW)	0	0	0	0	0	0
1181	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
1182 1183	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1184	Offshore / Otay Low / L3010 Out	15.2.3.1	15.2.3.2	15.2.3.3	15.2.3.4	15.2.3.5	15.2.3.6
1185	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1186 1187	Total Supply Elec Curtailment (MWh)	3132 0	4256 0	3497 0	3497 0	3806 0	4087 0
1187	Elec Curtailment (MWN) Elec Curtailment Duration (h)	0	0	0	0	0	0
1189	Avg Elec Curtailment (MW)	0	0	0	0	0	0
1190	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0%	0%	0%	0% 0	0%
1191 1192	Liec Gurtainnent (# Or Gustomers)	U	U	<u> </u>	U	0	U
1193	Offshore / Otay Out / L3010 80%	15.1.4.1	15.1.4.2	15.1.4.3	15.1.4.4	15.1.4.5	15.1.4.6
1194	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1195 1196	Total Supply Elec Curtailment (MWh)	3132 0	4256 0	3497 0	3497 0	3806 0	4087 0
1197	Elec Curtailment Duration (h)	0	0	0	0	0	0
1198	Avg Elec Curtailment (MW)	0	0	0	0	0	0
1199 1200	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0%	0%	0%	0% 0	0%
1200	Lico Gartannient (# Or Gustomers)	· ·	J	J		J	J
1202	Offshore / Otay Out / L3010 Out	15.2.4.1	15.2.4.2	15.2.4.3	15.2.4.4	15.2.4.5	15.2.4.6
1203	Curtailed NG-Fired Electric Gen (MW)	0	0	2407	0	0	0
1204 1205	Total Supply Elec Curtailment (MWh)	3132 0	4256 0	3497 0	3497 0	3806 0	4087 0
1206	Elec Curtailment Duration (h)	0	0	0	0	0	0
1207	Avg Elec Curtailment (MW)	0	0	0	0	0	0
1208 1209	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0% 0	0% 0	0% 0	0% 0	0% 0
00		· · · · · ·		•	-	•	

Line No.	AFFEIGATION 13-09-	013 VOLUME III – CO		3 ANALTSIS (COR	RECTED LEBROAR	11 2017)	
1		1. Example Summer Low-EG Day MW	2. Example Summer High-EG Day MW	3. Example Winter Day MW	4. Winter 1-in-10 Year Day MW	5. Example Spring Day MW	6. Example Fall Day MW
2	A B	C	Dav MW D	E	F	G	н
1210 1211	Blythe to Santee Alternate 1						
1212 1213	Blythe to Santee 1 / Otay Full / L3010 80%	16.1.1.1	16.1.1.2	16.1.1.3	16.1.1.4	16.1.1.5	16.1.1.6
1213	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1215	Total Supply	3132	4256	3497	3497	3806	4087
1216	Elec Curtailment (MWh)	0	0	0	0	0	0
1217 1218	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0
1219	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
1220	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1221 1222	Blythe to Santee 1 / Otay Full / L3010 Out	16.2.1.1	16.2.1.2	16.2.1.3	16.2.1.4	16.2.1.5	16.2.1.6
1223	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1224	Total Supply	3132	4256	3497	3497	3806	4087
1225	Elec Curtailment (MWh)	0	0	0	0	0	0
1226 1227	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0
1228	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
1229	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1230 1231	Blythe to Santee 1 / Otay Medium / L3010 80%	16.1.2.1	16.1.2.2	16.1.2.3	16.1.2.4	16.1.2.5	16.1.2.6
1231	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1233	Total Supply	3132	4256	3497	3497	3806	4087
1234	Elec Curtailment (MWh)	0	0	0	0	0	0
1235 1236	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0
1237	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
1238	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1239 1240	Blythe to Santee 1 / Otay Medium / L3010 Out	16.2.2.1	16.2.2.2	16.2.2.3	16.2.2.4	16.2.2.5	16.2.2.6
1241	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1242	Total Supply	3132	4256	3497	3497	3806	4087
1243	Elec Curtailment (MWh)	0	0	0	0	0	0
1244 1245	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0
1245	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
1247	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1248 1249	Blythe to Santee 1 / Otay Low / L3010 80%	16.1.3.1	16.1.3.2	16.1.3.3	16.1.3.4	16.1.3.5	16.1.3.6
1250	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1251	Total Supply	3132	4256	3497	3497	3806	4087
1252	Elec Curtailment (MWh)	0	0	0	0	0	0
1253 1254	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0
1255	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
1256	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1257 1258	Blythe to Santee 1 / Otay Low / L3010 Out	16.2.3.1	16.2.3.2	16.2.3.3	16.2.3.4	16.2.3.5	16.2.3.6
1259	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1260	Total Supply	3132	4256	3497	3497	3806	4087
1261	Elec Curtailment (MWh)	0	0	0	0	0	0
1262 1263	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0
1264	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
1265	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1266 1267	Blythe to Santee 1 / Otay Out / L3010 80%	16.1.4.1	16.1.4.2	16.1.4.3	16.1.4.4	16.1.4.5	16.1.4.6
1268	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1269	Total Supply	3132	4256	3497	3497	3806	4087
1270 1271	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0
1271	Avg Elec Curtailment (MW)	0	0	0	0	0	0
1273	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
1274	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1275 1276	Blythe to Santee 1 / Otay Out / L3010 Out	16.2.4.1	16.2.4.2	16.2.4.3	16.2.4.4	16.2.4.5	16.2.4.6
1277	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1278	Total Supply	3132	4256	3497	3497	3806	4087
1279 1280	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0
1280	Avg Elec Curtailment (MW)	0	0	0	0	0	0
1282	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
1283	Elec Curtailment (# of Customers)	0	0	0	0	0	0

Line No.	APPLICATION 15-09-0			O ANALTOIO (CON	REGIED LEBROAN	.1 2017)	
4		1. Example	2. Example	3. Example	4. Winter 1-in-10	5. Example	6. Example Fall
1		Dav MW	Summer High-EG Day MW	Winter Day MW	Year Day MW	Spring Day MW	Day MW
2	A B	C	D	Е	F	G	Н
1284	Blade to Control Alternation						
1285 1286	Blythe to Santee Alternate 2						
1287	Blythe to Santee 2 / Otay Full / L3010 80%	17.1.1.1	17.1.1.2	17.1.1.3	17.1.1.4	17.1.1.5	17.1.1.6
1288	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1289 1290	Total Supply Elec Curtailment (MWh)	3132 0	4256 0	3497 0	3497 0	3806 0	4087 0
1291	Elec Curtailment Duration (h)	0	0	0	0	0	0
1292	Avg Elec Curtailment (MW)	0	0	0	0	0	0
1293 1294	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0% 0	0%	0%	0% 0	0%
1295		•					
1296	Blythe to Santee 2 / Otay Full / L3010 Out	17.2.1.1	17.2.1.2	17.2.1.3	17.2.1.4	17.2.1.5	17.2.1.6
1297 1298	Curtailed NG-Fired Electric Gen (MW) Total Supply	0 3132	0 4256	0 3497	0 3497	0 3806	0 4087
1299	Elec Curtailment (MWh)	0	0	0	0	0	0
1300	Elec Curtailment Duration (h)	0	0	0	0	0	0
1301 1302	Avg Elec Curtailment (MW) Elec Curtailment (%)	0	0 0%	0 0%	0	0 0%	0 0%
1302	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1304		47.40.4	17.1.00	17.1.0.0	17.1.0.1	17.105	47.4.0.0
1305 1306	Blythe to Santee 2 / Otay Medium / L3010 80% Curtailed NG-Fired Electric Gen (MW)	17.1.2.1 0	17.1.2.2 0	17.1.2.3 0	17.1.2.4 0	17.1.2.5 0	17.1.2.6 0
1306	Total Supply	3132	4256	3497	3497	3806	4087
1308	Elec Curtailment (MWh)	0	0	0	0	0	0
1309 1310	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0
1311	Elec Curtailment (MVV)	0%	0%	0%	0%	0%	0%
1312	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1313 1314	Blythe to Santee 2 / Otay Medium / L3010 Out	17.2.2.1	17.2.2.2	17.2.2.3	17.2.2.4	17.2.2.5	17.2.2.6
1314	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1316	Total Supply	3132	4256	3497	3497	3806	4087
1317	Elec Curtailment (MWh)	0	0	0	0	0	0
1318 1319	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0
1320	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
1321 1322	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1323	Blythe to Santee 2 / Otay Low / L3010 80%	17.1.3.1	17.1.3.2	17.1.3.3	17.1.3.4	17.1.3.5	17.1.3.6
1324	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1325	Total Supply	3132	4256	3497	3497	3806	4087
1326 1327	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0
1328	Avg Elec Curtailment (MW)	0	0	0	0	0	0
1329	Elec Curtailment (%)	0%	0%	0% 0	0%	0%	0%
1330 1331	Elec Curtailment (# of Customers)	0	0	U	0	0	0
1332	Blythe to Santee 2 / Otay Low / L3010 Out	17.2.3.1	17.2.3.2	17.2.3.3	17.2.3.4	17.2.3.5	17.2.3.6
1333	Curtailed NG-Fired Electric Gen (MW)	0	0	0 3497	0 3497	0	0 4087
1334 1335	Total Supply Elec Curtailment (MWh)	3132 0	4256 0	0	0	3806 0	4087
1336	Elec Curtailment Duration (h)	0	0	0	0	0	0
1337 1338	Avg Elec Curtailment (MW) Elec Curtailment (%)	0	0 0%	0 0%	0	0 0%	0
1338	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0%	0%	0%	0%	0%
1340		•			•		
1341 1342	Blythe to Santee 2 / Otay Out / L3010 80% Curtailed NG-Fired Electric Gen (MW)	17.1.4.1	17.1.4.2 0	17.1.4.3 0	17.1.4.4 0	17.1.4.5 0	17.1.4.6 0
1342	Total Supply	3132	4256	3497	3497	3806	4087
1344	Elec Curtailment (MWh)	0	0	0	0	0	0
1345	Elec Curtailment Duration (h)	0	0	0	0	0	0
1346 1347	Avg Elec Curtailment (MW) Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
1348	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1349	Blythe to Santee 2 / Otay Out / L3010 Out	17.2.4.1	17.2.4.2	17.2.4.3	17.2.4.4	17.2.4.5	17.2.4.6
1350 1351	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1352	Total Supply	3132	4256	3497	3497	3806	4087
1353	Elec Curtailment (MWh)	0	0	0	0	0	0
1354 1355	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0
1356	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
1357	Elec Curtailment (# of Customers)	0	0	0	0	0	0

Line No.	711 210/11/01/10 00 01		31-EFFECTIVENES	07111/1E1010 (0011	NEOTED TEDROTIN	1 2017)	
1		1. Example Summer Low-EG Day MW	2. Example Summer High-EG Day MW	3. Example Winter Day MW	4. Winter 1-in-10 Year Day MW	5. Example Spring Day MW	6. Example Fall Day MW
2	A B	C	Dav MVV	E	F	G	н
1358 1359 1360	Cactus City to San Diego Alternate						
1361	Cactus City to SD / Otay Full / L3010 80%	18.1.1.1	18.1.1.2	18.1.1.3	18.1.1.4	18.1.1.5	18.1.1.6
1362	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1363 1364	Total Supply Elec Curtailment (MWh)	3132 0	4256 0	3497 0	3497 0	3806 0	4087 0
1365	Elec Curtailment Duration (h)	0	0	0	0	0	0
1366 1367	Avg Elec Curtailment (MW) Elec Curtailment (%)	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%
1368	Elec Curtailment (#)	0	0	0	0	0	0
1369	0	10011	10010	10010	10011	10015	10010
1370 1371	Cactus City to SD / Otay Full / L3010 Out Curtailed NG-Fired Electric Gen (MW)	18.2.1.1 0	18.2.1.2 0	18.2.1.3 0	18.2.1.4 0	18.2.1.5 0	18.2.1.6 0
1372	Total Supply	3132	4256	3497	3497	3806	4087
1373	Elec Curtailment (MWh)	0	0	0	0	0	0
1374 1375	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0
1376	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
1377	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1378 1379	Cactus City to SD / Otay Medium / L3010 80%	18.1.2.1	18.1.2.2	18.1.2.3	18.1.2.4	18.1.2.5	18.1.2.6
1380	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1381	Total Supply	3132	4256	3497	3497	3806	4087
1382 1383	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0
1384	Avg Elec Curtailment (MW)	0	0	0	0	0	0
1385	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
1386 1387	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1388	Cactus City to SD / Otay Medium / L3010 Out	18.2.2.1	18.2.2.2	18.2.2.3	18.2.2.4	18.2.2.5	18.2.2.6
1389	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1390 1391	Total Supply Elec Curtailment (MWh)	3132 0	4256 0	3497 0	3497 0	3806 0	4087 0
1392	Elec Curtailment Duration (h)	0	0	0	0	0	0
1393	Avg Elec Curtailment (MW)	0	0	0	0	0	0
1394 1395	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0%	0% 0	0%	0% 0	0%
1396							
1397	Cactus City to SD / Otay Low / L3010 80% Curtailed NG-Fired Electric Gen (MW)	18.1.3.1 0	18.1.3.2 0	18.1.3.3 0	18.1.3.4 0	18.1.3.5 0	18.1.3.6 0
1398 1399	Total Supply	3132	4256	3497	3497	3806	4087
1400	Elec Curtailment (MWh)	0	0	0	0	0	0
1401	Elec Curtailment Duration (h)	0	0	0	0	0	0
1402 1403	Avg Elec Curtailment (MW) Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
1404	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1405 1406	Cactus City to SD / Otay Low / L3010 Out	18.2.3.1	18.2.3.2	18.2.3.3	18.2.3.4	18.2.3.5	18.2.3.6
1407	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1408	Total Supply	3132	4256	3497	3497	3806	4087
1409 1410	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0
1411	Avg Elec Curtailment (MW)	0	0	0	0	0	0
1412	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
1413 1414	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1415	Cactus City to SD / Otay Out / L3010 80%	18.1.4.1	18.1.4.2	18.1.4.3	18.1.4.4	18.1.4.5	18.1.4.6
1416	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1417 1418	Total Supply Elec Curtailment (MWh)	3132 0	4256 0	3497 0	3497 0	3806 0	4087 0
1419	Elec Curtailment (MWH) Elec Curtailment Duration (h)	0	0	0	0	0	0
1420	Avg Elec Curtailment (MW)	0	0	0	0	0	0
1421 1422	Elec Curtailment (%) Elec Curtailment (# of Customers)	0%	0% 0	0%	0% 0	0% 0	0% 0
1423							
1424	Cactus City to SD / Otay Out / L3010 Out	18.2.4.1	18.2.4.2	18.2.4.3	18.2.4.4	18.2.4.5	18.2.4.6
1425 1426	Curtailed NG-Fired Electric Gen (MW) Total Supply	0 3132	0 4256	0 3497	0 3497	0 3806	0 4087
1427	Elec Curtailment (MWh)	0	0	0	0	0	0
1428	Elec Curtailment Duration (h)	0	0	0	0	0	0
1429 1430	Avg Elec Curtailment (MW) Elec Curtailment (%)	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%
1431	Elec Curtailment (# of Customers)	0	0	0	0	0	0

Line No.	APPLICATION 15-09-01			3 ANALTSIS (COR	RECTED LEBROAR	11 2017)	
1		1. Example Summer Low-EG	2. Example Summer High-EG	3. Example	4. Winter 1-in-10	5. Example	6. Example Fall
		Dav MW	Dav MW	Winter Day MW	Year Day MW	Spring Day MW	Day MW
2 1432	A B	С	D	E	F	G	Н
1433	Second Pipeline Along L3010 Alternate						
1434 1435	Second Pipeline Along L3010 / Otay Full / L3010 80%	19.1.1.1	19.1.1.2	19.1.1.3	19.1.1.4	19.1.1.5	19.1.1.6
1436	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1437	Total Supply	3132 0	4256 0	3497 0	3497 0	3806 0	4087 0
1438 1439	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0
1440	Avg Elec Curtailment (MW)	0	0	0	0	0	0
1441 1442	Elec Curtailment (%) Elec Curtailment (# of Customers)	0% 0	0%	0% 0	0% 0	0% 0	0%
1443							
1444 1445	Second Pipeline Along L3010 / Otay Full / L3010 Out Curtailed NG-Fired Electric Gen (MW)	19.2.1.1 0	19.2.1.2 0	19.2.1.3 0	19.2.1.4 0	19.2.1.5 0	19.2.1.6 0
1446	Total Supply	3132	4256	3497	3497	3806	4087
1447	Elec Curtailment (MWh)	0	0	0	0	0	0
1448 1449	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0
1450	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
1451 1452	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1453	Second Pipeline Along L3010 / Otay Medium / L3010 8	19.1.2.1	19.1.2.2	19.1.2.3	19.1.2.4	19.1.2.5	19.1.2.6
1454	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1455 1456	Total Supply Elec Curtailment (MWh)	3132 0	4256 0	3497 0	3497 0	3806 0	4087 0
1457	Elec Curtailment Duration (h)	0	0	0	0	0	0
1458 1459	Avg Elec Curtailment (MW) Elec Curtailment (%)	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%
1460	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1461	0	10001	40000	40000	40004	10005	19.2.2.6
1462 1463	Second Pipeline Along L3010 / Otay Medium / L3010 (Curtailed NG-Fired Electric Gen (MW)	19.2.2.1 0	19.2.2.2 0	19.2.2.3 0	19.2.2.4 0	19.2.2.5 0	19.2.2.6
1464	Total Supply	3132	4256	3497	3497	3806	4087
1465	Elec Curtailment (MWh)	0	0	0	0	0	0
1466 1467	Elec Curtailment Duration (h) Avg Elec Curtailment (MW)	0	0	0	0	0	0
1468	Elec Curtailment (%)	0%	0%	0%	0%	0%	0%
1469 1470	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1471	Second Pipeline Along L3010 / Otay Low / L3010 80%		19.1.3.2	19.1.3.3	19.1.3.4	19.1.3.5	19.1.3.6
1472	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1473 1474	Total Supply Elec Curtailment (MWh)	3132 0	4256 0	3497 0	3497 0	3806 0	4087 0
1475	Elec Curtailment Duration (h)	0	0	0	0	0	0
1476 1477	Avg Elec Curtailment (MW) Elec Curtailment (%)	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%
1478	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1479 1480	Second Pipeline Along L3010 / Otay Low / L3010 Out	19.2.3.1	19.2.3.2	19.2.3.3	19.2.3.4	19.2.3.5	19.2.3.6
1481	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1482	Total Supply	3132	4256	3497	3497	3806	4087
1483 1484	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0
1485	Avg Elec Curtailment (MW)	0	0	0	0	0	0
1486	Elec Curtailment (%)	0% 0	0%	0% 0	0%	0% 0	0%
1487 1488	Elec Curtailment (# of Customers)						
1489	Second Pipeline Along L3010 / Otay Out / L3010 80%	19.1.4.1	19.1.4.2	19.1.4.3	19.1.4.4	19.1.4.5	19.1.4.6
1490 1491	Curtailed NG-Fired Electric Gen (MW) Total Supply	0 3132	0 4256	0 3497	0 3497	0 3806	0 4087
1492	Elec Curtailment (MWh)	0	0	0	0	0	0
1493	Elec Curtailment Duration (h)	0	0	0	0	0	0
1494 1495	Avg Elec Curtailment (MW) Elec Curtailment (%)	0%	0%	0 0%	0%	0%	0%
1496	Elec Curtailment (# of Customers)	0	0	0	0	0	0
1497 1498	Second Pipeline Along L3010 / Otay Out / L3010 Out	19.2.4.1	19.2.4.2	19.2.4.3	19.2.4.4	19.2.4.5	19.2.4.6
1499	Curtailed NG-Fired Electric Gen (MW)	0	0	0	0	0	0
1500	Total Supply	3132	4256	3497	3497	3806	4087
1501 1502	Elec Curtailment (MWh) Elec Curtailment Duration (h)	0	0	0	0	0	0
1503	Avg Elec Curtailment (MW)	0	0	0	0	0	0
1504 1505	Elec Curtailment (%)	0% 0	0%	0% 0	0% 0	0% 0	0%
1305	Elec Curtailment (# of Customers)	J	J	J	J	J	U

