

Application No: A.13-12-013
Exhibit No.: _____
Witness: David M. Bisi

)
Application of Southern California Gas Company)
(U 904 G) and San Diego Gas & Electric Company)
(U 902 G) For Authority To Recover North-South)
Project Revenue Requirement In Customer Rates)
And For Approval Of Related Cost Allocation And)
Rate Design Proposals)
_____)

A.13-12-013
(Filed December 20, 2013)

PREPARED REBUTTAL TESTIMONY ON PROJECT ALTERNATIVES OF

DAVID M. BISI

SAN DIEGO GAS & ELECTRIC COMPANY

AND

SOUTHERN CALIFORNIA GAS COMPANY

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

May 8, 2015

TABLE OF CONTENTS

I. PURPOSE1

II. THE NORTH-SOUTH PROJECT INCREASES SYSTEM RECEIPT CAPACITY EVEN WITHOUT THE WHITEWATER PIPELINE1

II. THE NORTH-SOUTH PROJECT IS NOT INTENDED TO SOLVE ALL OPERATIONAL AND CUSTOMER PROBLEMS3

III. EL PASO NEGLECTS COSTS TO ACCESS STORAGE WITH ITS ALTERNATIVE.....4

IV. TRANSCANADA’S PROPOSAL HAS NO ACCESS TO ROCKY MOUNTAIN OR CANADIAN SUPPLIES.7

V. TRANSCANADA’S ALTERNATE PROPOSAL IS INCOMPLETE.....8

VI. SOCALGAS’ AND SDG&E’S PROJECT IS THE ONLY PROPOSAL THAT PROVIDES THE UTILITIES WITH OPERATIONAL CONTROL.....9

VII. SCGC’S CONCERNS OVER THE DEMAND CONDITION USED IN THE APPLICATION ARE NOT MERITORIOUS10

VIII. ELECTRIC DRIVEN COMPRESSORS ARE NOT SUITABLE FOR ADELANTO11

IX. TURN’S ARGUMENTS REGARDING THE POTENTIAL FOR SUPPLY DISRUPTION ARE NOT WELL FOUNDED.....13

1 **PREPARED REBUTTAL TESTIMONY ON PROJECT ALTERNATIVES**
2 **OF DAVID M. BISI**

3 **I. PURPOSE**

4 The purpose of my prepared rebuttal testimony on project alternatives is to address the
5 alternative physical proposals of El Paso Natural Gas Company, LLC (“El Paso”), TransCanada
6 Pipelines Limited and North Baja Pipeline, LLC (collectively “TransCanada”), and Transwestern
7 Pipeline Company, LLC (“Transwestern”) to the North-South Project proposed by Southern
8 California Gas Company (“SoCalGas”) and San Diego Gas & Electric Company (“SDG&E”). My
9 testimony also responds to certain operations-based statements made by these parties in their
10 testimony regarding project alternatives, as well as concerns expressed by the Southern California
11 Generation Coalition (“SCGC”) and The Utility Reform Network (“TURN”) in their alternatives
12 testimony.

13 **II. THE NORTH-SOUTH PROJECT INCREASES SYSTEM RECEIPT CAPACITY**
14 **EVEN WITHOUT THE WHITEWATER PIPELINE**

15 El Paso and TransCanada both challenge whether the North-South Project increases the
16 SoCalGas and SDG&E system receipt capacity from 3,875 million cubic feet per day (MMcfd) to
17 4,175 MMcfd. Without any supporting evidence or analysis, El Paso states that “The elimination of
18 the pipeline between the Moreno Pressure Limiting Station and the Whitewater Compressor Station
19 will also eliminate the enhancement of backbone capacity.”¹ Similarly, TransCanada faults
20 SoCalGas and SDG&E for not explaining “that deliveries into the SoCalGas Southern System from
21 its North-South Project would similarly compete [with deliveries at Blythe] because deliveries at

¹ Prepared Updated Intervenor Testimony of Anthony M. Sanabria, page 5. Note that El Paso erroneously refers to SoCalGas’ Whitewater Pressure Limiting Station as the “Whitewater Compressor Station” in the cited testimony.