Line No.						13 VOLUME III – COST-EFFI			31.07.11.1 2011				
1 2		1. Example Summer Low	-EG Day MW	2. Example Summer High	n-EG Day MW	3. Example Winter	Day MW	4. Winter 1-in-10 Year	r Day MW	5. Example Spring	Day MW	6. Example Fall Da	ny MW
3	L1600 / Otay Full / L3010 80%	1.1.1.1		1.1.1.2		1.1.1.3		1.1.1.4		1.1.1.5		1.1.1.6	
4 5 6		Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	3,132 0 0.00	Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	4,256 0 0.00	Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	3,497 0 0.00	Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	3,497 0 0.00	Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	3,806 0 0.00	Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	4,087 0 0.00
106	L1600 / Otay Full / L3010 Out	1.2.1.1		1.2.1.2		1.2.1.3		1.2.1.4		1.2.1.5		1.2.1.6	
107		Available Supply (MW)	3,132	Available Supply (MW)	3,335	Available Supply (MW)	3,429	Available Supply (MW)	3,204	Available Supply (MW)	3,806	Available Supply (MW)	4,087
108 109		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	2,043 9.25	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	249 3.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
209	L1600 / Otay Medium / L3010 80%	1.1.2.1		1.1.2.2		1.1.2.3		1.1.2.4		1.1.2.5		1.1.2.6	
210		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
211 212		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
312	L1600 / Otay Medium / L3010 Out	1.2.2.1		1.2.2.2		1.2.2.3		1.2.2.4		1.2.2.5		1.2.2.6	
313 314		Available Supply (MW) Curtailment (MWh)	3,132	Available Supply (MW) Curtailment (MWh)	3,187 3,554	Available Supply (MW) Curtailment (MWh)	2,963	Available Supply (MW) Curtailment (MWh)	2,738 2.886	Available Supply (MW) Curtailment (MWh)	3,806	Available Supply (MW) Curtailment (MWh)	3,790
315		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	11.00	Total # Hours w/ Outages	0.25	Total # Hours w/ Outages	10.75	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
415	L1600 / Otay Low / L3010 80%	1.1.3.1		1.1.3.2		1.1.3.3		1.1.3.4		1.1.3.5		1.1.3.6	
416 417		Available Supply (MW) Curtailment (MWh)	3,132	Available Supply (MW) Curtailment (MWh)	4,256	Available Supply (MW) Curtailment (MWh)	3,497	Available Supply (MW) Curtailment (MWh)	3,497	Available Supply (MW) Curtailment (MWh)	3,806	Available Supply (MW) Curtailment (MWh)	4,087
418		Total # Hours w/ Outages	0.00										
518	L1600 / Otay Low / L3010 Out	1.2.3.1		1.2.3.2		1.2.3.3		1.2.3.4		1.2.3.5		1.2.3.6	
519 520		Available Supply (MW) Curtailment (MWh)	3,038	Available Supply (MW) Curtailment (MWh)	3,038 5,303	Available Supply (MW) Curtailment (MWh)	2,570 1,450	Available Supply (MW) Curtailment (MWh)	2,570 5,152	Available Supply (MW) Curtailment (MWh)	3,189	Available Supply (MW) Curtailment (MWh)	3,343
521		Total # Hours w/ Outages	0.50	Total # Hours w/ Outages	12.50	Total # Hours w/ Outages	5.25	Total # Hours w/ Outages	16.75	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
621	L1600 / Otay Out / L3010 80%	1.1.4.1		1.1.4.2		1.1.4.3		1.1.4.4		1.1.4.5		1.1.4.6	
622 623		Available Supply (MW) Curtailment (MWh)	3,132	Available Supply (MW) Curtailment (MWh)	4,256	Available Supply (MW) Curtailment (MWh)	3,497	Available Supply (MW) Curtailment (MWh)	3,497	Available Supply (MW) Curtailment (MWh)	3,806	Available Supply (MW) Curtailment (MWh)	4,087
624		Total # Hours w/ Outages	0.00										
724	L1600 / Otay Out / L3010 Out	1.2.4.1		1.2.4.2		1.2.4.3		1.2.4.4		1.2.4.5		1.2.4.6	
725 726		Available Supply (MW)	2,851	Available Supply (MW)	2,851	Available Supply (MW)	2,570 1,450	Available Supply (MW)	2,570 5,152	Available Supply (MW)	2,570	Available Supply (MW)	2,570
726 727		Curtailment (MWh) Total # Hours w/ Outages	720 6.00	Curtailment (MWh) Total # Hours w/ Outages	7,881 14.75	Curtailment (MWh) Total # Hours w/ Outages	5.25	Curtailment (MWh) Total # Hours w/ Outages	16.75	Curtailment (MWh) Total # Hours w/ Outages	150 1.75	Curtailment (MWh) Total # Hours w/ Outages	1,636 8.00
827	L3602 / Otay Full / L3010 80%	2.1.1.1		2.1.1.2		2.1.1.3		2.1.1.4		2.1.1.5		2.1.1.6	
828 829		Available Supply (MW) Curtailment (MWh)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW) Curtailment (MWh)	4,087
830		Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
930	L3602 / Otay Full / L3010 Out	2.2.1.1		2.2.1.2		2.2.1.3		2.2.1.4		2.2.1.5		2.2.1.6	
931 932		Available Supply (MW) Curtailment (MWh)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW) Curtailment (MWh)	4,087
932		Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
1033	L3602 / Otay Medium / L3010 80%	2.1.2.1		2.1.2.2		2.1.2.3		2.1.2.4		2.1.2.5		2.1.2.6	

Line No.								<u> </u>		<u></u>			
1		1. Example Summer Low	-EG Day MW	2. Example Summer High	h-EG Day MW	3. Example Winter	Day MW	4. Winter 1-in-10 Year	Day MW	5. Example Spring	Day MW	6. Example Fall D	Day MW
1034		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
1035		Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0
1036		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
1136	L3602 / Otay Medium / L3010 Out	2.2.2.1		2.2.2.2		2.2.2.3		2.2.2.4		2.2.2.5		2.2.2.6	
1137		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
1138		Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0
1139		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
1239	L3602 / Otay Low / L3010 80%	2.1.3.1		2.1.3.2		2.1.3.3		2.1.3.4		2.1.3.5		2.1.3.6	
1240		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
1241		Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0
1242		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
1342	L3602 / Otay Low / L3010 Out	2.2.3.1		2.2.3.2		2.2.3.3		2.2.3.4		2.2.3.5		2.2.3.6	
1343		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
1344		Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0 00	Curtailment (MWh)	0
1345		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
1445	L3602 / Otay Out / L3010 80%	2.1.4.1		2.1.4.2		2.1.4.3		2.1.4.4		2.1.4.5		2.1.4.6	
1446		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
1447		Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0 00	Curtailment (MWh)	0	Curtailment (MWh)	0 00	Curtailment (MWh)	0 00
1448		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
1548	L3602 / Otay Out / L3010 Out	2.2.4.1		2.2.4.2		2.2.4.3		2.2.4.4		2.2.4.5		2.2.4.6	
1549		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
1550		Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0
1651	Hydrotesting / Otay Full / L3010 80%	3.1.1.1		3.1.1.2		3.1.1.3		3.1.1.4		3.1.1.5		3.1.1.6	
1652		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
1653		Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0
1654		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
1754	Hydrotesting / Otay Full / L3010 Out	3.2.1.1		3.2.1.2		3.2.1.3		3.2.1.4		3.2.1.5		3.2.1.6	
1755		Available Supply (MW)	3,132	Available Supply (MW)	2,570	Available Supply (MW)	2,586	Available Supply (MW)	2,570	Available Supply (MW)	3,463	Available Supply (MW)	3,377
1756		Curtailment (MWh)	0	Curtailment (MWh)	12,380	Curtailment (MWh)	1,368	Curtailment (MWh)	5,152	Curtailment (MWh)	0	Curtailment (MWh)	0
1757		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	17.75	Total # Hours w/ Outages	5.25	Total # Hours w/ Outages	16.75	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
1857	Hydrotesting / Otay Medium / L3010 80%	3.1.2.1		3.1.2.2		3.1.2.3		3.1.2.4		3.1.2.5		3.1.2.6	
1858		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
1859 1860		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
1000		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours W/ Outages	0.00	Total # Hours W/ Outages	0.00	Total # Hours W/ Outages	0.00	Total # Hours W/ Outages	0.00
1960	Hydrotesting / Otay Medium / L3010 Out	3.2.2.1		3.2.2.2		3.2.2.3		3.2.2.4		3.2.2.5		3.2.2.6	
1961	<u> </u>	Available Supply (MW)	2,883	Available Supply (MW)	2,570	Available Supply (MW)	2,570	Available Supply (MW)	2,570	Available Supply (MW)	2,987	Available Supply (MW)	2,947
1962		Curtailment (MWh)	542 5.25	Curtailment (MWh)	12,380	Curtailment (MWh)	1,450	Curtailment (MWh)	5,152	Curtailment (MWh)	0	Curtailment (MWh)	70
1963		Total # Hours w/ Outages	5.25	Total # Hours w/ Outages	17.75	Total # Hours w/ Outages	5.25	Total # Hours w/ Outages	16.75	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	1.50
2063	Hydrotesting / Otay Low / L3010 80%	3.1.3.1		3.1.3.2		3.1.3.3		3.1.3.4		3.1.3.5		3.1.3.6	
2064	<u> </u>	Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
2065		Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0
2066		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00

Line No.				APPLI	APPLICATION 15-09-013 VOLUME III – COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 2017)								
1		1. Example Summer Low	-EG Day MW	2. Example Summer High	n-EG Day MW	3. Example Winter [Day MW	4. Winter 1-in-10 Year	Day MW	5. Example Spring I	Day MW	6. Example Fall Da	y MW
2166	Hydrotesting / Otay Low / L3010 Out	3.2.3.1		3.2.3.2		3.2.3.3		3.2.3.4		3.2.3.5		3.2.3.6	
2167		Available Supply (MW)	2,570	Available Supply (MW)	2,570	Available Supply (MW)	2,570	Available Supply (MW)	2,570	Available Supply (MW)	2,570	Available Supply (MW)	2,570
2168 2169		Curtailment (MWh) Total # Hours w/ Outages	2,873	Curtailment (MWh) Total # Hours w/ Outages	12,380 17.75	Curtailment (MWh) Total # Hours w/ Outages	1,450 5.25	Curtailment (MWh) Total # Hours w/ Outages	5,152 16.75	Curtailment (MWh) Total # Hours w/ Outages	150 1.75	Curtailment (MWh) Total # Hours w/ Outages	1,636 8.00
2269	Hydrotesting / Otay Out / L3010 80%	3.1.4.1	0.20	3.1.4.2	17.70	3.1.4.3	0.20	3.1.4.4	10.70	3.1.4.5	1.70	3.1.4.6	6.00
2270		Available Supply (MW)	3,132	Available Supply (MW)	4,143	Available Supply (MW)	2,963	Available Supply (MW)	2,739	Available Supply (MW)	3,750	Available Supply (MW)	3,694
2271 2272		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.25	Curtailment (MWh) Total # Hours w/ Outages	2,881	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
2372	Hydrotesting / Otay Out / L3010 Out	3.2.4.1		3.2.4.2		3.2.4.3		3.2.4.4		3.2.4.5		3.2.4.6	
2373 2374		Available Supply (MW) Curtailment (MWh)	2,570	Available Supply (MW) Curtailment (MWh)	2,570 12 380	Available Supply (MW) Curtailment (MWh)	2,570 1,450	Available Supply (MW) Curtailment (MWh)	2,570 5 152	Available Supply (MW) Curtailment (MWh)	2,570	Available Supply (MW) Curtailment (MWh)	2,570
2475	Alt Diameter 10" / Otay Full / L3010 80%	4.1.1.1	2,010	4.1.1.2	12,500	4.1.1.3	1,400	4.1.1.4	0,102	4.1.1.5	100	4.1.1.6	1,000
2476		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
2477 2478		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
2578	Alt Diameter 10" / Otay Full / L3010 Out	4.2.1.1	0.00	4.2.1.2	0.00	4.2.1.3	0.00	4.2.1.4	0.00	4.2.1.5	0.00	4.2.1.6	0.00
2579		Available Supply (MW)	3,132	Available Supply (MW)	2,773	Available Supply (MW)	2,867	Available Supply (MW)	2,642	Available Supply (MW)	3,744	Available Supply (MW)	3,658
2580 2581		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	9,051 15.50	Curtailment (MWh) Total # Hours w/ Outages	172 2.75	Curtailment (MWh) Total # Hours w/ Outages	4,053	Curtailment (MWh) Total # Hours w/ Outages	0 00	Curtailment (MWh) Total # Hours w/ Outages	0.00
2681	Alt Diameter 10" / Otay Medium / L3010 80%	4.1.2.1	0.00	4.1.2.2	13.30	4.1.2.3	2.13	4.1.2.4	13.30	4.1.2.5	0.00	4.1.2.6	0.00
2682		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
2683 2684		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
2004		Total # Hours W/ Outages	0.00	Total # Hours W/ Outages	0.00	Total # Hours W/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours W/ Outages	0.00	Total # Hours W/ Outages	0.00
2784	Alt Diameter 10" / Otay Medium / L3010 Out	4.2.2.1		4.2.2.2	200	4.2.2.3		4.2.2.4		4.2.2.5		4.2.2.6	
2785 2786		Available Supply (MW) Curtailment (MWh)	3,132	Available Supply (MW) Curtailment (MWh)	2,625 11,438	Available Supply (MW) Curtailment (MWh)	2,570 1,450	Available Supply (MW) Curtailment (MWh)	2,570 5,152	Available Supply (MW) Curtailment (MWh)	3,268	Available Supply (MW) Curtailment (MWh)	3,228
2787		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	16.75	Total # Hours w/ Outages	5.25	Total # Hours w/ Outages	16.75	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
2887	Alt Diameter 10" / Otay Low / L3010 80%	4.1.3.1		4.1.3.2		4.1.3.3		4.1.3.4		4.1.3.5		4.1.3.6	
2888 2889		Available Supply (MW) Curtailment (MWh)	3,132	Available Supply (MW) Curtailment (MWh)	4,256	Available Supply (MW) Curtailment (MWh)	3,497	Available Supply (MW) Curtailment (MWh)	3,497	Available Supply (MW) Curtailment (MWh)	3,806	Available Supply (MW) Curtailment (MWh)	4,087
2889 2890		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
2990	Alt Diameter 10" / Otay Low / L3010 Out	4.2.3.1		4.2.3.2		4.2.3.3		4.2.3.4		4.2.3.5		4.2.3.6	
2991		Available Supply (MW)	2,570	Available Supply (MW)	2,570	Available Supply (MW)	2,570	Available Supply (MW)	2,570	Available Supply (MW)	2,627	Available Supply (MW)	2,781
2992 2993		Curtailment (MWh) Total # Hours w/ Outages	2,873	Curtailment (MWh) Total # Hours w/ Outages	12,380 17.75	Curtailment (MWh) Total # Hours w/ Outages	1,450 5.25	Curtailment (MWh) Total # Hours w/ Outages	5,152 16.75	Curtailment (MWh) Total # Hours w/ Outages	1.50	Curtailment (MWh) Total # Hours w/ Outages	473 3.25
2993		Total # Hours W/ Outages	9.25	Total # Hours W/ Outages	17.75	Total # Hours W/ Outages	5.25	Total # Hours w/ Outages	16.75	Total # Hours W/ Outages	1.50	Total # Hours W/ Outages	3.23
3093	Alt Diameter 10" / Otay Out / L3010 80%	4.1.4.1		4.1.4.2		4.1.4.3		4.1.4.4		4.1.4.5		4.1.4.6	
3094 3095		Available Supply (MW) Curtailment (MWh)	3,132	Available Supply (MW) Curtailment (MWh)	4,256	Available Supply (MW) Curtailment (MWh)	3,244	Available Supply (MW) Curtailment (MWh)	3,020 912	Available Supply (MW) Curtailment (MWh)	3,806	Available Supply (MW) Curtailment (MWh)	3,975
3095		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	4.25	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
3196	Alt Diameter 10" / Otay Out / L3010 Out	4.2.4.1		4.2.4.2		4.2.4.3		4.2.4.4		4.2.4.5		4.2.4.6	
3197		Available Supply (MW)	2,570	Available Supply (MW)	2,570	Available Supply (MW)	2,570	Available Supply (MW)	2,570	Available Supply (MW)	2,570	Available Supply (MW)	2,570

Line No.													
1		1. Example Summer Lo	w-EG Day MW	2. Example Summer Hig	h-EG Day MW	3. Example Winter I	Day MW	4. Winter 1-in-10 Yea	r Day MW	5. Example Sprir	ng Day MW	6. Example Fall Da	ay MW
3198		Curtailment (MWh)	2,873	Curtailment (MWh)	12,380	Curtailment (MWh)	1,450	Curtailment (MWh)	5,152	Curtailment (MWh)	150	Curtailment (MWh)	1,636
3299	Alt Diameter 12" / Otay Full / L3010 80%	5.1.1.1		5.1.1.2		5.1.1.3		5.1.1.4		5.1.1.5		5.1.1.6	
3300		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
3301 3302		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
3402	Alt Diameter 12" / Otay Full / L3010 Out	5.2.1.1		5.2.1.2		5.2.1.3		5.2.1.4		5.2.1.5		5.2.1.6	
3403 3404		Available Supply (MW) Curtailment (MWh)	3,132	Available Supply (MW) Curtailment (MWh)	2,886 7.374	Available Supply (MW) Curtailment (MWh)	2,979	Available Supply (MW) Curtailment (MWh)	2,754	Available Supply (MW) Curtailment (MWh)	3,806	Available Supply (MW)	3,771
3404		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	14.50	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	2,716 10.50	Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
3505	Alt Diameter 12" / Otay Medium / L3010 80%	5.1.2.1		5.1.2.2		5.1.2.3		5.1.2.4		5.1.2.5		5.1.2.6	
3506		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
3507 3508		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
3608	Alt Diameter 12" / Otay Medium / L3010 Out	5.2.2.1		5.2.2.2		5.2.2.3		5.2.2.4		5.2.2.5		5.2.2.6	
3609		Available Supply (MW)	3,132	Available Supply (MW)	2,737	Available Supply (MW)	2,570	Available Supply (MW)	2,570	Available Supply (MW)	3,380	Available Supply (MW)	3,341
3610 3611		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	9,618 16.00	Curtailment (MWh) Total # Hours w/ Outages	1,450 5.25	Curtailment (MWh) Total # Hours w/ Outages	5,152 16.75	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
3711	Alt Diameter 12" / Otay Low / L3010	5.1.3.1		5.1.3.2		5.1.3.3		5.1.3.4		5.1.3.5		5.1.3.6	
0740	80%	A - 7-11 - O 1 (A.BAD)	0.400	A - 7511 - O 1 (AMA)	4.050	A - 2-11- O 1 (AMA)	0.407	A - 25-11- O 1 - (A-0A-0	0.407	A - 121 1 0 1 (AMA)	0.000	A - 21-11- O 1 - (A-0)-0	4.007
3712 3713		Available Supply (MW) Curtailment (MWh)	3,132 0	Available Supply (MW) Curtailment (MWh)	4,256 0	Available Supply (MW) Curtailment (MWh)	3,497 0	Available Supply (MW) Curtailment (MWh)	3,497 0	Available Supply (MW) Curtailment (MWh)	3,806 0	Available Supply (MW) Curtailment (MWh)	4,087 0
3714		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
3814	Alt Diameter 12" / Otay Low / L3010 Out	5.2.3.1		5.2.3.2		5.2.3.3		5.2.3.4		5.2.3.5		5.2.3.6	
3815 3816		Available Supply (MW) Curtailment (MWh)	2,589	Available Supply (MW) Curtailment (MWh)	2,589 12,054	Available Supply (MW) Curtailment (MWh)	2,570 1,450	Available Supply (MW) Curtailment (MWh)	2,570 5 152	Available Supply (MW) Curtailment (MWh)	2,739	Available Supply (MW) Curtailment (MWh)	2,893 170
3817		Total # Hours w/ Outages	9.25	Total # Hours w/ Outages	17.50	Total # Hours w/ Outages	5.25	Total # Hours w/ Outages	16.75	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	2.25
3917	Alt Diameter 12" / Otay Out / L3010 80%	5.1.4.1		5.1.4.2		5.1.4.3		5.1.4.4		5.1.4.5		5.1.4.6	
3918 3919		Available Supply (MW) Curtailment (MWh)	3,132	Available Supply (MW) Curtailment (MWh)	4,256	Available Supply (MW) Curtailment (MWh)	3,357	Available Supply (MW) Curtailment (MWh)	3,132 486	Available Supply (MW) Curtailment (MWh)	3,806	Available Supply (MW) Curtailment (MWh)	4,087
3920		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	3.50	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
4020	Alt Diameter 12" / Otay Out / L3010 Out	5.2.4.1		5.2.4.2		5.2.4.3		5.2.4.4		5.2.4.5		5.2.4.6	
4021 4022		Available Supply (MW) Curtailment (MWh)	2,570 2,873	Available Supply (MW) Curtailment (MWh)	2,570 12,380	Available Supply (MW) Curtailment (MWh)	2,570 1,450	Available Supply (MW) Curtailment (MWh)	2,570 5 152	Available Supply (MW) Curtailment (MWh)	2,570 150	Available Supply (MW) Curtailment (MWh)	2,570 1,636
4022	Alt Diameter 16" /	Curtaliment (MWn)	2,873	Curtailment (MWn)	12,380	Curtailment (MWn)	1,450	Curtailment (MWN)	5,152	Curtailment (MWVn)	150	Curtailment (WWn)	1,030
4123	Otay Full / L3010 80%	6.1.1.1		6.1.1.2		6.1.1.3		6.1.1.4		6.1.1.5		6.1.1.6	
4124 4125		Available Supply (MW) Curtailment (MWh)	3,132	Available Supply (MW) Curtailment (MWh)	4,256	Available Supply (MW) Curtailment (MWh)	3,497	Available Supply (MW) Curtailment (MWh)	3,497	Available Supply (MW) Curtailment (MWh)	3,806	Available Supply (MW) Curtailment (MWh)	4,087
4126		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
4226	Alt Diameter 16" / Otay Full / L3010 Out	6.2.1.1		6.2.1.2		6.2.1.3		6.2.1.4		6.2.1.5		6.2.1.6	
4227		Available Supply (MW)	3,132	Available Supply (MW)	3,392	Available Supply (MW)	3,485	Available Supply (MW)	3,260	Available Supply (MW)	3,806	Available Supply (MW)	4,087
4228 4229		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	1,539 8.50	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	105 2.25	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
4329	Alt Diameter 16" / Otay Medium / L3010 80%	6.1.2.1		6.1.2.2		6.1.2.3		6.1.2.4		6.1.2.5		6.1.2.6	