1 Moreno from the North-South Project would essentially back out deliveries into SoCalGas at
2 Blythe.² Both El Paso and TransCanada are mistaken.

3 Nothing has changed regarding the design of the compressor station at Adelanto, the design
4 of the pipeline between Adelanto and Moreno, or where the pipeline from Adelanto will
5 interconnect with the Southern System at Moreno, far downstream of SoCalGas' Blythe receipt
6 point. The capacity of the North-South Project therefore remains unchanged, and that distance from
7 Blythe still allows supply from this interconnect to not interfere with our capability to receive the
8 full 1,210 MMcfd at Blythe. Of course, as also noted in our prepared direct testimony, sufficient
9 demand must exist on the system to receive this level of supply.

10 In contrast, TransCanada's alternative proposal is very similar to the River Route Pipeline
11 alternative that SoCalGas and SDG&E rejected for the reasons described in our testimony.³ Like
12 the River Route Pipeline, the TransCanada alternative would interconnect on the SoCalGas system
13 upstream of the Blythe compressor station. The Blythe compressor station only has throughput
14 capacity for 1,210 MMcfd; therefore while the River Route Pipeline or TransCanada's alternative
15 do increase the Northern Zone receipt capacity, they do not increase the system receipt capacity
16 because deliveries to the Southern System remain only 1,210 MMcfd.

17 SoCalGas and SDG&E note once again that an increase in receipt capacity is not the
18 primary driver for the North-South Project, nor does that incremental receipt capacity address any
19 existing problem on the SoCalGas and SDG&E system. The primary driver for the North-South
20 Project is to get physical supply to the Southern System. We currently have sufficient receipt
21 capacity on our system to meet our customers' needs and the Commission's desire to retain a
22 sufficient level of excess capacity. The issue is that customers have the flexibility to deliver gas

² Prepared Direct Testimony of James R. Schoene, page 6.

³ Updated Prepared Direct Testimony of Gwen Marelli, pages 21-22.

1 anywhere on our system, and they have historically chosen not to deliver enough to the Southern
2 System. The Commission should not give undue weight to the capacity issue and allow it to be
3 distracted from the primary purpose of our application--namely providing support to an area of our
4 system that is overly dependent upon a single supply source.

5 **II. THE NORTH-SOUTH PROJECT IS NOT INTENDED TO SOLVE ALL**
6 **OPERATIONAL AND CUSTOMER PROBLEMS**

7 The Commission should not be distracted by arguments that the North-South Project would
8 not have prevented customer curtailment in every single potential situation, as El Paso suggests in
9 its testimony.⁴ The North-South Project is designed to transport supplies from SoCalGas storage
10 and the SoCalGas Northern System to the Southern System; it stands to reason that this requires
11 sufficient supply to be available from storage and on the Northern System. Fortunately, SoCalGas
12 and SDG&E have substantial storage withdrawal capability, and have proposed a low Operational
13 Flow Order (OFO) protocol in A.14-06-021 that will provide customers with a strong incentive to
14 deliver adequate supplies to the system. SoCalGas and SDG&E are awaiting the Commission
15 Decision on that application.⁵

16 The Commission should also not be distracted by arguments relating to the capacity or
17 reliability of the SDG&E system when evaluating the benefits that the North-South Project provides
18 to Southern System customers. The Commission has determined that the new San Diego pipeline
19 that is under consideration by SoCalGas and SDG&E, Line 3602, is a separate project that would be
20 undertaken for different reasons than the North-South Project.⁶ The North-South Project was never
21 intended to address the capacity issues of SDG&E, and should not be faulted because it does not (as
22 do none of the intervenor alternative proposals as well).

⁴ Prepared Updated Intervenor Testimony of Anthony M. Sanabria, page 5-6.

⁵ On May 1, 2015, a Proposed Decision in A.14-06-021 was issued which would grant SoCalGas' and SDG&E's Low OFO proposal.

⁶ A.13-12013, Assigned Commissioner's Amended Scoping Memo and Ruling, dated March 9, 2015.