Line No.								<u> </u>		·			
1		1. Example Summer Low	v-EG Day MW	2. Example Summer High	n-EG Day MW	3. Example Winter	Day MW	4. Winter 1-in-10 Year	Day MW	5. Example Spring	Day MW	6. Example Fall D	ay MW
4330		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
4331		Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0
4332		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
4432	Alt Diameter 16" / Otay Medium / L3010 Out	6.2.2.1		6.2.2.2		6.2.2.3		6.2.2.4		6.2.2.5		6.2.2.6	
4433		Available Supply (MW)	3,132	Available Supply (MW)	3,243	Available Supply (MW)	3,019	Available Supply (MW)	2,794	Available Supply (MW)	3,806	Available Supply (MW)	3,847
4434 4435		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	2,953 10.50	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	2,315 9.25	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
4433		Total # Hours W/ Outages	0.00	Total # Hours W/ Outages	10.50	Total # Hours W/ Outages	0.00	Total # Hours W/ Outages	9.25	Total # Hours W/ Outages	0.00	Total # Hours W/ Outages	0.00
4535	Alt Diameter 16" / Otay Low / L3010 80%	6.1.3.1		6.1.3.2		6.1.3.3		6.1.3.4		6.1.3.5		6.1.3.6	
4536		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
4537		Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0
4538		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
4638	Alt Diameter 16" / Otay Low / L3010 Out	6.2.3.1		6.2.3.2		6.2.3.3		6.2.3.4		6.2.3.5		6.2.3.6	
4639		Available Supply (MW)	3,094	Available Supply (MW)	3,094	Available Supply (MW)	2,570	Available Supply (MW)	2,570	Available Supply (MW)	3,245	Available Supply (MW)	3,399
4640 4641		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	4,618 12.00	Curtailment (MWh) Total # Hours w/ Outages	1,450 5.25	Curtailment (MWh) Total # Hours w/ Outages	5,152 16.75	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
4041		Total # Hours W/ Outages	0.00	Total # Hours w/ Outages	12.00	Total # Hours W/ Outages	5.25	Total # Hours W/ Outages	16.75	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
4741	Alt Diameter 16" / Otay Out / L3010 80%	6.1.4.1		6.1.4.2		6.1.4.3		6.1.4.4		6.1.4.5		6.1.4.6	
4742		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
4743 4744		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
4/44		Total # Hours W/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours W/ Outages	0.00	Total # Hours W/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
4844	Alt Diameter 16" / Otay Out / L3010 Out	6.2.4.1		6.2.4.2		6.2.4.3		6.2.4.4		6.2.4.5		6.2.4.6	
4845		Available Supply (MW)	2,907	Available Supply (MW)	2,907	Available Supply (MW)	2,570	Available Supply (MW)	2,570	Available Supply (MW)	2,570	Available Supply (MW)	2,570
4846		Curtailment (MWh)	417	Curtailment (MWh)	7,065	Curtailment (MWh)	1,450	Curtailment (MWh)	5,152	Curtailment (MWh)	150	Curtailment (MWh)	1,636
4947	Alt Diameter 20" / Otay Full / L3010 80%	20.1.1.1		20.1.1.2		20.1.1.3		20.1.1.4		20.1.1.5		20.1.1.6	
4948		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
4949		Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0
4950		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
5050	Alt Diameter 20" / Otay Full / L3010 Out	20.2.1.1		20.2.1.2		20.2.1.3		20.2.1.4		20.2.1.5		20.2.1.6	
5051		Available Supply (MW)	3,132	Available Supply (MW)	3,897	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
5052		Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0
5053		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
5153	Alt Diameter 20" / Otay Medium / L3010 80%	20.1.2.1		20.1.2.2		20.1.2.3		20.1.2.4		20.1.2.5		20.1.2.6	
5154		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
5155 5156		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
2120		Total # Hours W/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours W/ Outages	0.00	Total # Hours W/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
5256	Alt Diameter 20" / Otay Medium / L3010 Out	20.2.2.1		20.2.2.2		20.2.2.3		20.2.2.4		20.2.2.5		20.2.2.6	
5257		Available Supply (MW)	3,132	Available Supply (MW)	3,749	Available Supply (MW)	3,497	Available Supply (MW)	3,300	Available Supply (MW)	3,806	Available Supply (MW)	4,087
5258 5259		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	1.25	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
5259		Total # Hours W/ Outages	0.00	Total # Hours W/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	1.20	Total # Hours W/ Outages	0.00	Total # Hours w/ Outages	0.00
5359	Alt Diameter 20" / Otay Low / L3010 80%	20.1.3.1		20.1.3.2		20.1.3.3		20.1.3.4		20.1.3.5		20.1.3.6	
5360		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
5361		Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0
5362		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00

WORK PAPER TABLE - SCENARIO ANALYSIS ELECTRIC DEMAND AND OUTPUTS (SA 1.3)

EXAMPLE ELECTRIC DEMAND DAY DURING SEASONAL VARIATIONS WITH ELECTRIC SUPPLY FOR THE ALTERNATIVES AND RELATED CURTAILMENT APPLICATION 15-09-013 VOLUME III – COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 2017)

Line No. 1. Example Summer Low-EG Day MW 2. Example Summer High-EG Day MW 6. Example Fall Day MW 3. Example Winter Day MW 4. Winter 1-in-10 Year Day MW 5. Example Spring Day MW Alt Diameter 20" / 5462 Otay Low / L3010 20231 20232 20233 20234 20235 20236 Out 5463 Available Supply (MW) Available Supply (MW) 3,905 3.132 3.600 Available Supply (MW) 3.065 Available Supply (MW) 2,840 Available Supply (MW) 3.751 Available Supply (MW) 5464 Curtailment (MWh) Curtailment (MWh) Curtailment (MWh) Curtailment (MWh Curtailment (MWh) Curtailment (MWh) 0.00 0.00 5465 Total # Hours w/ Outages Total # Hours w/ Outages Total # Hours w/ Outages Total # Hours w/ Outage Total # Hours w/ Outage: Total # Hours w/ Outage Alt Diameter 20" / 5565 Otay Out / L3010 20.1.4.1 20.1.4.2 20.1.4.3 20.1.4.4 20.1.4.5 20.1.4.6 80% 5566 Available Supply (MW) 3.132 Available Supply (MW) 4.256 Available Supply (MW) 3,497 Available Supply (MW) 3.497 Available Supply (MW) 3.806 Available Supply (MW) 4 087 5567 Curtailment (MWh) Curtailment (MWh) Curtailment (MWh) Curtailment (MWh) urtailment (MWh) Curtailment (MWh) 5568 Total # Hours w/ Outages Total # Hours w/ Outages 0.00 Total # Hours w/ Outages 0.00 Total # Hours w/ Outage Total # Hours w/ Outage 0.00 Total # Hours w/ Outage 0.00 Alt Diameter 20" Otay Out / L3010 20.2.4.1 20.2.4.2 20.2.4.3 20.2.4.4 20.2.4.5 20.2.4.6 5668 Out 5669 Available Supply (MW) Available Supply (MW) 3,413 Available Supply (MW) Available Supply (MW) 2,570 Available Supply (MW) Available Supply (MW) 2,963 5670 urtailment (MWh) Curtailment (MWh Curtailment (MWh) Curtailment (MWh) urtailment (MWh) Alt Diameter 24" 5771 Otay Full / L3010 7.1.1.2 7114 7.1.1.5 7.1.1.6 80% 5772 Available Supply (MW)
Curtailment (MWh) Available Supply (MW)
Curtailment (MWh) Available Supply (MW)
Curtailment (MWh) 3,497 Available Supply (MW)
Curtailment (MWh) Available Supply (MW)
Curtailment (MWh) Available Supply (MW)
Curtailment (MWh) 4.087 3.132 4.256 3.497 3.806 5773 0.00 5774 Total # Hours w/ Outages Total # Hours w/ Outages Total # Hours w/ Outages Total # Hours w/ Outage: Total # Hours w/ Outages Total # Hours w/ Outage: Alt Diameter 24" / 7.2.1.2 7.2.1.3 7.2.1.4 7.2.1.5 7.2.1.6 5874 Otay Full / L3010 Out 5875 Available Supply (MW) Curtailment (MWh) Available Supply (MW)
Curtailment (MWh) Available Supply (MW)
Curtailment (MWh) Available Supply (MW) 3.132 4.256 3,497 Available Supply (MW) 3,497 3.806 Available Supply (MW) 4.087 Curtailment (MWh) Curtailment (MWh) 5876 Curtailment (MWh) 5877 Total # Hours w/ Outages Total # Hours w/ Outages Total # Hours w/ Outage: 0.00 Total # Hours w/ Outage 0.00 Total # Hours w/ Outage Total # Hours w/ Outage 0.00 Alt Diameter 24" / Otay Medium / 7.1.2.2 7.1.2.3 7.1.2.4 7.1.2.5 7.1.2.6 5977 1 3010 80% 5978 Available Supply (MW) Available Supply (MW)
Curtailment (MWh) 3,497 Available Supply (MW)
Curtailment (MWh) Available Supply (MW)
Curtailment (MWh) 4,087 Available Supply (MW) 3.132 Available Supply (MW) 4,256 3,497 3,806 5979 Curtailment (MWh) Curtailment (MWh) Curtailment (MWh) 5980 otal # Hours w/ Outage: Total # Hours w/ Outage Total # Hours w/ Outage Total # Hours w/ Outag Total # Hours w/ Outag Total # Hours w/ Outage Alt Diameter 24" / 6080 Otay Medium / 7221 7222 7223 7224 7225 7226 L3010 Out 6081 Available Supply (MW)
Curtailment (MWh) 3,132 Available Supply (MW)
Curtailment (MWh) 4.256 Available Supply (MW)
Curtailment (MWh) 3,497 Available Supply (MW)
Curtailment (MWh) 3,497 Available Supply (MW)
Curtailment (MWh) 3,806 Available Supply (MW)
Curtailment (MWh) 4.087 6082 6083 Total # Hours w/ Outage: 0.00 Total # Hours w/ Outages Total # Hours w/ Outages Total # Hours w/ Outages Total # Hours w/ Outage: Total # Hours w/ Outages Alt Diameter 24" / 7.1.3.1 7.1.3.2 7.1.3.4 7.1.3.5 7.1.3.6 6183 Otay Low / L3010 80% 6184 Available Supply (MW) 3.132 Available Supply (MW)
Curtailment (MWh) 4.256 Available Supply (MW)
Curtailment (MWh) 3,497 Available Supply (MW) 3,497 Available Supply (MW)
Curtailment (MWh) 3.806 Available Supply (MW) 4.087 6185 Curtailment (MWh) Curtailment (MWh) Curtailment (MWh) 6186 Total # Hours w/ Outages Total # Hours w/ Outages Total # Hours w/ Outage: 0.00 Total # Hours w/ Outage 00.0 Total # Hours w/ Outage Total # Hours w/ Outage 0.00 Alt Diameter 24" / Otay Low / L3010 7231 7233 7234 7235 7.2.3.6 6286 Out Available Supply (MW)
Curtailment (MWh) Available Supply (MW) Curtailment (MWh) 6287 3.132 Available Supply (MW) 4,256 Available Supply (MW) 3,497 3,497 Available Supply (MW)
Curtailment (MWh) 3,806 Available Supply (MW)
Curtailment (MWh) 4,087 6288 Curtailment (MWh) Curtailment (MWh) 6289 otal # Hours w/ Outage Total # Hours w/ Outa Total # Hours w/ Outage Alt Diameter 24" / 6389 Otay Out / L3010 7141 7142 7143 7144 7145 7146 80% 6390 Available Supply (MW)
Curtailment (MWh) Available Supply (MW)
Curtailment (MWh) Available Supply (MW)
Curtailment (MWh) 3,497 Available Supply (MW)
Curtailment (MWh) 3,497 Available Supply (MW)
Curtailment (MWh) Available Supply (MW)
Curtailment (MWh) 4.087 3.132 4.256 3,806 6391 0.00 6392 Total # Hours w/ Outages Total # Hours w/ Outages Total # Hours w/ Outages Total # Hours w/ Outage: otal # Hours w/ Outage: Total # Hours w/ Outage Alt Diameter 24" / 6492 Otay Out / L3010 7.2.4.1 7.2.4.2 7.2.4.3 7.2.4.4 7.2.4.5 7.2.4.6 Out 6493 Available Supply (MW) 3,132 Available Supply (MW) 4,256 Available Supply (MW) 3,076 Available Supply (MW) 2,851 Available Supply (MW) 3,806 Available Supply (MW) 3,806

Line No.	APPLICATION 15-09-013 VOLUME III – COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 2017) 1. Example Summer Low-EG Day MW 2. Example Summer High-EG Day MW 3. Example Winter Day MW 4. Winter 1-in-10 Year Day MW 5. Example Spring Day MW 6. Example Fall Day MW												
1		1. Example Summer	Low-EG Day MW	2. Example Summer Hig	h-EG Day MW	3. Example Winter	Day MW	4. Winter 1-in-10 Yea	r Day MW	5. Example Sprin	g Day MW	6. Example Fall D	ay MW
6494		Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	1,819	Curtailment (MWh)	0	Curtailment (MWh)	0
6595	Alt Diameter 30" / Otay Full / L3010 80%	8.1.1	.1	8.1.1.2		8.1.1.3		8.1.1.4		8.1.1.5		8.1.1.6	
6596 6597		Available Supply (MW) Curtailment (MWh)	3,132	Available Supply (MW) Curtailment (MWh)	4,256	Available Supply (MW) Curtailment (MWh)	3,497	Available Supply (MW) Curtailment (MWh)	3,497	Available Supply (MW) Curtailment (MWh)	3,806	Available Supply (MW) Curtailment (MWh)	4,087
6598		Total # Hours w/ Outage	s 0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
6698	Alt Diameter 30" / Otay Full / L3010 Out	8.2.1	.1	8.2.1.2		8.2.1.3		8.2.1.4		8.2.1.5		8.2.1.6	
6699 6700		Available Supply (MW) Curtailment (MWh)	3,132	Available Supply (MW) Curtailment (MWh)	4,256	Available Supply (MW) Curtailment (MWh)	3,497	Available Supply (MW) Curtailment (MWh)	3,497	Available Supply (MW) Curtailment (MWh)	3,806	Available Supply (MW) Curtailment (MWh)	4,087
6700		Total # Hours w/ Outage	s 0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
6801	Alt Diameter 30" / Otay Medium / L3010 80%	8.1.2	.1	8.1.2.2		8.1.2.3		8.1.2.4		8.1.2.5		8.1.2.6	
6802		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
6803 6804		Curtailment (MWh) Total # Hours w/ Outage	s 0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
6904	Alt Diameter 30" / Otay Medium / L3010 Out	8.2.2	.1	8.2.2.2		8.2.2.3		8.2.2.4		8.2.2.5		8.2.2.6	
6905		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
6906 6907		Curtailment (MWh) Total # Hours w/ Outage	0 s 0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
7007	Alt Diameter 30" / Otay Low / L3010	8.1.3		8.1.3.2	0.00	8.1.3.3	0.00	8.1.3.4	0.00	8.1.3.5		8.1.3.6	0.00
	80%												
7008 7009		Available Supply (MW) Curtailment (MWh)	3,132	Available Supply (MW) Curtailment (MWh)	4,256	Available Supply (MW) Curtailment (MWh)	3,497	Available Supply (MW) Curtailment (MWh)	3,497	Available Supply (MW) Curtailment (MWh)	3,806	Available Supply (MW) Curtailment (MWh)	4,087
7010		Total # Hours w/ Outage	s 0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
7110	Alt Diameter 30" / Otay Low / L3010 Out	8.2.3	.1	8.2.3.2		8.2.3.3		8.2.3.4		8.2.3.5		8.2.3.6	
7111 7112		Available Supply (MW) Curtailment (MWh)	3,132	Available Supply (MW) Curtailment (MWh)	4,256	Available Supply (MW) Curtailment (MWh)	3,497	Available Supply (MW) Curtailment (MWh)	3,497	Available Supply (MW) Curtailment (MWh)	3,806	Available Supply (MW) Curtailment (MWh)	4,087
7113		Total # Hours w/ Outage	s 0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
7213	Alt Diameter 30" / Otay Out / L3010 80%	8.1.4	.1	8.1.4.2		8.1.4.3		8.1.4.4		8.1.4.5		8.1.4.6	
7214 7215	,	Available Supply (MW) Curtailment (MWh)	3,132	Available Supply (MW) Curtailment (MWh)	4,256	Available Supply (MW) Curtailment (MWh)	3,497	Available Supply (MW) Curtailment (MWh)	3,497	Available Supply (MW) Curtailment (MWh)	3,806	Available Supply (MW) Curtailment (MWh)	4,087
7216		Total # Hours w/ Outage	s 0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
7316	Alt Diameter 30" / Otay Out / L3010 Out	8.2.4	.1	8.2.4.2		8.2.4.3		8.2.4.4		8.2.4.5		8.2.4.6	
7317 7318		Available Supply (MW) Curtailment (MWh)	3,132	Available Supply (MW) Curtailment (MWh)	4,256	Available Supply (MW) Curtailment (MWh)	3,497	Available Supply (MW) Curtailment (MWh)	3,497	Available Supply (MW) Curtailment (MWh)	3,806	Available Supply (MW) Curtailment (MWh)	4,087
7419	Alt Diameter 42" / Otay Full / L3010 80%	9.1.1	- J	9.1.1.2	U	9.1.1.3	0	9.1.1.4	V	9.1.1.5	0	9.1.1.6	o l
7420		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
7421		Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0
7422 7522	Alt Diameter 42" / Otay Full / L3010	Total # Hours w/ Outage 9.2.1.		Total # Hours w/ Outages 9.2.1.2	0.00	Total # Hours w/ Outages 9.2.1.3	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
7523	Out	Available Supply (MW)	3.132	Available Supply (MW)	4.256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3.806	Available Supply (MW)	4.087
7523 7524		Curtailment (MWh)	3,132	Curtailment (MWh)	4,200 0	Curtailment (MWh)	0,497	Curtailment (MWh)	0,497	Curtailment (MWh)	3,800	Curtailment (MWh)	4,087
7525		Total # Hours w/ Outage	s 0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
7625	Alt Diameter 42" / Otay Medium / L3010 80%	9.1.2	.1	9.1.2.2		9.1.2.3		9.1.2.4		9.1.2.5		9.1.2.6	

Line No.										·			
1		1. Example Summer Low	v-EG Day MW	2. Example Summer High	n-EG Day MW	3. Example Winter	Day MW	4. Winter 1-in-10 Year	Day MW	5. Example Spring	Day MW	6. Example Fall D	ay MW
7626		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
7627		Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0
7628		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
7728	Alt Diameter 42" / Otay Medium / L3010 Out	9.2.2.1		9.2.2.2		9.2.2.3		9.2.2.4		9.2.2.5		9.2.2.6	
7729		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
7730 7731		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
1131		Total # Hours W/ Outages	0.00	Total # Hours W/ Outages	0.00	Total # Hours W/ Outages	0.00	Total # Hours W/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
7831	Alt Diameter 42" / Otay Low / L3010 80%	9.1.3.1		9.1.3.2		9.1.3.3		9.1.3.4		9.1.3.5		9.1.3.6	
7832		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
7833 7834		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
7834		Total # Hours W/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours W/ Outages	0.00	Total # Hours W/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
7934	Alt Diameter 42" / Otay Low / L3010 Out	9.2.3.1		9.2.3.2		9.2.3.3		9.2.3.4		9.2.3.5		9.2.3.6	
7935		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
7936 7937		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
1931		Total # Hours W/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours W/ Outages	0.00	Total # Hours W/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
8037	Alt Diameter 42" / Otay Out / L3010 80%	9.1.4.1		9.1.4.2		9.1.4.3		9.1.4.4		9.1.4.5		9.1.4.6	
8038		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
8039 8040		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
0040		Total # Hours W/ Outages	0.00	Total # Hours W/ Outages	0.00	Total # Hours W/ Outages	0.00	Total # Hours W/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
8140	Alt Diameter 42" / Otay Out / L3010 Out	9.2.4.1		9.2.4.2		9.2.4.3		9.2.4.4		9.2.4.5		9.2.4.6	
8141		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
8142		Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0
8243	L1600 In-Kind / Otay Full / L3010 80%	10.1.1.1		10.1.1.2		10.1.1.3		10.1.1.4		10.1.1.5		10.1.1.6	
8244		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
8245		Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0
8246		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
8346	L1600 In-Kind / Otay Full / L3010 Out	10.2.1.1		10.2.1.2		10.2.1.3		10.2.1.4		10.2.1.5		10.2.1.6	
8347		Available Supply (MW)	3,132	Available Supply (MW)	3,392	Available Supply (MW)	3,485	Available Supply (MW)	3,260	Available Supply (MW)	3,806	Available Supply (MW)	4,087
8348		Curtailment (MWh)	0	Curtailment (MWh)	1,539	Curtailment (MWh)	0	Curtailment (MWh)	105	Curtailment (MWh)	0	Curtailment (MWh)	0
8349 8449	L1600 In-Kind / Otay Medium / L3010 80%	Total # Hours w/ Outages 10.1.2.1	0.00	Total # Hours w/ Outages	8.50	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	2.25	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
8450		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
8451		Curtailment (MWh)	0,132	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0
8452		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
8552	L1600 In-Kind / Otay Medium / L3010 Out	10.2.2.1		10.2.2.2		10.2.2.3		10.2.2.4		10.2.2.5		10.2.2.6	
8553		Available Supply (MW)	3,132	Available Supply (MW)	3,243	Available Supply (MW)	3,019	Available Supply (MW)	2,794	Available Supply (MW)	3,806	Available Supply (MW)	3,847
8554		Curtailment (MWh)	0	Curtailment (MWh)	2,953	Curtailment (MWh)	0	Curtailment (MWh)	2,315	Curtailment (MWh)	0	Curtailment (MWh)	0
8555		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	10.50	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	9.25	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
8655	L1600 In-Kind / Otay Low / L3010 80%	10.1.3.1		10.1.3.2		10.1.3.3		10.1.3.4		10.1.3.5		10.1.3.6	
8656		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
8657		Curtailment (MWh)	0.00	Curtailment (MWh)	0.00	Curtailment (MWh)	0.00	Curtailment (MWh)	0 00	Curtailment (MWh)	0.00	Curtailment (MWh)	0 00
8658		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00

WORK PAPER TABLE - SCENARIO ANALYSIS ELECTRIC DEMAND AND OUTPUTS (SA 1.3)

EXAMPLE ELECTRIC DEMAND DAY DURING SEASONAL VARIATIONS WITH ELECTRIC SUPPLY FOR THE ALTERNATIVES AND RELATED CURTAILMENT APPLICATION 15-09-013 VOLUME III - COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 2017)

Line No. 1. Example Summer Low-EG Day MW 2. Example Summer High-EG Day MW 6. Example Fall Day MW 3. Example Winter Day MW 4. Winter 1-in-10 Year Day MW 5. Example Spring Day MW L1600 In-Kind / 8758 Otay Low / L3010 10231 10232 10233 10234 10235 10236 Out Available Supply (MW) 8759 Available Supply (MW) 3,399 3.094 3.094 Available Supply (MW) 2.570 Available Supply (MW) 2,570 Available Supply (MW) 3,245 Available Supply (MW) 8760 Curtailment (MWh) Curtailment (MWh) Curtailment (MWh) Curtailment (MWh Curtailment (MWh) Curtailment (MWh) 0.00 8761 Total # Hours w/ Outages Total # Hours w/ Outages Total # Hours w/ Outages otal # Hours w/ Outage Total # Hours w/ Outage: Total # Hours w/ Outage L1600 In-Kind / 10.1.4.1 10.1.4.2 10.1.4.3 10.1.4.4 10.1.4.5 10.1.4.6 8861 Otay Out / L3010 80% 8862 Available Supply (MW) 3.132 Available Supply (MW) 4.256 Available Supply (MW) 3,497 Available Supply (MW) 3.497 Available Supply (MW) 3.806 Available Supply (MW) 4 087 8863 Curtailment (MWh) Curtailment (MWh) Curtailment (MWh) Curtailment (MWh) urtailment (MWh) Curtailment (MWh) Total # Hours w/ Outage 8864 Total # Hours w/ Outages Total # Hours w/ Outages 0.00 Total # Hours w/ Outages 0.00 00 Total # Hours w/ Outage 0.00 Total # Hours w/ Outage 0.00 L1600 In-Kind / Otay Out / L3010 10.2.4.1 10.2.4.2 10.2.4.3 10.2.4.4 10.2.4.5 10.2.4.6 8964 Out 8965 Available Supply (MW) 2,907 Available Supply (MW) Available Supply (MW) Available Supply (MW) 2,570 Available Supply (MW) Available Supply (MW) 8966 urtailment (MWh Curtailment (MWh Curtailment (MWh) Curtailment (MWh) Curtailment (MWh) Otay Mesa 9067 Alternate / Otay 11112 11113 11 1 1 4 11115 11.1.1.6 Full / L3010 80% 9068 Available Supply (MW)
Curtailment (MWh) Available Supply (MW)
Curtailment (MWh) Available Supply (MW) 3,497 Available Supply (MW)
Curtailment (MWh) Available Supply (MW)
Curtailment (MWh) Available Supply (MW)
Curtailment (MWh) 4.087 3.132 4.256 3.497 3.806 Curtailment (MWh) 9069 0.00 9070 0.00 Total # Hours w/ Outages Total # Hours w/ Outage: Otay Mesa 11.2.1.2 11.2.1.3 11.2.1.4 11.2.1.5 11.2.1.6 9170 Alternate / Otay Full / L3010 Out 9171 Available Supply (MW) Curtailment (MWh) Available Supply (MW)
Curtailment (MWh) Available Supply (MW)
Curtailment (MWh) Available Supply (MW) 3.132 2.570 2.586 Available Supply (MW) 2,570 3.463 Available Supply (MW) 3.377 Curtailment (MWh) Curtailment (MWh) 9172 Curtailment (MWh) 9173 Total # Hours w/ Outages Total # Hours w/ Outages Total # Hours w/ Outage 0.00 Otay Mesa Alternate / Otay 11.1.2.1 11.1.2.2 11.1.2.3 11.1.2.4 11.1.2.5 11.1.2.6 9273 Medium / L3010 9274 Available Supply (MW) Available Supply (MW)
Curtailment (MWh) 3,497 Available Supply (MW)
Curtailment (MWh) Available Supply (MW)
Curtailment (MWh) Available Supply (MW) 3.132 Available Supply (MW) 4,256 3,497 3,806 4,087 9275 Curtailment (MWh) Curtailment (MWh) Curtailment (MWh) 9276 otal # Hours w/ Outage: Total # Hours w/ Outag Total # Hours w/ Outage Total # Hours w/ Outag Total # Hours w/ Outa Total # Hours w/ Outage Otay Mesa Alternate / Otay 9376 11222 11223 11224 11225 11226 Medium / L3010 Out 9377 Available Supply (MW)
Curtailment (MWh) 2.883 Available Supply (MW) 2.570 Available Supply (MW)
Curtailment (MWh) 2.570 Available Supply (MW)
Curtailment (MWh) 2,570 Available Supply (MW)
Curtailment (MWh) 2,987 Available Supply (MW)
Curtailment (MWh) 2.947 9378 Curtailment (MWh) 9379 Total # Hours w/ Outages Total # Hours w/ Outages Total # Hours w/ Outages Total # Hours w/ Outage: Total # Hours w/ Outages Total # Hours w/ Outage: 11.1.3.2 11.1.3.3 11.1.3.4 11.1.3.5 11.1.3.6 9479 Alternate / Otay Low / L3010 80% 9480 Available Supply (MW) 3.132 Available Supply (MW)
Curtailment (MWh) 4.256 Available Supply (MW)
Curtailment (MWh) 3,497 Available Supply (MW) 3,497 Available Supply (MW)
Curtailment (MWh) 3.806 Available Supply (MW) 4.087 9481 Curtailment (MWh) Curtailment (MWh) Curtailment (MWh) 9482 Total # Hours w/ Outages Total # Hours w/ Outages Total # Hours w/ Outage: 0.00 Total # Hours w/ Outage 00.0 Total # Hours w/ Outage Total # Hours w/ Outage 0.00 Otay Mesa 11.2.3.1 11.2.3.2 11.2.3.3 11.2.3.4 11235 11.2.3.6 9582 Alternate / Otav Low / L3010 Out Available Supply (MW)
Curtailment (MWh) Available Supply (MW) Curtailment (MWh) 9583 2,570 Available Supply (MW) 2,570 12,380 Available Supply (MW) 2,570 2,570 Available Supply (MW)
Curtailment (MWh) 2,570 Available Supply (MW)
Curtailment (MWh) 2,570 9584 Curtailment (MWh) Curtailment (MWh) 9585 otal # Hours w/ Outage Total # Hours w/ Outag Total # Hours w/ Outage otal # Hours w/ Outa Total # Hours w/ Outa Otay Mesa 9685 Alternate / Otay 11 1 4 1 11142 11143 11 1 4 4 11145 11146 Out / L3010 80% 9686 Available Supply (MW)
Curtailment (MWh) 3.694 3.132 4.143 2.963 2.739 3,750 9687 0.00 9688 Total # Hours w/ Outages Total # Hours w/ Outages Total # Hours w/ Outages Total # Hours w/ Outage: otal # Hours w/ Outage: Total # Hours w/ Outage Otay Mesa 9788 Alternate / Otay 11.2.4.1 11.2.4.2 11.2.4.3 11.2.4.4 11.2.4.5 11.2.4.6 Out / L3010 Out 9789 Available Supply (MW) 2,570 Available Supply (MW) 2,570 Available Supply (MW) 2.570 Available Supply (MW) 2,570 Available Supply (MW) 2,570 Available Supply (MW) 2.570

1 9790 9891	LNG Storage / Otay Full / L3010	Example Summer Lo Curtailment (MWh)		APPLICATION 15-09-013 VOLUME III – COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 2017) No. 1. Example Summer Low-EG Day MW 2. Example Summer High-EG Day MW 3. Example Winter Day MW 4. Winter 1-in-10 Year Day MW 5. Example Spring Day MW 6. Example Fall Day MW										
	Otay Full / L3010	Curtailment (MWh)	0.070		II-LO Day MITT	3. Example Winter I	Day MW			5,152 Curtailment (MWh) 150		·		
9891	Otay Full / L3010		2,873	Curtailment (MWh)	12,380	Curtailment (MWh)	1,450	Curtailment (MWh)	5,152	Curtailment (MWh)	150	Curtailment (MWh)	1,636	
	80%	13.1.1.1		13.1.1.2		13.1.1.3		13.1.1.4		13.1.1.	5	13.1.1.6		
9892		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087	
9893 9894		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	
9994	LNG Storage / Otay Full / L3010 Out	13.2.1.1		13.2.1.2		13.2.1.3		13.2.1.4		13.2.1.	5	13.2.1.6		
9995 9996		Available Supply (MW) Curtailment (MWh)	3,132	Available Supply (MW) Curtailment (MWh)	4,256	Available Supply (MW) Curtailment (MWh)	3,497	Available Supply (MW) Curtailment (MWh)	3,497	Available Supply (MW) Curtailment (MWh)	3,806	Available Supply (MW)	4,087	
9997		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	
10097	LNG Storage / Otay Medium / L3010 80%	13.1.2.1		13.1.2.2		13.1.2.3		13.1.2.4		13.1.2.	5	13.1.2.6		
10098		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087	
10099 10100		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	
10200	LNG Storage / Otay Medium / L3010 Out	13.2.2.1		13.2.2.2		13.2.2.3		13.2.2.4		13.2.2.	5	13.2.2.6		
10201	23070 000	Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087	
10202		Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	
10203		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	
10303	LNG Storage / Otay Low / L3010 80%	13.1.3.1		13.1.3.2		13.1.3.3		13.1.3.4		13.1.3.	5	13.1.3.6		
10304		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087	
10305 10306		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	
10406	LNG Storage / Otay Low / L3010 Out	13.2.3.1		13.2.3.2		13.2.3.3		13.2.3.4		13.2.3.	5	13.2.3.6		
10407		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087	
10408 10409		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	
10509	LNG Storage / Otay Out / L3010 80%	13.1.4.1		13.1.4.2		13.1.4.3		13.1.4.4		13.1.4.	5	13.1.4.6		
10510		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087	
10511 10512		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	
10612	LNG Storage / Otay Out / L3010 Out	13.2.4.1		13.2.4.2		13.2.4.3		13.2.4.4		13.2.4.	5	13.2.4.6		
10613		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087	
10614		Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	
10715	Alt Energy (Grid) / Otay Full / L3010 80%	14.1.1.1		14.1.1.2		14.1.1.3		14.1.1.4		14.1.1.	5	14.1.1.6		
10716		Available Supply (MW)	4,818	Available Supply (MW)	5,942	Available Supply (MW)	5,183	Available Supply (MW)	5,183	Available Supply (MW)	5,492	Available Supply (MW)	5,773	
10717 10718		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	
	Alt Energy (Grid) / Otay Full / L3010 Out	14.2.1.1	0.00	14.2.1.2	0.00	14.2.1.3	0.00	14.2.1.4	0.00	14.2.1.	3.00	14.2.1.6	0.00	
10819		Available Supply (MW)	4,818	Available Supply (MW)	4,256	Available Supply (MW)	4,272	Available Supply (MW)	4,256	Available Supply (MW)	5,149	Available Supply (MW)	5,063	
10820		Curtailment (MWh)	0.00	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	
10821 10921	Alt Energy (Grid) / Otay Medium / L3010 80%	Total # Hours w/ Outages 14.1.2.1	0.00	Total # Hours w/ Outages 14.1.2.2	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	