1 **III. EL PASO NEGLECTS COSTS TO ACCESS STORAGE WITH ITS ALTERNATIVE**

2 In its testimony, El Paso states: “To accommodate additional supply sources, including
3 SoCalGas storage, EPNG, in collaboration with Mojave, could transport natural gas from SoCalGas
4 at Wheeler Ridge and Kramer Junction”⁷ and “No additional facilities in California would be
5 required to facilitate this additional firm capability.”⁸ In response to SoCalGas’ and SDG&E’s first
6 set of data requests, El Paso provided further information regarding these statements:

7 SoCalGas currently has two interconnects with Mojave Pipeline in
8 California; Wheeler Ridger (sic) and Kramer Junction. These
9 interconnects are used to move gas from existing interstate pipelines to fill
10 SoCalGas’ storage. EPNG believes this gas could be transported from
11 these locations east on Mojave to the existing Topock Interconnect on
12 EPNG. With the planned enhancements submitted as part of the EPNG
13 Alternative, the gas could then be transported on EPNG via the expanded
14 Havasu Lateral for delivery to SDG&E at the existing Ehrenberg
15 interconnect.⁹

16 El Paso is correct in that SoCalGas does have two interconnects with the Kern/Mojave
17 common pipeline at Wheeler Ridge and at Kramer Junction. However, El Paso is not correct in its
18 statement that “No additional facilities in California would be required” in order for this operation.
19 El Paso assumes that SoCalGas can effectuate physical delivery into the Kern/Mojave common
20 pipeline in sufficient volumes for their alternative to replace the North-South Project without any
21 improvement on the SoCalGas system; this assumption is wrong.

22 In order to deliver 800 MMcfd of storage supplies to the Kern/Mojave common pipeline at
23 Wheeler Ridge for El Paso to transport to the Southern System via the Mojave Pipeline and its own
24 system under the same demand condition used in our Application, SoCalGas would need to make
25 the following improvements on its system:

⁷ Prepared Intervenor Testimony of Anthony M. Sanabria, page 6 (emphasis added).

⁸ Id.

⁹ El Paso Response to Question 23 in SoCalGas and SDG&E first set of data requests.

- 1 • Install 53 miles of 30-inch diameter pipeline between the Newberry compressor
2 station and the Adelanto compressor station
- 3 • Install 59 miles of 30-inch diameter pipeline between the Quigley Pressure Limiting
4 Station and the Wheeler Ridge compressor station
- 5 • Rebuild the Adelanto compressor station with 30,000 horsepower
- 6 • Add 21,000 horsepower to the Wheeler Ridge compressor station for an assumed
7 930 psig delivery pressure to the Kern/Mojave pipeline
- 8 • Expand the Honor Rancho storage field withdrawal capacity by 500 MMcfd
- 9 • Install valving, controls, and metering at the Wheeler Ridge compressor station for
10 physical redelivery of gas supply to the Kern/Mojave pipeline

11 A direct cost estimate for these improvements, based on historical cost data, is
12 approximately \$890 million.

13 For physical deliveries to the Kern/Mojave pipeline at the Kramer Junction interconnect, the
14 following improvements are needed on the SoCalGas system:

- 15 • Install 53 miles of 30-inch diameter pipeline between the Newberry compressor
16 station and the Adelanto compressor station
- 17 • Install 7 miles of 30-inch diameter pipeline between the Quigley Pressure Limiting
18 Station and the Honor Rancho storage field
- 19 • Rebuild the Adelanto compressor station with 38,000 horsepower for an assumed
20 930 psig delivery pressure to the Kern/Mojave pipeline
- 21 • Expand the Honor Rancho storage field withdrawal capacity by 500 MMcfd
- 22 • Install valving, controls, and metering at Kramer Junction for physical redelivery of
23 gas supply to the Kern/Mojave pipeline