Lina Na				APPLI	CATION 15-09-0	113 VOLUME III – COST-EFFE	ECTIVENESS A	NALYSIS (CORRECTED FEE	BRUARY 2017)			
<u>Line No.</u> 1		1. Example Summer Low	-EG Day MW	2. Example Summer High	n-EG Day MW	3. Example Winter	Day MW	4. Winter 1-in-10 Year	Day MW	5. Example Spring	Day MW	6. Example Fall Da	ry MW
10922		Available Supply (MW)	4,818	Available Supply (MW)	5,942	Available Supply (MW)	5,183	Available Supply (MW)	5,183	Available Supply (MW)	5,492	Available Supply (MW)	5,773
10923		Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0
10924		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
11024	Alt Energy (Grid) / Otay Medium / L3010 Out	14.2.2.1		14.2.2.2		14.2.2.3		14.2.2.4		14.2.2.5		14.2.2.6	
11025		Available Supply (MW)	4,569	Available Supply (MW)	4,256	Available Supply (MW)	4,256	Available Supply (MW)	4,256	Available Supply (MW)	4,672	Available Supply (MW)	4,633
11026 11027		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
	Alt Energy (Grid) /		3,33		3.33	- Communication of the Communi	3,333	Transcript of the second of th		l comment of the second		The state of the s	5.55
11127	Otay Low / L3010 80%	14.1.3.1		14.1.3.2		14.1.3.3		14.1.3.4		14.1.3.5		14.1.3.6	
11128		Available Supply (MW)	4,818	Available Supply (MW)	5,942	Available Supply (MW)	5,183	Available Supply (MW)	5,183	Available Supply (MW)	5,492	Available Supply (MW)	5,773
11129 11130	ŀ	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
	Alt Energy (Grid) /	Total II Tibalo III Gatagoo	0.00	Total II Tiodio III Gatagoo	0.00	Total # Tibalo W Catagoo	0.00	Total # Tibalo W Oatagot	0.00	Total # Tibalo W/ Oakagov	0.00	Total # Trouto W/ Outago	0.00
11230	Otay Low / L3010 Out	14.2.3.1		14.2.3.2		14.2.3.3		14.2.3.4		14.2.3.5		14.2.3.6	
11231		Available Supply (MW)	4,256	Available Supply (MW)	4,256	Available Supply (MW)	4,256	Available Supply (MW)	4,256	Available Supply (MW)	4,256	Available Supply (MW)	4,256
11232 11233	ŀ	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
	Alt Energy (Grid) /		3,55		3.33	l l l l l l l l l l l l l l l l l l l	3.53	The state of the s		l l l l l l l l l l l l l l l l l l l			3.33
11333	Otay Out / L3010 80%	14.1.4.1		14.1.4.2		14.1.4.3		14.1.4.4		14.1.4.5		14.1.4.6	
11334 11335		Available Supply (MW)	4,818	Available Supply (MW)	5,829	Available Supply (MW)	4,649	Available Supply (MW)	4,424	Available Supply (MW)	5,436	Available Supply (MW)	5,380
11335		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
11436	Alt Energy (Grid) / Otay Out / L3010 Out	14.2.4.1		14.2.4.2		14.2.4.3		14.2.4.4		14.2.4.5		14.2.4.6	
11437		Available Supply (MW)	4 256	Available Supply (MW)	4 256	Available Supply (MW)	4 256	Available Supply (MW)	4 256	Available Supply (MW)	4 256	Available Supply (MW)	4 256
11437 11438		Available Supply (MW) Curtailment (MWh)	4,256 0	Available Supply (MW) Curtailment (MWh)	4,256 0	Available Supply (MW) Curtailment (MWh)	4,256 0	Available Supply (MW) Curtailment (MWh)	4,256 0	Available Supply (MW) Curtailment (MWh)	4,256 0	Available Supply (MW) Curtailment (MWh)	4,256 0
	Alt Energy (Small) / Otay Full / L3010 80%		4,256 0		4,256 0		4,256 0		4,256 0		4,256 0		4,256 0
11438	Alt Energy (Small) / Otay Full / L3010	Curtailment (MWh)	4,256 0	Curtailment (MWh)	4,256 0	Curtailment (MWh)	4,256 0	Curtailment (MWh)	4,256 0	Curtailment (MWh)	4,256 0	Curtailment (MWh)	4,256 0
11438 11539 11540 11541	Alt Energy (Small) / Otay Full / L3010 80%	Curtailment (MWh) 21.1.1.1 Available Supply (MW) Curtailment (MWh)	4,818 0	Curtailment (MWh) 21.1.1.2 Available Supply (MW) Curtailment (MWh)	5,942 0	Curtailment (MWh) 21.1.1.3 Available Supply (MW) Curtailment (MWh)	5,183 0	Curtailment (MWh) 21.1.1.4 Available Supply (MW) Curtailment (MWh)	5,183 0	Curtailment (MWh) 21.1.1.5 Available Supply (MW) Curtailment (MWh)	5,492 0	Curtailment (MWh) 21.1.1.6 Available Supply (MW) Curtailment (MWh)	5,773 0
11438 11539 11540 11541 11542	Alt Energy (Small) / Otay Full / L3010 80% Alt Energy (Small)	Curtailment (MWh) 21.1.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	0	Curtailment (MWh) 21.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	0	Curtailment (MWh) 21.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	0	Curtailment (MWh) 21.1.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outagee	0	Curtailment (MWh) 21.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	0	Curtailment (MWh) 21.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	0
11438 11539 11540 11541	Alt Energy (Small) / Otay Full / L3010 80%	Curtailment (MWh) 21.1.1.1 Available Supply (MW) Curtailment (MWh)	4,818 0	Curtailment (MWh) 21.1.1.2 Available Supply (MW) Curtailment (MWh)	5,942 0	Curtailment (MWh) 21.1.1.3 Available Supply (MW) Curtailment (MWh)	5,183 0	Curtailment (MWh) 21.1.1.4 Available Supply (MW) Curtailment (MWh)	5,183 0	Curtailment (MWh) 21.1.1.5 Available Supply (MW) Curtailment (MWh)	5,492 0	Curtailment (MWh) 21.1.1.6 Available Supply (MW) Curtailment (MWh)	5,773 0
11438 11539 11540 11541 11542 11642	Alt Energy (Small) / Otay Full / L3010 80% Alt Energy (Small) / Otay Full / L3010 Out	Curtailment (MWh) 21.1.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.1 Available Supply (MW)	4,818 0	Curtailment (MWh) 21.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.2 Available Supply (MW)	5,942 0	Curtailment (MWh) 21.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.3 Available Supply (MW)	5,183 0	Curtailment (MWh) 21.1.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.2.1.4 Available Supply (MW)	5,183 0	Curtailment (MWh) 21.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.5 Available Supply (MW)	5,492 0	Curtailment (MWh) 21.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaged 21.2.1.6 Available Supply (MW)	5,773 0
11438 11539 11540 11541 11542 11642 11643 11644	Alt Energy (Small) / Otay Full / L3010 80% Alt Energy (Small) / Otay Full / L3010 Out	Curtailment (MWh) 21.1.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.1 Available Supply (MW) Curtailment (MWh)	4,818 0 0.00	Curtailment (MWh) 21.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.2 Available Supply (MW) Curtailment (MWh)	5,942 0 0.00	Curtailment (MWh) 21.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.3 Available Supply (MW) Curtailment (MWh)	5,183 0 0.00	Curtailment (MWh) 21.1.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.2.1.4 Available Supply (MW) Curtailment (MWh)	5,183 0 0.00	Curtailment (MWh) 21.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage! 21.2.1.5 Available Supply (MW) Curtailment (MWh)	5,492 0 0.00	Curtailment (MWh) 21.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage: 21.2.1.6 Available Supply (MW) Curtailment (MWh)	5,773 0 0.00
11438 11539 11540 11541 11542 11642	Alt Energy (Small) / Otay Full / L3010 80% Alt Energy (Small) / Otay Full / L3010 Out	Curtailment (MWh) 21.1.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.1 Available Supply (MW)	4,818 0 0.00	Curtailment (MWh) 21.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.2 Available Supply (MW)	5,942 0 0.00	Curtailment (MWh) 21.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.3 Available Supply (MW)	5,183 0 0.00	Curtailment (MWh) 21.1.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.2.1.4 Available Supply (MW)	5,183 0 0.00	Curtailment (MWh) 21.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.5 Available Supply (MW)	5,492 0 0.00	Curtailment (MWh) 21.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaged 21.2.1.6 Available Supply (MW)	5,773 0 0.00
11438 11539 11540 11541 11542 11642 11643 11644	Alt Energy (Small) / Otay Full / L3010 80% Alt Energy (Small) / Otay Full / L3010 Out	Curtailment (MWh) 21.1.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.1 Available Supply (MW) Curtailment (MWh)	4,818 0 0.00	Curtailment (MWh) 21.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.2 Available Supply (MW) Curtailment (MWh)	5,942 0 0.00	Curtailment (MWh) 21.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.3 Available Supply (MW) Curtailment (MWh)	5,183 0 0.00	Curtailment (MWh) 21.1.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.2.1.4 Available Supply (MW) Curtailment (MWh)	5,183 0 0.00	Curtailment (MWh) 21.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage! 21.2.1.5 Available Supply (MW) Curtailment (MWh)	5,492 0 0.00	Curtailment (MWh) 21.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage: 21.2.1.6 Available Supply (MW) Curtailment (MWh)	5,773 0 0.00
11438 11539 11540 11541 11542 11642 11643 11644 11645	Alt Energy (Small) / Otay Full / L3010 80% Alt Energy (Small) / Otay Full / L3010 Out Alt Energy (Small) / Otay Medium / L3010 80%	Curtailment (MWh) 21.1.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.1 Available Supply (MW)	4,818 0 0.00	Curtailment (MWh) 21.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.2 Available Supply (MW) Curtailment (MWh)	5,942 0 0.00	Curtailment (MWh) 21.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.3 Available Supply (MW)	5,183 0 0.00	Curtailment (MWh) 21.1.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage; 21.2.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage; 21.1.2.4 Available Supply (MW)	5,183 0 0.00	Curtailment (MWh) 21.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.5 Available Supply (MW)	5,492 0 0.00	Curtailment (MWh) 21.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.2.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.1.2.6 Available Supply (MW)	5,773 0 0.00 5,063 0 0.00
11438 11539 11540 11541 11542 11642 11643 11644 11745	Alt Energy (Small) / Otay Full / L3010 80% Alt Energy (Small) / Otay Full / L3010 Out Alt Energy (Small) / Otay Medium / L3010 80%	Curtailment (MWh) 21.1.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.1 Available Supply (MW) Curtailment (MWh) Curtailment (MWh) Curtailment (MWh) Curtailment (MWh) Curtailment (MWh)	4,818 0 0.00 4,818 0 0.00	Curtailment (MWh) 21.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.2 Available Supply (MW) Curtailment (MWh) Curtailment (MWh) Curtailment (MWh)	5,942 0 0.00 4,256 0 0.00	Curtailment (MWh) 21.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.3 Available Supply (MW) Curtailment (MWh) Curtailment (MWh) Curtailment (MWh)	5,183 0 0.00 4,272 0 0.00	Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.2.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.2.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget	5,183 0 0.00 4,256 0 0.00	Curtailment (MWh) 21.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.2.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.1.2.5 Available Supply (MW) Curtailment (MWh) Curtailment (MWh) Curtailment (MWh)	5,492 0 0.00 5,149 0 0.00	Curtailment (MWh) 21.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.2.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.1.2.6 Available Supply (MW) Curtailment (MWh) Curtailment (MWh) Curtailment (MWh)	5,773 0 0.00 5,063 0 0.00
11438 11539 11540 11541 11542 11642 11643 11644 11645	Alt Energy (Small) / Otay Full / L3010 80% Alt Energy (Small) / Otay Full / L3010 Out Alt Energy (Small) / Otay Medium / L3010 80%	Curtailment (MWh) 21.1.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.1 Available Supply (MW)	4,818 0 0.00 4,818 0 0.00	Curtailment (MWh) 21.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.2 Available Supply (MW) Curtailment (MWh)	5,942 0 0.00 4,256 0	Curtailment (MWh) 21.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.3 Available Supply (MW)	5,183 0 0.00 4,272 0 0.00	Curtailment (MWh) 21.1.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage; 21.2.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage; 21.1.2.4 Available Supply (MW)	5,183 0 0.00 4,256 0	Curtailment (MWh) 21.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.5 Available Supply (MW)	5,492 0 0.00 5,149 0 0.00	Curtailment (MWh) 21.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.2.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.1.2.6 Available Supply (MW)	5,773 0 0.00 5,063 0 0.00
11438 11539 11540 11541 11542 11642 11643 11644 11645 11745 11746 11747 11748	Alt Energy (Small) / Otay Full / L3010 80% Alt Energy (Small) / Otay Full / L3010 Out Alt Energy (Small) / Otay Medium / L3010 80% Alt Energy (Small) / Otay Medium / L3010 Out	Curtailment (MWh) 21.1.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.2.1	4,818 0 0.00 4,818 0 0.00	Curtailment (MWh) 21.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.2.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	5,942 0 0.00 4,256 0 0.00 5,942 0 0.00	Curtailment (MWh) 21.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.3	5,183 0 0.00 4,272 0 0.00 5,183 0 0.00	Curtailment (MWh) 21.1.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outagee 21.2.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outagee 21.1.2.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outagee	5.183 0 0.00 4.256 0 0.00	Curtailment (MWh) 21.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	5,492 0 0.00 5,149 0 0.00 5,492 0 0.00	Curtailment (MWh) 21.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.2.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget Curtailment (MWh) Total # Hours w/ Outaget	5,773 0 0.00 5,063 0 0.00
11438 11539 11540 11541 11542 11642 11643 11644 11745 11746 11747 11748 11848	Alt Energy (Small) / Otay Full / L3010 80% Alt Energy (Small) / Otay Full / L3010 Out Alt Energy (Small) / Otay Medium / L3010 80% Alt Energy (Small) / Otay Medium / L3010 Out	Curtailment (MWh) 21.1.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.2.1 Available Supply (MW)	4,818 0 0.00 4,818 0 0.00	Curtailment (MWh) 21.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.2 Available Supply (MW) Total # Hours w/ Outages 21.2.2.2 Available Supply (MW) Total # Hours w/ Outages	5,942 0 0.00 4,256 0 0.00	Curtailment (MWh) 21.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.2.3 Available Supply (MW)	5,183 0 0.00 4,272 0 0.00	Curtailment (MWh) 21.1.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.2.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.1.2.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.1.2.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget	5,183 0 0.00 4,256 0 0.00	Curtailment (MWh) 21.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.2.5 Available Supply (MW) Total # Hours w/ Outages	5,492 0 0.00 5,149 0 0.00	Curtailment (MWh) 21.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.2.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.1.2.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.1.2.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget	5,773 0 0.00 5,063 0 0.00
11438 11539 11540 11541 11542 11642 11643 11644 11645 11745 11746 11747 11748 11848	Alt Energy (Small) / Otay Full / L3010 80% Alt Energy (Small) / Otay Full / L3010 Out Alt Energy (Small) / Otay Medium / L3010 80% Alt Energy (Small) / Otay Medium / L3010 Out	Curtailment (MWh) 21.1.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.2.1 Available Supply (MW) Curtailment (MWh) Curtailment (MWh) Curtailment (MWh)	4,818 0 0.00 4,818 0 0.00 4,818 0 0.00	Curtailment (MWh) 21.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.2.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	5,942 0 0.00 4,256 0 0.00 5,942 0 0.00	Curtailment (MWh) 21.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.2.3	5,183 0 0.00 4,272 0 0.00 5,183 0 0.00	Curtailment (MWh) 21.1.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage; 21.2.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage; 21.1.2.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage; 21.2.2.4 Available Supply (MW) Curtailment (MWh) Curtailment (MWh) Curtailment (MWh) Curtailment (MWh) Curtailment (MWh)	5,183 0 0,00 4,256 0 0,00 5,183 0 0,00	Curtailment (MWh) 21.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.2.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.1.2.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.2.2.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget	5,492 0 0.00 5,149 0 0.00 5,492 0 0.00	Curtailment (MWh) 21.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.2.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.1.2.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.2.2.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget	5,773 0 0.00 5,063 0 0.00 5,773 0 0.00
11438 11539 11540 11541 11542 11642 11643 11644 11745 11746 11747 11748 11848	Alt Energy (Small) / Otay Full / L3010 80% Alt Energy (Small) / Otay Full / L3010 Out Alt Energy (Small) / Otay Medium / L3010 80% Alt Energy (Small) / Otay Medium / L3010 Out	Curtailment (MWh) 21.1.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.2.1 Available Supply (MW)	4,818 0 0.00 4,818 0 0.00	Curtailment (MWh) 21.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.2 Available Supply (MW) Total # Hours w/ Outages 21.2.2.2 Available Supply (MW) Total # Hours w/ Outages	5,942 0 0.00 4,256 0 0.00 5,942 0 0.00	Curtailment (MWh) 21.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.2.3 Available Supply (MW)	5,183 0 0.00 4,272 0 0.00 5,183 0 0.00	Curtailment (MWh) 21.1.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.2.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.1.2.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.1.2.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget	5.183 0 0.00 4.256 0 0.00	Curtailment (MWh) 21.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.2.5 Available Supply (MW) Total # Hours w/ Outages	5,492 0 0.00 5,149 0 0.00 5,492 0 0.00	Curtailment (MWh) 21.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.2.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.1.2.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.1.2.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget	5,773 0 0.00 5,063 0 0.00
11438 11539 11540 11541 11542 11642 11643 11644 11745 11746 11747 11748 11848 11849 11850 11851	Alt Energy (Small) / Otay Full / L3010 80% Alt Energy (Small) / Otay Full / L3010 Out Alt Energy (Small) / Otay Medium / L3010 80% Alt Energy (Small) / Otay Medium / L3010 Out	Curtailment (MWh) 21.1.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	4,818 0 0.00 4,818 0 0.00 4,818 0 0.00 4,569 0 0.00	Curtailment (MWh) 21.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.2.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.2.2	5,942 0 0.00 4,256 0 0.00 5,942 0 0.00 4,256 0 0.00	Curtailment (MWh) 21.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	5,183 0 0.00 4,272 0 0.00 5,183 0 0.00	Curtailment (MWh) 21.1.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage 21.2.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.1.2.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.2.2.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.2.2.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget	5,183 0 0,00 4,256 0 0,00 5,183 0 0,00 4,256 0 0,00	Curtailment (MWh) 21.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.2.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.1.2.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.2.2.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.2.3.5	5,492 0 0.00 5,149 0 0.00 5,492 0 0.00	Curtailment (MWh) 21.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.1.2.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.2.2.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.2.3.6	5,773 0 0.00 5,063 0 0.00 5,773 0 0.00 4,633 0 0.00
11438 11539 11540 11541 11542 11642 11643 11644 11645 11745 11746 11747 11748 11848 11849 11850 11851	Alt Energy (Small) / Otay Full / L3010 Alt Energy (Small) / Otay Full / L3010 Out Alt Energy (Small) / Otay Medium / L3010 80% Alt Energy (Small) / Otay Medium / L3010 Out Alt Energy (Small) / Otay Medium / L3010 Out	Curtailment (MWh) 21.1.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages Total # Hours w/ Outages Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	4,818 0 0.00 4,818 0 0.00 4,818 0 0.00	Curtailment (MWh) 21.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.2.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	5,942 0 0.00 4,256 0 0.00 5,942 0 0.00	Curtailment (MWh) 21.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	5,183 0 0.00 4,272 0 0.00 5,183 0 0.00	Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.1.2.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 21.2.2.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	5,183 0 0,00 4,256 0 0,00 5,183 0 0,00	Curtailment (MWh) 21.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	5,492 0 0.00 5,149 0 0.00 5,492 0 0.00	Curtailment (MWh) 21.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.2.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.1.2.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 21.1.2.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget	5,773 0 0.00 5,063 0 0.00 5,773 0 0.00

WORK PAPER TABLE - SCENARIO ANALYSIS ELECTRIC DEMAND AND OUTPUTS (SA 1.3)

EXAMPLE ELECTRIC DEMAND DAY DURING SEASONAL VARIATIONS WITH ELECTRIC SUPPLY FOR THE ALTERNATIVES AND RELATED CURTAILMENT APPLICATION 15-09-013 VOLUME III - COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 2017)

Line No. 1. Example Summer Low-EG Day MW 2. Example Summer High-EG Day MW 6. Example Fall Day MW 3. Example Winter Day MW 4. Winter 1-in-10 Year Day MW 5. Example Spring Day MW Alt Energy (Small) 12054 Otay Low / L3010 21231 21232 21233 21234 21235 21236 Out Available Supply (MW) 12055 Available Supply (MW) 4.256 4.256 Available Supply (MW) 4.256 Available Supply (MW) 4.256 Available Supply (MW) 4.256 Available Supply (MW) 4.256 12056 Curtailment (MWh) Curtailment (MWh) Curtailment (MWh) Curtailment (MWh Curtailment (MWh) Curtailment (MWh) 0.00 0.000.00 12057 Total # Hours w/ Outages Total # Hours w/ Outages Total # Hours w/ Outages Total # Hours w/ Outage Total # Hours w/ Outage: Total # Hours w/ Outage Alt Energy (Small) / Otay Out / L3010 21.1.4.2 21.1.4.3 21.1.4.4 21.1.4.5 21.1.4.6 12157 80% 12158 Available Supply (MW) 4.818 Available Supply (MW) 5.829 Available Supply (MW) 4 640 Available Supply (MW) 4,424 Available Supply (MW) 5.436 Available Supply (MW) 5.380 12159 Curtailment (MWh) Curtailment (MWh) Curtailment (MWh) urtailment (MWh) urtailment (MWh) Curtailment (MWh) Total # Hours w/ Outage 12160 Fotal # Hours w/ Outages Total # Hours w/ Outages 0.00 Total # Hours w/ Outages 0.00 00 Total # Hours w/ Outage 0.00 Total # Hours w/ Outage 0.00 Alt Energy (Small) / Otay Out / L3010 21.2.4.1 21.2.4.2 21.2.4.3 21.2.4.4 21.2.4.5 21.2.4.6 12260 Out 12261 Available Supply (MW) 4,256 Available Supply (MW) 4.256 Available Supply (MW) Available Supply (MW) 4,256 Available Supply (MW) Available Supply (MW) 4,256 12262 urtailment (MWh Curtailment (MWh Curtailment (MWh) urtailment (MWh) urtailment (MWh) Offshore / Otay 12363 15 1 1 1 15112 15 1 1 3 15 1 1 4 15 1 1 5 15.1.1.6 Full / L3010 80% 12364 Available Supply (MW)
Curtailment (MWh) Available Supply (MW)
Curtailment (MWh) Available Supply (MW)
Curtailment (MWh) 3,497 Available Supply (MW)
Curtailment (MWh) 3,497 Available Supply (MW)
Curtailment (MWh) Available Supply (MW)
Curtailment (MWh) 4.087 3.132 4.256 3.806 12365 0.00 12366 0.00 Total # Hours w/ Outages Total # Hours w/ Outage: Offshore / Otay 15.2.1.1 15.2.1.2 15.2.1.3 15.2.1.4 15.2.1.5 15.2.1.6 12466 Full / L3010 Out Available Supply (MW) Curtailment (MWh) Available Supply (MW)
Curtailment (MWh) Available Supply (MW)
Curtailment (MWh) 12467 Available Supply (MW) 3.132 4.256 3,497 Available Supply (MW) 3,497 3.806 Available Supply (MW) 4.087 Curtailment (MWh) Curtailment (MWh) 12468 Curtailment (MWh) 12469 Total # Hours w/ Outages Total # Hours w/ Outages Total # Hours w/ Outage: 0.00 Total # Hours w/ Outage 0.00 Total # Hours w/ Outage Total # Hours w/ Outage 0.00 Offshore / Otav Medium / L3010 15.1.2.1 15.1.2.2 15.1.2.3 15.1.2.4 15.1.2.5 15.1.2.6 12569 80% 12570 Available Supply (MW) Available Supply (MW)
Curtailment (MWh) 3,497 Available Supply (MW)
Curtailment (MWh) Available Supply (MW)
Curtailment (MWh) 4,087 Available Supply (MW) 3.132 Available Supply (MW) 4,256 3,497 3,806 12571 Curtailment (MWh) Curtailment (MWh) 12572 otal # Hours w/ Outage: Total # Hours w/ Outage Total # Hours w/ Outage Total # Hours w/ Outag Total # Hours w/ Outag Total # Hours w/ Outage Offshore / Otay 12672 Medium / L3010 15221 15222 15223 15224 15225 15226 Out 12673 Available Supply (MW)
Curtailment (MWh) 3.132 Available Supply (MW)
Curtailment (MWh) 4.256 Available Supply (MW)
Curtailment (MWh) 3,497 Available Supply (MW)
Curtailment (MWh) 3,497 Available Supply (MW)
Curtailment (MWh) 3,806 Available Supply (MW)
Curtailment (MWh) 4.087 12674 Total # Hours w/ Outages 0.00 Total # Hours w/ Outage: 0.00 12675 Total # Hours w/ Outages Total # Hours w/ Outages Total # Hours w/ Outage: Total # Hours w/ Outages Offshore / Otay 15.1.3.1 15.1.3.2 15.1.3.3 15.1.3.4 15.1.3.5 15.1.3.6 12775 Low / L3010 80% 12776 Available Supply (MW) 3.132 Available Supply (MW)
Curtailment (MWh) 4.256 Available Supply (MW)
Curtailment (MWh) 3,497 Available Supply (MW) 3,497 Available Supply (MW)
Curtailment (MWh) 3.806 Available Supply (MW) 4.087 12777 Curtailment (MWh) Curtailment (MWh) Curtailment (MWh) 12778 Total # Hours w/ Outages Total # Hours w/ Outages Total # Hours w/ Outage: 0.00 Total # Hours w/ Outage 00.0 Total # Hours w/ Outage Total # Hours w/ Outage 0.00 Offshore / Otay 15 2 3 1 15232 15 2 3 3 15234 15235 15236 12878 Low / L3010 Out Available Supply (MW) Curtailment (MWh) 12879 Available Supply (MW) 3.132 Available Supply (MW) 4,256 Available Supply (MW) 3,497 3,497 Available Supply (MW)
Curtailment (MWh) 3,806 Available Supply (MW)
Curtailment (MWh) 4,087 12880 Curtailment (MWh) Curtailment (MWh) Curtailment (MWh) 12881 otal # Hours w/ Outage Total # Hours w/ Outa Total # Hours w/ Outag Offshore / Otay 12981 15 1 4 1 15142 15 1 4 3 15 1 4 4 15 1 4 5 15 1 4 6 Out / L3010 80% 12982 Available Supply (MW)
Curtailment (MWh) 3.132 Available Supply (MW)
Curtailment (MWh) Available Supply (MW)
Curtailment (MWh) 3,497 Available Supply (MW)
Curtailment (MWh) 3,497 Available Supply (MW)
Curtailment (MWh) Available Supply (MW)
Curtailment (MWh) 4.087 4.256 3,806 12983 0.00 12984 Total # Hours w/ Outages Total # Hours w/ Outages Total # Hours w/ Outages Total # Hours w/ Outage: otal # Hours w/ Outage: Total # Hours w/ Outage Offshore / Otav 13084 15.2.4.1 15.2.4.2 15.2.4.3 15.2.4.4 15.2.4.5 15.2.4.6 Out / L3010 Out 13085 Available Supply (MW) 3,132 Available Supply (MW) 4,256 Available Supply (MW) 3,497 Available Supply (MW) 3,497 Available Supply (MW) 3,806 Available Supply (MW) 4.087