1 A direct cost estimate for these improvements, based on historical cost data, is
2 approximately \$620 million.¹⁰

3 Clearly, these costs are significant. It should not give the Commission comfort that El Paso
4 seems to have overlooked these costs in their alternate proposal – particularly since El Paso has
5 been circumspect regarding the investments they would make on their system to insure reliable
6 supply is delivered to the SoCalGas Southern System. Table 1 of El Paso’s Prepared Intervenor
7 Testimony listed three options that presumably build on each other to deliver volumes ranging from
8 300-800 MMcf/d to the Southern System, but El Paso does not specify the facility investments
9 necessary to provide each service level – their testimony only says “looping of its Havasu Crossover
10 in La Paz County, Arizona with a 42-inch diameter pipeline and the installation of compression
11 facilities along the pipeline loop in Arizona.”¹¹ El Paso has provided no details regarding how it
12 would scale its project from 300 to 800 MMcf/d, such as how much pipeline and compression needs
13 to be installed for each level of supply. El Paso’s rationale is that “the Annual Revenue
14 Requirements set forth in the Prepared Intervenor Testimony of Anthony M. Sanabria are firm
15 (subject to approval by the appropriate management, management committee, and/or board of
16 directors of EPNG and/or its parent companies). EPNG is willing to accept all financial risk if its
17 project costs increase and would not seek to increase the Annual Revenue Requirements set forth in
18 Table 1.”¹²

19 Since El Paso neglected to include the costs to access storage supplies for a project that it
20 advertised as having access to SoCalGas’ storage supplies, the Commission should question

¹⁰ As discussed further in the Rebuttal Testimony of Mr. Buczkowski (pages 2-3), these cost estimates are not of the same quality as the cost estimate that SoCalGas and SDG&E presented in our Application for the North-South Project; however, SoCalGas and SDG&E would not expect these costs estimates to be lower than this figure with further assessment – costs would likely increase as a result of additional study.

¹¹ Prepared Intervenor Testimony of Anthony M. Sanabria, page 5.

¹² El Paso Response to Question 1 in SoCalGas and SDG&E first set of data requests.

1 whether there are other costs that El Paso also failed to include which would negate El Paso’s
2 ability to provide the services it describes. Given the opaque nature that El Paso has chosen to
3 present its alternative to the Commission, it will be very hard for anyone to make that independent
4 judgement.

5 **IV. TRANSCANADA’S PROPOSAL HAS NO ACCESS TO ROCKY MOUNTAIN OR**
6 **CANADIAN SUPPLIES**

7 As El Paso and TransCanada affirm,¹³ the SoCalGas system interconnects with the
8 Kern/Mojave common pipeline at the Wheeler Ridge and Kramer Junction receipt points. The
9 North-South Project as proposed by SoCalGas and SDG&E has the capability to transport supply
10 delivered at Kramer Junction and Wheeler Ridge to the Southern System.¹⁴ TransCanada concludes
11 that because the “Kern River [pipeline] has minimal available capacity”¹⁵ and the PG&E pipelines
12 “are at or near capacity,”¹⁶ no new supplies are available from the Wheeler Ridge or Kramer
13 Junction receipt points.

14 This line of reasoning is irrelevant. SoCalGas does not need “new” supply at either receipt
15 point in order to transport it to the Southern System via the North-South Project. It is a fact that
16 SoCalGas currently receives supply at both the Wheeler Ridge and Kramer Junction locations, and
17 it is this supply that is already available that can be transported via our project to support the
18 Southern System. TransCanada’s alternative proposal, in contrast, would not be able to access these
19 already-available supplies.¹⁷

¹³ Prepared Intervenor Testimony of Anthony M. Sanabria, El Paso Natural Gas Company, LLC, page 6 and Prepared Direct Testimony of James R. Schoene on Behalf of TransCanada Pipelines Limited and North Baja Pipeline, LLC, page 6.

¹⁴ Updated Direct Testimony of David M. Bisi, page 12.

¹⁵ Prepared Direct Testimony of James R. Schoene, page 6.

¹⁶ Id.