Line No.													
1		1. Example Summer Lo	w-EG Day MW	2. Example Summer High	n-EG Day MW	3. Example Winter I	Day MW	4. Winter 1-in-10 Yea	r Day MW	5. Example Spring D	ay MW	6. Example Fall Day	y MW
13086		Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0
13187	Blythe to Santee 1 / Otay Full / L3010 80%	16.1.1.1		16.1.1.2		16.1.1.3		16.1.1.4		16.1.1.5		16.1.1.6	
13188		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
13189 13190		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
13290	Blythe to Santee 1 / Otay Full / L3010 Out	16.2.1.1		16.2.1.2		16.2.1.3		16.2.1.4		16.2.1.5		16.2.1.6	
13291		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
13292 13293		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
13393	Blythe to Santee 1 / Otay Medium / L3010 80%	16.1.2.1		16.1.2.2		16.1.2.3		16.1.2.4		16.1.2.5		16.1.2.6	
13394 13395		Available Supply (MW) Curtailment (MWh)	3,132	Available Supply (MW) Curtailment (MWh)	4,256	Available Supply (MW) Curtailment (MWh)	3,497	Available Supply (MW) Curtailment (MWh)	3,497	Available Supply (MW) Curtailment (MWh)	3,806	Available Supply (MW) Curtailment (MWh)	4,087
13396	Blythe to Santee 1	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
13496	/ Otay Medium / L3010 Out	16.2.2.1		16.2.2.2		16.2.2.3		16.2.2.4		16.2.2.5		16.2.2.6	
13497 13498		Available Supply (MW) Curtailment (MWh)	3,132	Available Supply (MW) Curtailment (MWh)	4,256	Available Supply (MW) Curtailment (MWh)	3,497	Available Supply (MW) Curtailment (MWh)	3,497	Available Supply (MW) Curtailment (MWh)	3,806	Available Supply (MW) Curtailment (MWh)	4,087
13499		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
13599	Blythe to Santee 1 / Otay Low / L3010 80%	16.1.3.1		16.1.3.2		16.1.3.3		16.1.3.4		16.1.3.5		16.1.3.6	
13600	0078	Aveilable Comple (MAA)	3,132	Ausilabla Cusalu (MAA)	4,256	Ausilahla Cusak (MAA)	3,497	Aveilable Constru(MAA)	3,497	Available Comple (MAA)	3,806	Available Supply (MW)	4,087
13600		Available Supply (MW) Curtailment (MWh)	0	Available Supply (MW) Curtailment (MWh)	4,236	Available Supply (MW) Curtailment (MWh)	3,497	Available Supply (MW) Curtailment (MWh)	0	Available Supply (MW) Curtailment (MWh)	0	Curtailment (MWh)	4,067
13602		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
13702	Blythe to Santee 1 / Otay Low / L3010 Out	16.2.3.1		16.2.3.2		16.2.3.3		16.2.3.4		16.2.3.5		16.2.3.6	
13703		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
13704		Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0
13705		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
13805	Blythe to Santee 1 / Otay Out / L3010 80%	16.1.4.1		16.1.4.2		16.1.4.3		16.1.4.4		16.1.4.5		16.1.4.6	
13806		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
13807 13808		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
13908	Blythe to Santee 1 / Otay Out / L3010 Out	16.2.4.1	0.00	16.2.4.2	0.00	16.2.4.3	0.00	16.2.4.4	0.00	16.2.4.5	0.00	16.2.4.6	0.00
13909	out	Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
13910		Curtailment (MWh)	0	Curtailment (MWh)	4,230 0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0
14011	Blythe to Santee 2 / Otay Full / L3010 80%	17.1.1.1		17.1.1.2		17.1.1.3		17.1.1.4		17.1.1.5		17.1.1.6	
14012		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
14013		Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0
14014		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
14114	Blythe to Santee 2 / Otay Full / L3010 Out	17.2.1.1		17.2.1.2		17.2.1.3		17.2.1.4		17.2.1.5		17.2.1.6	
14115		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
14116		Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0
14117	Blythe to Santee 2	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
14217	/ Otay Medium / L3010 80%	17.1.2.1		17.1.2.2		17.1.2.3		17.1.2.4		17.1.2.5		17.1.2.6	

Line No				APPLI	CATION 15-09-0	13 VOLUME III – COST-EFFE	ECTIVENESS A	NALYSIS (CORRECTED FEE	5KUAKT 2017)			
<u>Line No.</u> 1		1. Example Summer Low	/-EG Day MW	2. Example Summer High	h-EG Day MW	3. Example Winter	Day MW	4. Winter 1-in-10 Year	r Day MW	5. Example Spring	Day MW	6. Example Fall Da	ry MW
14218		Available Supply (MW)	3,132	Available Supply (MW)	4.256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3.806	Available Supply (MW)	4,087
14219		Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0	Curtailment (MWh)	0
14220		Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00	Total # Hours w/ Outages	0.00
14320	Blythe to Santee 2 / Otay Medium / L3010 Out	17.2.2.1		17.2.2.2		17.2.2.3		17.2.2.4		17.2.2.5		17.2.2.6	
14321		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
14322 14323		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
14020		Total # Flours W/ Outages	0.00	Total # Tiours W/ Outages	0.00	Total # Tlouis W/ Outages	0.00	Total # Hours w/ Odtages	0.00	Total # Flours w/ Odlages	0.00	Total # Flours W/ Outages	0.00
14423	Blythe to Santee 2 / Otay Low / L3010 80%	17.1.3.1		17.1.3.2		17.1.3.3		17.1.3.4		17.1.3.5		17.1.3.6	
14424		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
14425 14426		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
14420		Total # Hours w/ Outages	0.00	Total # Hours W/ Outages	0.00	Total # Hours W/ Outages	0.00	Total # Hours W/ Outages	0.00	Total # Hours W/ Outages	0.00	Total # Hours W/ Outages	0.00
14526	Blythe to Santee 2 / Otay Low / L3010 Out	17.2.3.1		17.2.3.2		17.2.3.3		17.2.3.4		17.2.3.5		17.2.3.6	
14527		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
14528 14529		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
14023		Total # Hours W/ Odtages	0.00	Total # Tiours W/ Outages	0.00	Total # Flours W/ Odtages	0.00	Total # Hours W/ Outages	0.00	Total # Flodis W/ Odtages	0.00	Total # Flours W/ Outages	0.00
14629	Blythe to Santee 2 / Otay Out / L3010 80%	17.1.4.1		17.1.4.2		17.1.4.3		17.1.4.4		17.1.4.5		17.1.4.6	
14630		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
14631 14632		Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00	Curtailment (MWh) Total # Hours w/ Outages	0.00
14732	Blythe to Santee 2 / Otay Out / L3010	17.2.4.1	0.00	17.2.4.2	0.00	17.2.4.3	0.00	17.2.4.4	0.00	17.2.4.5	0.00	17.2.4.6	0.00
	Out												
14733		Available Supply (MW)	3,132	Available Supply (MW)	4,256	Available Supply (MW)	3,497	Available Supply (MW)	3,497	Available Supply (MW)	3,806	Available Supply (MW)	4,087
14733 14734		Available Supply (MW) Curtailment (MWh)	3,132 0	Available Supply (MW) Curtailment (MWh)	4,256 0	Available Supply (MW) Curtailment (MWh)	3,497 0	Available Supply (MW) Curtailment (MWh)	3,497 0	Available Supply (MW) Curtailment (MWh)	3,806 0	Available Supply (MW) Curtailment (MWh)	4,087 0
14734	Cactus City to SD / Otay Full / L3010 80%	Curtailment (MWh)	3,132 0	Curtailment (MWh) 18.1.1.2	0	Curtailment (MWh)	0	Curtailment (MWh) 18.1.1.4	0	Curtailment (MWh)	0	Curtailment (MWh)	0
14734 14835 14836	Cactus City to SD / Otay Full / L3010 80%	Curtailment (MWh) 18.1.1.1 Available Supply (MW)	3,132	Curtailment (MWh) 18.1.1.2 Available Supply (MW)	4,256 0 4,256	Curtailment (MWh) 18.1.1.3 Available Supply (MW)	3,497 0	Curtailment (MWh) 18.1.1.4 Available Supply (MW)		Curtailment (MWh) 18.1.1.5 Available Supply (MW)	3,806 0	Curtailment (MWh) 18.1.1.6 Available Supply (MW)	4,087
14734 14835 14836 14837	Cactus City to SD / Otay Full / L3010 80%	Curtailment (MWh) 18.1.1.1 Available Supply (MW) Curtailment (MWh)	3,132	Curtailment (MWh) 18.1.1.2 Available Supply (MW) Curtailment (MWh)	4,256 0	Curtailment (MWh) 18.1.1.3 Available Supply (MW) Curtailment (MWh)	3,497 0	Curtailment (MWh) 18.1.1.4 Available Supply (MW) Curtailment (MWh)	3,497 0	Curtailment (MWh) 18.1.1.5 Available Supply (MW) Curtailment (MWh)	3,806 0	Curtailment (MWh) 18.1.1.6 Available Supply (MW) Curtailment (MWh)	4,087 0
14734 14835 14836	Cactus City to SD / Otay Full / L3010 80% Cactus City to SD / Otay Full / L3010	Curtailment (MWh) 18.1.1.1 Available Supply (MW)	0	Curtailment (MWh) 18.1.1.2 Available Supply (MW)	0	Curtailment (MWh) 18.1.1.3 Available Supply (MW)	0	Curtailment (MWh) 18.1.1.4 Available Supply (MW)	0	Curtailment (MWh) 18.1.1.5 Available Supply (MW)	0	Curtailment (MWh) 18.1.1.6 Available Supply (MW)	0
14734 14835 14836 14837 14838	Cactus City to SD / Otay Full / L3010 80% Cactus City to SD / Otay Full / L3010 Out	Curtailment (MWh) 18.1.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.1	3,132 0 0.00	Curtailment (MWh) 18.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.2	4,256 0 0.00	Curtailment (MWh) 18.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.3	3,497 0 0.00	Curtailment (MWh) 18.1.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage; 18.2.1.4	3,497 0 0.00	Curtailment (MWh) 18.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.5	3,806 0 0.00	Curtailment (MWh) 18.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage:	4,087 0 0.00
14734 14835 14836 14837 14838 14938	Cactus City to SD / Otay Full / L3010 80% Cactus City to SD / Otay Full / L3010 Out	Curtailment (MWh) 18.1.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.1 Available Supply (MW)	3,132	Curtailment (MWh) 18.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.2 Available Supply (MW)	4,256 0 0.00	Curtailment (MWh) 18.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 19.2.1.3 Available Supply (MW)	3,497 0	Curtailment (MWh) 18.1.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.2.1.4 Available Supply (MW)	3,497 0	Curtailment (MWh) 18.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.2.1.5 Available Supply (MW)	3,806 0	Curtailment (MWh) 18.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.2.1.6 Available Supply (MW)	4,087 0 0.00
14734 14835 14836 14837 14838 14938	Cactus City to SD / Otay Full / L3010 80% Cactus City to SD / Otay Full / L3010 Out	Available Supply (MW) Total # Hours w/ Outages 18.2.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.1 Available Supply (MW) Curtailment (MWh)	3,132 0 0.00	Curtailment (MWh) 18.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.2 Available Supply (MW) Curtailment (MWh)	4,256 0 0.00	Curtailment (MWh) 18.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.3 Available Supply (MW) Curtailment (MWh)	3,497 0 0.00	Curtailment (MWh) 18.1.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.2.1.4 Available Supply (MW) Curtailment (MWh)	3,497 0 0.00	Curtailment (MWh) 18.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage! 18.2.1.5 Available Supply (MW) Curtailment (MWh)	3,806 0 0.00	Curtailment (MWh) 18.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage: 18.2.1.6 Available Supply (MW) Curtailment (MWh)	4,087 0 0.00
14734 14835 14836 14837 14838 14938	Cactus City to SD / Otay Full / L3010 80% Cactus City to SD / Otay Full / L3010 Out	Curtailment (MWh) 18.1.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.1 Available Supply (MW)	3,132 0 0.00	Curtailment (MWh) 18.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.2 Available Supply (MW)	4,256 0 0.00	Curtailment (MWh) 18.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 19.2.1.3 Available Supply (MW)	3,497 0 0.00	Curtailment (MWh) 18.1.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.2.1.4 Available Supply (MW)	3,497 0 0.00	Curtailment (MWh) 18.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.2.1.5 Available Supply (MW)	3,806 0 0.00	Curtailment (MWh) 18.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.2.1.6 Available Supply (MW)	4,087 0 0.00
14734 14835 14836 14837 14838 14938 14939 14940 14941	Cactus City to SD / Otay Full / L3010 80% Cactus City to SD / Otay Full / L3010 Out Cactus City to SD / Otay Medium / L3010 80%	Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.1	3,132 0 0.00	Curtailment (MWh) 18.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	4,256 0 0.00	Curtailment (MWh) 18.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	3,497 0 0.00	Curtailment (MWh) 18.1.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage 18.2.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage	3,497 0 0.00	Curtailment (MWh) 18.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	3,806 0 0.00	Curtailment (MWh) 18.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage: 18.2.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage:	4,087 0 0.00
14734 14835 14836 14837 14838 14938 14940 14941 15041	Cactus City to SD / Otay Full / L3010 80% Cactus City to SD / Otay Full / L3010 Out Cactus City to SD / Otay Medium / L3010 80%	Curtailment (MWh) 18.1.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.1 Available Supply (MW) Curtailment (MWh) Curtailment (MWh) Curtailment (MWh) Curtailment (MWh)	3,132 0 0.00 3,132 0 0.00	Curtailment (MWh) 18.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.2 Available Supply (MW) Curtailment (MWh) Curtailment (MWh) Curtailment (MWh)	4,256 0 0.00 4,256 0 0.00	Curtailment (MWh) 18.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.3 Available Supply (MW) Curtailment (MWh)	3,497 0 0.00 3,497 0 0.00	Curtailment (MWh) 18.1.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.2.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.1.2.4 Available Supply (MW) Curtailment (MWh) Curtailment (MWh) Curtailment (MWh)	3,497 0 0.00 3,497 0 0.00	Curtailment (MWh) 18.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.2.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.1.2.5 Available Supply (MW) Curtailment (MWh) Curtailment (MWh) Curtailment (MWh)	3,806 0 0.00 3,806 0 0.00	Curtailment (MWh) 18.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage! 18.2.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage! 18.1.2.6 Available Supply (MW) Curtailment (MWh) Curtailment (MWh) Curtailment (MWh)	4,087 0 0.00 4,087 0 0.00
14734 14835 14836 14837 14838 14938 14940 14941 15041	Cactus City to SD / Otay Full / L3010 80% Cactus City to SD / Otay Full / L3010 Out Cactus City to SD / Otay Medium / L3010 80%	Curtailment (MWh) 18.1.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.1 Available Supply (MW)	3,132 0 0.00 3,132 0 0.00	Curtailment (MWh) 18.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.2 Available Supply (MW)	4,256 0 0.00 4,256 0 0.00	Curtailment (MWh) 18.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.3 Available Supply (MW)	3,497 0 0.00 3,497 0 0.00	Curtailment (MWh) 18.1.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage; 18.2.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage; 18.1.2.4 Available Supply (MW)	3,497 0 0.00 3,497 0 0.00	Curtailment (MWh) 18.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.5 Available Supply (MW)	3,806 0 0.00 3,806 0 0.00	Curtailment (MWh) 18.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage; 18.2.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage; 18.1.2.6 Available Supply (MW)	4,087 0 0.00 4,087 0 0.00
14734 14835 14836 14837 14838 14938 14940 14941 15041 15042 15043 15044	Cactus City to SD / Otay Full / L3010 80% Cactus City to SD / Otay Full / L3010 Out Cactus City to SD / Otay Medium / L3010 80% Cactus City to SD / Otay Medium / L3010 Out	Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	3,132 0 0.00 3,132 0 0.00 3,132 0 0.00	Curtailment (MWh) 18.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	4,256 0 0.00 4,256 0 0.00 4,256 0 0.00	Curtailment (MWh) 18.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	3,497 0 0.00 3,497 0 0.00 3,497 0 0.00	Curtailment (MWh) 18.1.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.2.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.1.2.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.1.2.4	3,497 0 0.00 3,497 0 0.00	Curtailment (MWh) 18.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.5	3,806 0 0.00 3,806 0 0.00	Curtailment (MWh) 18.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.2.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.1.2.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget	4,087 0 0.00 4,087 0 0.00
14734 14835 14836 14837 14838 14938 14940 14941 15042 15043 15044 15144	Cactus City to SD / Otay Full / L3010 80% Cactus City to SD / Otay Full / L3010 Out Cactus City to SD / Otay Medium / L3010 80% Cactus City to SD / Otay Medium / L3010 Out	Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	3,132 0 0.00 3,132 0 0.00	Curtailment (MWh) 18.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.2 Available Supply (MW) Total # Hours w/ Outages 18.2.2.2 Available Supply (MW) Total # Hours w/ Outages	4,256 0 0.00 4,256 0 0.00	Curtailment (MWh) 18.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.3 Available Supply (MW)	3,497 0 0.00 3,497 0 0.00	Curtailment (MWh) 18.1.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.2.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.1.2.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.1.2.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget	3,497 0 0.00 3,497 0 0.00	Curtailment (MWh) 18.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.5 Available Supply (MW) Total # Hours w/ Outages 18.2.2.5 Available Supply (MW)	3,806 0 0.00 3,806 0 0.00	Curtailment (MWh) 18.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage: 18.2.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage: 18.1.2.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage: 18.1.2.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage:	4,087 0 0.00 4,087 0 0.00
14734 14835 14836 14837 14838 14938 14940 14941 15041 15042 15043 15044 15144	Cactus City to SD / Otay Full / L3010 80% Cactus City to SD / Otay Full / L3010 Out Cactus City to SD / Otay Medium / L3010 80% Cactus City to SD / Otay Medium / L3010 Out	Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.1 Available Supply (MW) Curtailment (MWh) Curtailment (MWh) Curtailment (MWh) Curtailment (MWh) Curtailment (MWh) Curtailment (MWh)	3,132 0 0.00 3,132 0 0.00 3,132 0 0.00	Curtailment (MWh) 18.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	4,256 0 0.00 4,256 0 0.00 4,256 0 0.00	Curtailment (MWh) 18.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.3	3,497 0 0.00 3,497 0 0.00 3,497 0 0.00	Curtailment (MWh) 18.1.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.2.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.1.2.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.2.2.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget	3,497 0 0.00 3,497 0 0.00 3,497 0 0.00	Curtailment (MWh) 18.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.5	3,806 0 0.00 3,806 0 0.00 3,806 0 0.00	Curtailment (MWh) 18.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage: 18.2.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage: 18.1.2.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage: 18.2.2.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage:	4,087 0 0.00 4,087 0 0.00
14734 14835 14836 14837 14838 14938 14940 14941 15042 15043 15044 15144	Cactus City to SD / Otay Full / L3010 80% Cactus City to SD / Otay Full / L3010 Out Cactus City to SD / Otay Medium / L3010 80% Cactus City to SD / Otay Medium / L3010 Out	Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	3,132 0 0.00 3,132 0 0.00 3,132 0 0.00	Curtailment (MWh) 18.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.2 Available Supply (MW) Total # Hours w/ Outages 18.2.2.2 Available Supply (MW) Total # Hours w/ Outages	4,256 0 0.00 4,256 0 0.00 4,256 0 0.00	Curtailment (MWh) 18.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.3 Available Supply (MW)	3,497 0 0.00 3,497 0 0.00 3,497 0 0.00	Curtailment (MWh) 18.1.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.2.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.1.2.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.1.2.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget	3,497 0 0.00 3,497 0 0.00	Curtailment (MWh) 18.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.5 Available Supply (MW) Total # Hours w/ Outages 18.2.2.5 Available Supply (MW)	3,806 0 0.00 3,806 0 0.00	Curtailment (MWh) 18.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage: 18.2.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage: 18.1.2.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage: 18.1.2.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage:	4,087 0 0.00 4,087 0 0.00
14734 14835 14836 14837 14838 14938 14940 14941 15041 15042 15043 15044 15144 15145 15147	Cactus City to SD / Otay Full / L3010 80% Cactus City to SD / Otay Full / L3010 Out Cactus City to SD / Otay Medium / L3010 80% Cactus City to SD / Otay Medium / L3010 Out	Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	3,132 0 0.00 3,132 0 0.00 3,132 0 0.00 3,132 0 0.00	Curtailment (MWh) 18.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	4,256 0 0.00 4,256 0 0.00 4,256 0 0.00 4,256 0 0.00	Curtailment (MWh) 18.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	3,497 0 0.00 3,497 0 0.00 3,497 0 0.00 3,497 0 0.00	Curtailment (MWh) 18.1.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage 18.2.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage 18.1.2.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage 18.2.2.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage 18.2.2.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage	3,497 0 0.00 3,497 0 0.00 3,497 0 0.00	Curtailment (MWh) 18.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.3.5	3,806 0 0.00 3,806 0 0.00 3,806 0 0.00	Curtailment (MWh) 18.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage: 18.2.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage: 18.1.2.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage: 18.2.2.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage: 18.2.3.6	4,087 0 0.00 4,087 0 0.00 4,087 0 0.00
14734 14835 14836 14837 14838 14938 14940 14941 15041 15044 15144 15144 15145 15146 15147 15247	Cactus City to SD / Otay Full / L3010 80% Cactus City to SD / Otay Full / L3010 Out Cactus City to SD / Otay Medium / L3010 80% Cactus City to SD / Otay Medium / L3010 Out	Curtailment (MWh) 18.1.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	3,132 0 0.00 3,132 0 0.00 3,132 0 0.00	Curtailment (MWh) 18.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.3.2 Available Supply (MW)	4,256 0 0.00 4,256 0 0.00 4,256 0 0.00	Curtailment (MWh) 18.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.3.3 Available Supply (MW)	3,497 0 0.00 3,497 0 0.00 3,497 0 0.00	Curtailment (MWh) 18.1.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.2.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.1.2.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.2.2.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget 18.2.3.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outaget	3,497 0 0.00 3,497 0 0.00 3,497 0 0.00	Curtailment (MWh) 18.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.3.5	3,806 0 0.00 3,806 0 0.00 3,806 0 0.00	Curtailment (MWh) 18.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage! 18.2.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage! 18.1.2.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage! 18.2.2.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage!	4,087 0 0.00 4,087 0 0.00
14734 14835 14836 14837 14838 14938 14940 14941 15041 15042 15043 15044 15144 15145 15147	Cactus City to SD / Otay Full / L3010 Cactus City to SD / Otay Full / L3010 Out Cactus City to SD / Otay Medium / L3010 80% Cactus City to SD / Otay Medium / L3010 Out	Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.1 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	3,132 0 0.00 3,132 0 0.00 3,132 0 0.00 3,132 0 0.00	Curtailment (MWh) 18.1.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.2 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	4,256 0 0.00 4,256 0 0.00 4,256 0 0.00 4,256 0 0.00	Curtailment (MWh) 18.1.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.3 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages	3,497 0 0.00 3,497 0 0.00 3,497 0 0.00 3,497 0 0.00	Curtailment (MWh) 18.1.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage 18.2.1.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage 18.1.2.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage 18.2.2.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage 18.2.2.4 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage	3,497 0 0.00 3,497 0 0.00 3,497 0 0.00	Curtailment (MWh) 18.1.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.1.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.1.2.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.2.5 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outages 18.2.3.5	3,806 0 0.00 3,806 0 0.00 3,806 0 0.00	Curtailment (MWh) 18.1.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage: 18.2.1.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage: 18.1.2.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage: 18.2.2.6 Available Supply (MW) Curtailment (MWh) Total # Hours w/ Outage: 18.2.3.6	4,087 0 0.00 4,087 0 0.00 4,087 0 0.00