¹⁷ TransCanada states that “SoCalGas customers currently have these points [Wheeler Ridge, Kern River Station, and Kramer Junction] as receipt points and would not lose access to them with the TC Project.” Prepared Direct Testimony of James R. Schoene at page 6. This also is true but irrelevant to the

1 **V. TRANSCANADA’S ALTERNATE PROPOSAL IS INCOMPLETE**

2 TransCanada’s alternate proposal is not comparable to SoCalGas’ and SDG&E’s North-
3 South Project, even putting aside TransCanada’s lack of access to Rocky Mountain, Canadian, and
4 storage supplies. TransCanada estimates the cost of its alternative proposal to be \$585.4 million,¹⁸
5 which includes new pipeline and compression near South Needles. TransCanada states that their
6 pipeline will operate between a Maximum Allowable Operating Pressure (MAOP) of 1150 psig and
7 a minimum pressure of 400 psig.¹⁹ 400 psig is insufficient for delivery into the SoCalGas system at
8 Blythe, and additional compression would be required. This additional requirement will increase
9 the cost of the TransCanada alternative, which already exceeds the cost estimate of \$560 million for
10 SoCalGas and SDG&E’s very similar River Route Pipeline.

11 TransCanada apparently realized this, and offered up a reduction in its alternative proposal
12 of \$82 million if TransCanada could somehow utilize SoCalGas’ existing compression at South
13 Needles. This proposal is not reasonable. TransCanada would have SoCalGas and SDG&E’s
14 customers utilize utility assets for the benefit of TransCanada, and then be charged by TransCanada
15 for that privilege. TransCanada’s alternative proposal should stand on its own or be withdrawn, and
16 at this point, there is no advantage that TransCanada’s alternative proposal holds over SoCalGas
17 and SDG&E’s similar-but-ultimately-rejected River Route Pipeline.²⁰

TransCanada alternative proposal; their project could not access or transport supplies delivered at these locations without further investment on the SoCalGas system.

¹⁸ Id., page 7.

¹⁹ Id., page 4.

²⁰ Even TransCanada’s so-called “advantage” of interconnecting with the North Baja pipeline at Blythe to transport northern supplies to Otay Mesa is questionable (Prepared Direct Testimony of James R. Schoene at page 7). TransCanada ignores the fact that these gas supplies must traverse two other pipelines before getting to Otay Mesa, incurring costs even if capacity were available. Further, if this was something that the market really desired, TransCanada would have already offered this service and not have waited for SoCalGas and SDG&E’s application.

1 **VI. SOCALGAS' AND SDG&E'S PROJECT IS THE ONLY PROPOSAL THAT**
2 **PROVIDES THE UTILITIES WITH OPERATIONAL CONTROL**

3 In our Application and supporting testimony, SoCalGas and SDG&E explain that our North-
4 South Project provides benefit over contractual alternatives that would simply deliver supply to the
5 Southern System.²¹ These benefits provided by the North-South Project are equally true compared
6 to any of the alternative physical proposals offered by El Paso, TransCanada, and Transwestern.
7 The alternative proposals advocated by the interstate pipelines leave the operational control of those
8 assets outside of SoCalGas and SDG&E. Southern System integrity would still be dependent upon
9 customers (or perhaps the Utility System Operator) purchasing and scheduling those supplies to be
10 transported on those assets. And SoCalGas and SDG&E customers would still be at risk for any
11 outage on the interstate system that would render these assets unavailable. As we've explained, this
12 is not a significant improvement over the current situation.

13 Additionally, the use of these interstate assets would typically conform to the established
14 NAESB scheduling protocols consisting of two day-ahead and two flow-day scheduling cycles.
15 The need for Southern System support may not be evident in time to schedule sufficient supply on
16 these interstate assets. This is not a factor with SoCalGas and SDG&E's proposed North-South
17 Project. The North-South Project would be a component of our integrated intrastate gas network,
18 and gas supply could be transported on this integrated network whenever required by operational
19 and customer needs.

20 Transwestern²² and El Paso²³ both suggest that their alternative proposals can provide
21 operational flexibility equivalent to that offered by the North-South Project. However, neither

²¹ Updated Direct Testimony of David M. Bisi, page 18.

²² "Transwestern is open to considering operational and cost recovery proposals for the project that might conform to both the Commission's expectations and the needs of SoCalGas and SDG&E and their end use customers." Direct Testimony of Steven Hearn, page 12.