Line No.							
1		1. Example Summer Low-EG Day MW	2. Example Summer High-EG Day MW	3. Example Winter Day MW	4. Winter 1-in-10 Year Day MW	5. Example Spring Day MW	6. Example Fall Day MW
15350	Cactus City to SD / Otay Low / L3010 Out	18.2.3.1	18.2.3.2	18.2.3.3	18.2.3.4	18.2.3.5	18.2.3.6
15351		Available Supply (MW) 3,132	Available Supply (MW) 4,256	Available Supply (MW) 3,497	Available Supply (MW) 3,497	Available Supply (MW) 3,806	Available Supply (MW) 4,087
15352		Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0
15353		Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00
15453	Cactus City to SD / Otay Out / L3010 80%	18.1.4.1	18.1.4.2	18.1.4.3	18.1.4.4	18.1.4.5	18.1.4.6
15454		Available Supply (MW) 3,132	Available Supply (MW) 4,256	Available Supply (MW) 3,497	Available Supply (MW) 3,497	Available Supply (MW) 3,806	Available Supply (MW) 4,087
15455		Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0
15456		Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00
15556	Cactus City to SD / Otay Out / L3010 Out	18.2.4.1	18.2.4.2	18.2.4.3	18.2.4.4	18.2.4.5	18.2.4.6
15557		Available Supply (MW) 3,132	Available Supply (MW) 4,256	Available Supply (MW) 3,497	Available Supply (MW) 3,497	Available Supply (MW) 3,806	Available Supply (MW) 4,087
15558		Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0
15659	Second Pipeline Along L3010 / Otay Full / L3010 80%	19.1.1.1	19.1.1.2	19.1.1.3	19.1.1.4	19.1.1.5	19.1.1.6
15660	5070	Available Supply (MW) 3,132	Available Supply (MW) 4,256	Available Supply (MW) 3,497	Available Supply (MW) 3,497	Available Supply (MW) 3,806	Available Supply (MW) 4,087
15661		Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0
15662		Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00
15762	Second Pipeline Along L3010 / Otay Full / L3010 Out	19.2.1.1	19.2.1.2	19.2.1.3	19.2.1.4	19.2.1.5	19.2.1.6
15763		Available Supply (MW) 3,132	Available Supply (MW) 4,256	Available Supply (MW) 3,497	Available Supply (MW) 3,497	Available Supply (MW) 3,806	Available Supply (MW) 4,087
15764		Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0
15765		Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00
15865	Second Pipeline Along L3010 / Otay Medium / L3010 80%	19.1.2.1	19.1.2.2	19.1.2.3	19.1.2.4	19.1.2.5	19.1.2.6
15866		Available Supply (MW) 3,132	Available Supply (MW) 4,256	Available Supply (MW) 3,497	Available Supply (MW) 3,497	Available Supply (MW) 3,806	Available Supply (MW) 4,087
15867		Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0
15868		Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00
15968	Second Pipeline Along L3010 / Otay Medium / L3010 Out	19.2.2.1	19.2.2.2	19.2.2.3	19.2.2.4	19.2.2.5	19.2.2.6
15969		Available Supply (MW) 3,132	Available Supply (MW) 4,256	Available Supply (MW) 3,497	Available Supply (MW) 3,497	Available Supply (MW) 3,806	Available Supply (MW) 4,087
15970		Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0
15971		Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00
16071	Second Pipeline Along L3010 / Otay Low / L3010 80%	19.1.3.1	19.1.3.2	19.1.3.3	19.1.3.4	19.1.3.5	19.1.3.6
16072		Available Supply (MW) 3,132	Available Supply (MW) 4,256	Available Supply (MW) 3,497	Available Supply (MW) 3,497	Available Supply (MW) 3,806	Available Supply (MW) 4,087
16073		Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0
16074		Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00
16174	Second Pipeline Along L3010 / Otay Low / L3010 Out	19.2.3.1	19.2.3.2	19.2.3.3	19.2.3.4	19.2.3.5	19.2.3.6
16175		Available Supply (MW) 3,132	Available Supply (MW) 4,256	Available Supply (MW) 3,497	Available Supply (MW) 3,497	Available Supply (MW) 3,806	Available Supply (MW) 4,087
16176		Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0
16177		Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00
16277	Second Pipeline Along L3010 / Otay Out / L3010 80%	19.1.4.1	19.1.4.2	19.1.4.3	19.1.4.4	19.1.4.5	19.1.4.6
16278		Available Supply (MW) 3,132	Available Supply (MW) 4,256	Available Supply (MW) 3,497	Available Supply (MW) 3,497	Available Supply (MW) 3,806	Available Supply (MW) 4,087
16279		Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0
16280	Consul Birelia	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00	Total # Hours w/ Outages 0.00
16380	Second Pipeline Along L3010 / Otay Out / L3010 Out	19.2.4.1	19.2.4.2	19.2.4.3	19.2.4.4	19.2.4.5	19.2.4.6
16381		Available Supply (MW) 3,132	Available Supply (MW) 4,256	Available Supply (MW) 3,497	Available Supply (MW) 3,497	Available Supply (MW) 3,806	Available Supply (MW) 4,087

Line No.

1	1. Example Summer Low-EG Day MW	2. Example Summer High-EG Day MW	3. Example Winter Day MW	4. Winter 1-in-10 Year Day MW	5. Example Spring Day MW	6. Example Fall Day MW
16382	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0	Curtailment (MWh) 0

WORK PAPER TABLE - SCENARIO ANALYSIS SUMMARY OF OUTPUTS (SA 1.5)
SUMMARY OF SCENARIO ANALYSIS OUTCOMES FOR % CURTAILMENT TO CUSTOMERS AND CUSTOMERS OR METERS AFFECTED APPLICATION 15-09-013 VOLUME III – COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 2017)

Line No.

					С	urtailment '	%	Cus	tomers Affe	ected
Project Alternate	L3010 Status	Scenarios Analyzed	Customer Class	% of Scenarios in Curtailment	Min	Max	Avg	Min	Max	А
А	В	С	D	Е	F	G	Н	- 1	J	
			Gas Non-Core Non-EG	88%	68%	100%	86.0%			
	Complete	24	Gas Electric Generation (EG)	79%	7%	100%	51.6%			
L1600 (Pre/Post	Outage		Gas Core	25%	4%	57%	6.5%	33,352	496,479	56
Hydrotesting)			Electric Gas Non-Core Non-EG	63% 8%	0% 11%	14% 76%	4.3% 3.6%	2,665	200,930	59
r lydrotesting)	Derated to		Gas Electric Generation (EG)	0%	0%	0%	0.0%			
	80%	24	Gas Core	0%	0%	0%	0.0%	0	0	
			Electric	0%	0%	0%	0.0%	0	0	
			Gas Non-Core Non-EG	0%	0%	0%	0.0%			
	Complete	24	Gas Electric Generation (EG)	0%	0%	0%	0.0%		_	
L3602	Outage		Gas Core Electric	0% 0%	0% 0%	0% 0%	0.0%	0	0	
(Proposed			Gas Non-Core Non-EG	0%	0%	0%	0.0%	U	U	
Project)	Derated to		Gas Electric Generation (EG)	0%	0%	0%	0.0%			
	80%	24	Gas Core	0%	0%	0%	0.0%	0	0	
			Electric	0%	0%	0%	0.0%	0	0	
			Gas Non-Core Non-EG	96%	100%	100%	95.8%			
	Complete	24	Gas Electric Generation (EG)	96%	28%	100%	85.8%			
L1600 (During	Outage		Gas Core Electric	71% 83%	7% 2%	100% 19%	41.6% 8.1%	60,119	868,838	36
Hydrotesting)			Gas Non-Core Non-EG	42%	12%	100%	30.6%	21,550	262,272	11
riyarotestirig)	Derated to		Gas Electric Generation (EG)	21%	5%	82%	7.4%			
	80%	24	Gas Core	0%	0%	0%	0.0%	0	0	
			Electric	8%	0%	8%	0.3%	2,440	112,734	4
			Gas Non-Core Non-EG	96%	92%	100%	95.5%			
	Complete	24	Gas Electric Generation (EG)	92%	5%	100%	77.5%			
Alternate	Outage		Gas Core	50%	10%	86%	23.1%	84,319 19,934	744,718	20
Diameter			Electric Gas Non-Core Non-EG	75% 25%	1% 16%	19% 100%	7.3% 17.6%	19,934	262,272	10
Pipeline 10"	Derated to		Gas Electric Generation (EG)	13%	7%	52%	3.6%			
	80%	24	Gas Core	0%	0%	0%	0.0%	0	0	
			Electric	4%	6%	6%	0.3%	90,313	90,313	3
			Gas Non-Core Non-EG	96%	66%	100%	93.9%			
	Complete	24	Gas Electric Generation (EG)	88%	21%	100%	73.9%			
Alternate	Outage		Gas Core	42%	3%	80%	17.6%	28,265	695,070	15
Diameter			Electric Gas Non-Core Non-EG	67% 21%	3% 20%	19% 100%	6.8% 14.7%	35,092	262,272	9
Pipeline 12"	Derated to		Gas Electric Generation (EG)	8%	15%	39%	2.3%			
	80%	24	Gas Core	0%	0%	0%	0.0%	0	0	
			Electric	4%	4%	4%	0.2%	58,403	58,403	2
			Gas Non-Core Non-EG	88%	55%	100%	84.8%			
	Complete	24	Gas Electric Generation (EG)	79%	1%	100%	48.7%			
Alternate	Outage		Gas Core Electric	25% 54%	1% 1%	54% 13%	5.5% 3.9%	5,325 19,607	471,655 183,210	4 ⁻
Diameter			Gas Non-Core Non-EG	4%	60%	60%	2.5%	19,007	103,210	٠,
Pipeline 16"	Derated to	0.4	Gas Electric Generation (EG)	0%	0%	0%	0.0%			
	80%	24	Gas Core	0%	0%	0%	0.0%	0	0	
			Electric	0%	0%	0%	0.0%	0	0	
			Gas Non-Core Non-EG	71%	23%	100%	61.9%			
	Complete Outage	24	Gas Electric Generation (EG) Gas Core	54% 8%	4% 19%	100% 29%	26.4% 2.0%	160 460	240 220	1
Alternate	Outage		Electric	29%	19%	9%	1.4%	168,162 9,493	248,239 130,224	19
Diameter			Gas Non-Core Non-EG	0%	0%	0%	0.0%	5,735	100,224	<u> </u>
Pipeline 20"	Derated to	24	Gas Electric Generation (EG)	0%	0%	0%	0.0%			
	80%	24	Gas Core	0%	0%	0%	0.0%	0	0	
			Electric	0%	0%	0%	0.0%	0	0	
	Complete		Gas Non-Core Non-EG	33%	20%	100%	25.4%			
	Complete Outage	24	Gas Electric Generation (EG) Gas Core	13% 0%	19% 0%	70% 0%	5.6% 0.0%	0	0	
Alternate	Julaye		Electric	4%	7%	7%	0.0%	95,660	95.660	3
Diameter			Gas Non-Core Non-EG	0%	0%	0%	0.0%	55,000	55,000	
Pipeline 24"	Derated to	24	Gas Electric Generation (EG)	0%	0%	0%	0.0%			
	80%	∠4	Gas Core	0%	0%	0%	0.0%	0	0	
			Electric	0%	0%	0%	0.0%	0	0	
	Complete		Gas Non-Core Non-EG	0%	0%	0%	0.0%		-	
	Complete Outage	24	Gas Electric Generation (EG)	0% 0%	0% 0%	0% 0%	0.0%	0	0	
Alternate	Outage		Gas Core Electric	0%	0%	0%	0.0%	0	0	_
Diameter			Gas Non-Core Non-EG	0%	0%	0%	0.0%	,	-	
Pipeline 30"	Derated to	24	Gas Electric Generation (EG)	0%	0%	0%	0.0%			
	80%	24	Gas Core	0%	0%	0%	0.0%	0	0	
			Electric	0%	0%	0%	0.0%	0	0	
	0		Gas Non-Core Non-EG	0%	0%	0%	0.0%			
	Complete	24	Gas Electric Generation (EG)	0% 0%	0%	0%	0.0%	^	^	
Alternate	Outage		Gas Core Electric	0% 0%	0% 0%	0% 0%	0.0%	0	0	
Diameter			Gas Non-Core Non-EG	0%	0%	0%	0.0%	U	U	_
Pipeline 42"	Derated to		Gas Electric Generation (EG)	0%	0%	0%	0.0%		1	
		24			U / U	0 /0	0.070			

WORK PAPER TABLE - SCENARIO ANALYSIS SUMMARY OF OUTPUTS (SA 1.5)
SUMMARY OF SCENARIO ANALYSIS OUTCOMES FOR % CURTAILMENT TO CUSTOMERS AND CUSTOMERS OR METERS AFFECTED APPLICATION 15-09-013 VOLUME III – COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 2017)

Line No.

					с	urtailment ^c	/0	Cus	tomers Affe	ecte
Project Alternate	L3010 Status	Scenarios Analyzed	Customer Class	% of Scenarios in Curtailment	Min	Max	Avg	Min	Max	
А	В	С	D	Е	F	G	Н	1	J	
			Electric	0% 88%	0% 55%	0% 100%	0.0% 84.8%	0	0	
	Complete		Gas Non-Core Non-EG Gas Electric Generation (EG)	79%	1%	100%	48.7%			
	Outage	24	Gas Core	25%	1%	54%	5.5%	5,325	471,655	4
L1600 In-Kind			Electric	54%	1%	13%	3.9%	19,607	183,210	
Replacement	Derated to		Gas Non-Core Non-EG Gas Electric Generation (EG)	4% 0%	60% 0%	60% 0%	2.5% 0.0%			-
	80%	24	Gas Core	0%	0%	0%	0.0%	0	0	1
			Electric	0%	0%	0%	0.0%	0	0	
	0		Gas Non-Core Non-EG	96%	100%	100%	95.8%			
	Complete Outage	24	Gas Electric Generation (EG) Gas Core	96% 71%	28% 7%	100% 100%	85.8% 41.6%	60,119	868,838	3
Otay Mesa	Odlage		Electric	83%	2%	19%	8.1%	21,550	262,272	1
Alternate			Gas Non-Core Non-EG	42%	12%	100%	30.6%	,	,	
	Derated to	24	Gas Electric Generation (EG)	21%	5%	82%	7.4%			<u> </u>
	80%		Gas Core Electric	0% 8%	0% 0%	0% 8%	0.0% 0.3%	0 2,440	0 112,734	
			Gas Non-Core Non-EG	96%	100%	100%	95.8%	2,440	112,734	-
	Complete	0.4	Gas Electric Generation (EG)	96%	28%	100%	85.8%			t
	Outage	24	Gas Core	71%	7%	100%	41.6%	60,119	868,838	3
LNG Storage			Electric	0%	0%	0%	0.0%	0	0	
Alternate	Derated to		Gas Non-Core Non-EG Gas Electric Generation (EG)	42% 21%	12% 5%	100% 82%	30.6% 7.4%			-
	80%	24	Gas Core	0%	5% 0%	0%	0.0%	0	0	-
	0070		Electric	0%	0%	0%	0.0%	0	0	1
			Gas Non-Core Non-EG	96%	100%	100%	95.8%			
	Complete	24	Gas Electric Generation (EG)	96%	28%	100%	85.8%			
Alt Energy	Outage		Gas Core	71%	7%	100%	41.6%	60,119	868,838	3
Alternate (Grid-			Electric Gas Non-Core Non-EG	0% 42%	0% 12%	0% 100%	0.0% 30.6%	0	0	1
Scale)	Derated to	0.4	Gas Electric Generation (EG)	21%	5%	82%	7.4%			
	80%	24	Gas Core	0%	0%	0%	0.0%	0	0	İ
			Electric	0%	0%	0%	0.0%	0	0	
	0		Gas Non-Core Non-EG	96%	100%	100%	95.8%			1
	Complete Outage	24	Gas Electric Generation (EG) Gas Core	96% 71%	28% 7%	100% 100%	85.8% 41.6%	60,119	868,838	3
Alt Energy	Outage		Electric	0%	0%	0%	0.0%	00,119	0	_
Alternate			Gas Non-Core Non-EG	42%	12%	100%	30.6%			l
(Smaller-Scale)	Derated to	24	Gas Electric Generation (EG)	21%	5%	82%	7.4%			
	80%		Gas Core	0%	0%	0%	0.0%	0	0	ļ
			Electric Gas Non-Core Non-EG	0% 0%	0% 0%	0% 0%	0.0%	0	0	1
	Complete		Gas Electric Generation (EG)	0%	0%	0%	0.0%			1
	Outage	24	Gas Core	0%	0%	0%	0.0%	0	0	
Offshore Route			Electric	0%	0%	0%	0.0%	0	0	
	Derated to		Gas Non-Core Non-EG	0% 0%	0% 0%	0% 0%	0.0%			ļ
	80%	24	Gas Electric Generation (EG) Gas Core	0%	0%	0%	0.0%	0	0	-
	0070		Electric	0%	0%	0%	0.0%	0	0	
			Gas Non-Core Non-EG	0%	0%	0%	0.0%			
	Complete	24	Gas Electric Generation (EG)	0%	0%	0%	0.0%			
Blytho to Contac	Outage		Gas Core	0%	0%	0%	0.0%	0	0	<u> </u>
Blythe to Santee Alternate 1			Electric Gas Non-Core Non-EG	0% 0%	0% 0%	0% 0%	0.0% 0.0%	0	0	<u> </u>
, monate i	Derated to	0.4	Gas Electric Generation (EG)	0%	0%	0%	0.0%			H
	80%	24	Gas Core	0%	0%	0%	0.0%	0	0	
			Electric	0%	0%	0%	0.0%	0	0	
	Complete		Gas Non-Core Non-EG	0%	0%	0%	0.0%			<u> </u>
	Complete Outage	24	Gas Electric Generation (EG) Gas Core	0% 0%	0% 0%	0% 0%	0.0%	0	0	-
Blythe to Santee	Outage		Electric	0%	0%	0%	0.0%	0	0	┢
Alternate 2			Gas Non-Core Non-EG	0%	0%	0%	0.0%	Ť	Ť	t
	Derated to	24	Gas Electric Generation (EG)	0%	0%	0%	0.0%			
	80%	-7	Gas Core	0%	0%	0%	0.0%	0	0	L
			Electric	0%	0%	0%	0.0%	0	0	<u> </u>
	Complete		Gas Non-Core Non-EG Gas Electric Generation (EG)	0% 0%	0% 0%	0% 0%	0.0%			-
Cook :- O'	Outage	24	Gas Core	0%	0%	0%	0.0%	0	0	-
Cactus City to San Diego	3-		Electric	0%	0%	0%	0.0%	0	0	Ĺ
San Diego Alternate			Gas Non-Core Non-EG	0%	0%	0%	0.0%			
Alleriale	Derated to	24	Gas Electric Generation (EG)	0%	0%	0%	0.0%		_	L
	80%	, ,	Gas Core	0% 0%	0% 0%	0% 0%	0.0%	0	0	-
			Electric Gas Non-Core Non-EG	0%	0%	0%	0.0%	U	U	┢
	Complete	0.4	Gas Electric Generation (EG)	0%	0%	0%	0.0%			t
Second Pipeline	Outage	24	Gas Core	0%	0%	0%	0.0%	0	0	
		ı	Electric	0%	0%	0%	0.0%	0	0	
Along L3010			Electric Gas Non-Core Non-EG	0%	0%	0%	0.0%	0	U	_

WORK PAPER TABLE - SCENARIO ANALYSIS SUMMARY OF OUTPUTS (SA 1.5)
SUMMARY OF SCENARIO ANALYSIS OUTCOMES FOR % CURTAILMENT TO CUSTOMERS AND CUSTOMERS OR METERS AFFECTED
APPLICATION 15-09-013 VOLUME III – COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 2017)

Line No.

3 162 163

1 2

					С	urtailment ^c	%	Cus	tomers Affe	cted
Project Alternate	L3010 Status	Scenarios Analyzed	Customer Class	% of Scenarios in Curtailment	Min	Max	Avg	Min	Max	Avg
А	В	С	D	Е	F	G	H		J	K
	80%	2-	Gas Core	0%	0%	0%	0.0%	0	0	0
			Electric	0%	0%	0%	0.0%	0	0	0

WORK PAPER TABLE - SCENARIO ANALYSIS HEAT MAP OF CURTAILMENT LEVELS (SA 1.4)

EXAMPLE ELECTRIC DEMAND FOR DAY DURING SEASONAL VARIATIONS WITH ELECTRIC SUPPLY FOR THE ALTERNATIVES APPLICATION 15-09-013 VOLUME III – COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 2017)

		APPLICATION	15-09-013 VOLUME III – COS I	I-EFFECTIVENESS ANALYSI	S (CORRECTED FEBRUARY)	2017)	
Line No.							
1	Dynamic dropdown list for heatn	nap of curtailment:					T T
2	Project Alternate	Line 1600 (During Hydrotesting)				Curtailment Avg:	0%
3	Line 3010 Status	Line 3010 at 80% Supply	%	of Scenarios in Curtailment:	0%	Curtailment Min:	0%
4	Output Type	Non-Core [%]	Count	t of Scenarios in Curtailment:	0	Curtailment Max:	0%
5						_	
6	Curtailment Type: Non-Core [%]	1. Example Summer Low-EG Day	2. Example Summer High-EG Day	3. Example Winter Day	4. Winter 1-in-10 Year Day	5. Example Spring Day	6. Example Fall Day
7	Otay Mesa Full Supply	0.00	0.00	0.00	0.00	0.00	0.00
8	Otay Mesa Medium Supply	0.00	0.00	0.00	0.00	0.00	0.00
9	Otay Mesa Low Supply	0.00	0.00	0.00	0.00	0.00	0.00
10	Otay Mesa No Supply	0.00	0.00	0.00	0.00	0.00	0.00
11							
12	Color Scale:						
13	Lowest value	Highest value					
14		·					
15							

WORK PAPER TABLE - SCENARIO ANALYSIS HEAT MAP OF CURTAILMENT LEVELS (SA 1.XX)

16 17

18

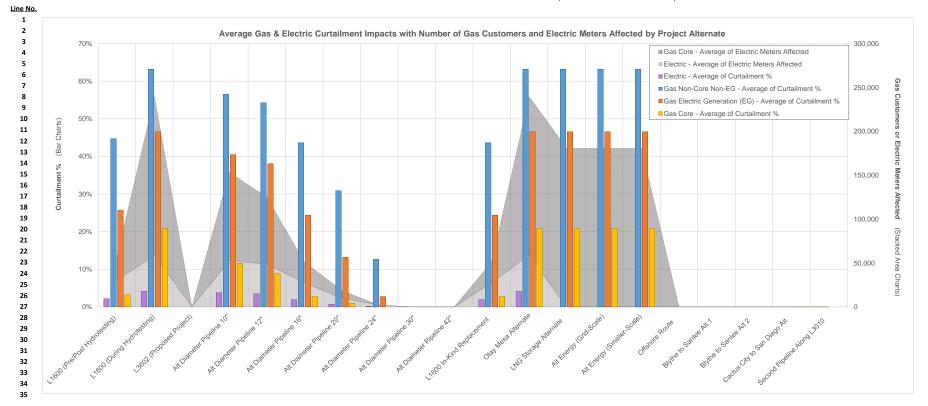
19

EXAMPLE ELECTRIC DEMAND FOR DAY DURING SEASONAL VARIATIONS WITH ELECTRIC SUPPLY FOR THE ALTERNATIVES AMENDED APPLICATION, VOLUME III - COST-EFFECTIVENESS ANALYSIS

		AMENDED AN LEIGHTION, V	OLOME III OOOT ETTEOTT	VEHILOGYHVILLIGIO		
20						
21	Otay Mesa Supply 1. Example Summer Low-EG D	2. Example Summer High-EG Day	3. Example Winter Day	4. Winter 1-in-10 Year Day	5. Example Spring Day	6. Example Fall Day
22	·	,		·		
23	Line 1600 (Pre/Post Hydrotesting)					
54	Line 3602 (Proposed Project)					
85	Line 1600 (During Hydrotesting)					
116	Alternate Diameter Pipeline 10"					
147	Alternate Diameter Pipeline 12"					
178	Alternate Diameter Pipeline 16"					
209	Alternate Diameter Pipeline 20"					
240	Alternate Diameter Pipeline 24"					
271	Alternate Diameter Pipeline 30"					
302	Alternate Diameter Pipeline 42"					
333 364	L1600 In-Kind Replacement					
395	Otay Mesa Alternate LNG Storage Alternate					
395 426	Alt Energy Alternate (Grid-Scale)					
457	Alt Energy Alternate (Grid-Scale) Alt Energy Alternate (Smaller-Scale)					
488	Offshore Route					
	Blythe to Santee Alternate 1					
	Blythe to Santee Alternate 2					
581	Cactus City to San Diego Alternate					
612	Second Pipeline Along L3010 Alternate					
643	Electric Curtailment Heat Maps					

WORK PAPER TABLE - SCENARIO ANALYSIS GRAPH (SA 1.6)

GRAPH OF CURTAILMENT IMPACTS FOR EACH ALTERNATE WITH GAS CUSTOMERS AND ELECTRIC METERS AFFECTED APPLICATION 15-09-013 VOLUME III – COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 2017)



WORK PAPER TABLE - SCENARIO ANALYSIS SCORING (SA 1.7)

TABLE OF AVERAGE GAS CURTAILMENT % FOR GAS CUSTOMERS & ELECTRIC OUTAGES FOR ELECTRIC CUSTOMERS RANKED BY AVERAGE CURTAILMENT % APPLICATION 15-09-013 VOLUME III – COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 2017)

Line No.

24

25 26 27

28

29

30

31

1		Avg Curtailment %						
2	A	В	С	D	E			
3	Project Alternate	Gas Non-Core Non-EG	Gas Electric Generation (EG)	Gas Core	Electric			
4	L1600 (Pre/Post Hydrotesting)	44.8%	25.8%	3.2%	2.1%			
5	L1600 (During Hydrotesting)	63.2%	46.6%	20.8%	4.2%			
6	L3602 (Proposed Project)	0.0%	0.0%	0.0%	0.0%			
7	Alt Diameter Pipeline 10"	56.6%	40.5%	11.6%	3.8%			
8	Alt Diameter Pipeline 12"	54.3%	38.1%	8.8%	3.5%			
9	Alt Diameter Pipeline 16"	43.7%	24.3%	2.8%	2.0%			
10	Alt Diameter Pipeline 20"	30.9%	13.2%	1.0%	0.7%			
11	Alt Diameter Pipeline 24"	12.7%	2.8%	0.0%	0.1%			
12	Alt Diameter Pipeline 30"	0.0%	0.0%	0.0%	0.0%			
13	Alt Diameter Pipeline 42"	0.0%	0.0%	0.0%	0.0%			
14	L1600 In-Kind Replacement	43.7%	24.3%	2.8%	2.0%			
15	Otay Mesa Alternate	63.2%	46.6%	20.8%	4.2%			
16	LNG Storage Alternate	63.2%	46.6%	20.8%	0.0%			
17	Alt Energy (Grid-Scale)	63.2%	46.6%	20.8%	0.0%			
18	Alt Energy (Smaller-Scale)	63.2%	46.6%	20.8%	0.0%			
19	Offshore Route	0.0%	0.0%	0.0%	0.0%			
20	Blythe to Santee Alt 1	0.0%	0.0%	0.0%	0.0%			
21	Blythe to Santee Alt 2	0.0%	0.0%	0.0%	0.0%			
22	Cactus City to San Diego Alt	0.0%	0.0%	0.0%	0.0%			
23	Second Pipeline Along L3010	0.0%	0.0%	0.0%	0.0%			

	Normalized Avera	age Curtailment	
F	G	Н	1
Gas Non-Core Non-EG	Gas Electric Generation (EG)	Gas Core	Electric
71%	55%	16%	51%
100%	100%	100%	100%
0%	0%	0%	0%
89%	87%	56%	90%
86%	82%	42%	83%
69%	52%	13%	47%
49%	28%	5%	17%
20%	6%	0%	3%
0%	0%	0%	0%
0%	0%	0%	0%
69%	52%	13%	47%
100%	100%	100%	100%
100%	100%	100%	0%
100%	100%	100%	0%
100%	100%	100%	0%
0%	0%	0%	0%
0%	0%	0%	0%
0%	0%	0%	0%
0%	0%	0%	0%
0%	0%	0%	0%

	Benefits Evaluation Model Scoring of Avg Curtailment %									
	J	K	L	М						
	Gas Non-Core Non-EG	Gas Electric Generation (EG)	Gas Core	Electric						
	2	3	5	3						
	1	1	1	1						
	5	5	5	5						
	1	1	3	1						
	1	1	3	1						
	2	3	5	3						
	3	4	5	5						
	4	5	5	5						
	5	5	5	5						
	5	5	5	5						
	2	3	5	3						
	1	1	1	1						
	1	1	1	5						
	1	1	1	5						
	1	1	1	5						
	5	5	5	5						
	5	5	5	5						
Ш	5	5	5	5						
Ш	5	5	5	5						
	5	5	5	5						

Average Curtailment Percentage

Returns the average curtailment to each gas customer class and electric meters by project alternate, under all 48 scenarios evaluated for that alternate.

Normalization

Max 63.2%

The scores in this table have been normalized against the maximum curtailment percentage under each customer class.

For example, (Column F - Line 4) = (Column B - Line 4) / (Column F -

20.8%

4.2%

46.6%

Benefits Evaluation Model Scoring

This table scored the Alternatives 1 through 5 using data in the 'Normalized Average Curtailment' table.

Scores are ranked as 1 being worst (curtailment >= 80%) and 5 being best (curtailment <= 20%)

WORK PAPER TABLE - SCENARIO ANALYSIS GRAPH DATA SET (SA 1.8)

DATA SET OF CURTAILMENT IMPACTS WITH GAS CUSTOMERS AND ELECTRIC METERS AFFECTED FOR GRAPH INPUT APPLICATION 15-09-013 VOLUME III – COST-EFFECTIVENESS ANALYSIS (CORRECTED FEBRUARY 2017)

Line No.												
1		Column Labels										
2					Gas Electric Generation (EG)		Gas Core		Total Average of Curtailment %	Total Average of Electric Meters Affected		
3	Row Labels	Average of Curtailment %	Average of Electric Meters Affected	Average of Curtailment %	Average of Electric Meters Affected	Average of Curtailment %	Average of Electric Meters Affected	Average of Curtailment %	Average of Electric Meters Affected			
4	L1600 (Pre/Post Hydrotesting)	0.021422862	29992.00627	0.447922939	0	0.257788988	0	0.03246967	28210.88279	0.189901115	14550.72226	
5	L1600 (During Hydrotesting)	0.042067286	58894.2007	0.63212371	0	0.465656104	0	0.208019672	180735.3956	0.336966693	59907.39906	
6	L3602 (Proposed Project)	0	0	0	0	0	0	0	0	0	0	
7	Alt Diameter Pipeline 10"	0.037748364	52847.71015	0.565558889	0	0.405443448	0	0.115625752	100460.0471	0.281094113	38326.93932	
8	Alt Diameter Pipeline 12"	0.03474192	48638.68849	0.543171389	0	0.380634018	0	0.087968353	76430.24831	0.26162892	31267.2342	
9	Alt Diameter Pipeline 16"	0.019694133	27571.78659	0.436655018	0	0.243303859	0	0.02755221	23938.40683	0.181801305	12877.54835	
10	Alt Diameter Pipeline 20"	0.007117018	9963.824973	0.309465936	0	0.13191479	0	0.009984639	8675.033794	0.114620596	4659.714692	
11	Alt Diameter Pipeline 24"	0.001423519	1992.926133	0.126914633	0	0.027847924	0	0	0	0.039046519	498.2315333	
	Alt Diameter Pipeline 30"	0	0	0	0	0	0	0	0	0	0	
	Alt Diameter Pipeline 42"	0	0	0	0	0	0	0	0	0	0	
14	L1600 In-Kind Replacement	0.019694133		0.436655018	0	0.243303859	0	0.02755221				
	Otay Mesa Alternate	0.042067286	58894.2007	0.63212371	0	0.465656104	0	0.208019672				
	LNG Storage Alternate	0	0	0.63212371	0	0.465656104	0	0.208019672			45183.84889	
	Alt Energy (Grid-Scale)	0	0	0.63212371	0	0.465656104	0	0.208019672		0.326449871	45183.84889	
	Alt Energy (Smaller-Scale)	0	0	0.63212371	0	0.465656104	0	0.208019672	180735.3956	0.326449871	45183.84889	
-	Offshore Route	0	0	0	0	0	0	0	0	0	0	
	Blythe to Santee Alt 1	0	0	0	0	0	0	0	0	0	0	
21	Blythe to Santee Alt 2	0	0	0	0	0	0	0	0	0	0	
	Cactus City to San Diego Alt	0	0	0	0	0	0	0	0	0	0	
23	Second Pipeline Along L3010	0	0	0	0	0	0	0	0	0	0	
24	Grand Total	0.011298826	15818.35653	0.301348119	0	0.20092587	0	0.06706256	58266.50017	0.145158844	18521.21418	