1 Transwestern nor El Paso have provided any details on how exactly this would be accomplished,
2 despite having an opportunity to update their testimony following the removal of the Moreno to
3 Whitewater Pipeline from the North-South Project.²⁴ The Commission should therefore take these
4 statements for what they are: words without substance that do not rebut the clear advantage of the
5 North-South Project over any of the intervenor physical alternative proposals.

6 **VII. SCGC’S CONCERNS OVER THE DEMAND CONDITION USED IN THE**
7 **APPLICATION ARE NOT MERITORIOUS**

8 SoCalGas and SDG&E were forthright in our application about the fact that the demand
9 condition used to evaluate the effectiveness of the North-South Project and its alternatives deviated
10 from the CPUC-mandated design standard for firm noncore service, and the reasons behind that
11 deviation.²⁵ SCGC has been critical of this decision. It contends that the utilities’ demand
12 condition “inflates the projected need for the North-South Project considerably.”²⁶

13 SCGC’s concerns do not stand up to critical scrutiny. SoCalGas and SDG&E believe that it
14 would be a poor example of project planning should the North-South Project be completed and
15 SoCalGas were still forced to either purchase supply for delivery on the Southern System or curtail
16 customer usage because the demand forecast didn’t account for a more robust level of Southern
17 System demand than a 1-in-10 year cold day.

18 SoCalGas and SDG&E provided data to SCGC that stated that the difference between
19 SCGC’s 1-in-10 year cold day demand forecast of 5.0 BCFD and the “inflated” demand condition
20 used in our assessment was only 344 MMcfd.²⁷ That difference equates to only a 7% increase in
21 demand over the 1-in-10 year cold day standard, and represents customer demand that is already on

²³ “Given the flexibility afforded by SoCalGas’ storage infrastructure and EPNG’s/Mojave’s pipeline assets, EPNG is confident it can offer SoCalGas/SDG&E operational flexibility which will replicate the capabilities of the North-South Project.” Prepared Intervenor Testimony of Anthony M. Sanabria, page 6.

²⁴ A.13-12-013, Assigned Commissioner’s Amended Scoping Memo and Ruling, dated March 9, 2015.

²⁵ Updated Direct Testimony of David M. Bisi, page 8-9.

²⁶ Updated Direct Testimony of Catherine E. Yap, dated May 4, 2015, page 6 (emphasis added).

²⁷ SCGC acknowledges this at page 6 of Ms. Yap’s Updated Direct Testimony, dated May 4, 2015.

1 the system. Had SoCalGas and SDG&E instead used the 1-in-10 year cold day demand forecast as
2 the design basis for this project, we may have been able to reduce the pipeline diameter or the
3 compression requirement somewhat.²⁸ However, such a design would allow for no error in the
4 demand forecast, no operational upsets at the compressor station, and no future growth in customer
5 demand on the Southern System. Given the construction challenges provided by Mr. Buczkowski
6 in his Updated Direct Testimony, it would be a poor decision to not consider these circumstances in
7 the design of this project.

8 SCGC is the only party that has questioned SoCalGas' and SDG&E's decision to modify the
9 1-in-10 year cold day demand condition in the design of the North-South Project. SoCalGas and
10 SDG&E have explained our reasons for doing so, and believe those reasons to be valid and in the
11 best interests of our customers.

12 SCGC also claims that SoCalGas and SDG&E utilized an "unwarranted assumption that
13 deliveries of gas would cease entirely from the Northern System through Chino, Prado, and Line
14 6916."²⁹ SCGC is mistaken. SoCalGas and SDG&E fully utilized the capacity of Chino Station,
15 Prado Station, and Line 6916 in the analyses we used to develop the North-South Project and its
16 alternatives. Had we not, the improvements necessary to operate the system without any supply
17 delivered at Blythe and Otay Mesa would have been even more extensive.

18 **VIII. ELECTRIC DRIVEN COMPRESSORS ARE NOT SUITABLE FOR ADELANTO**

19 In its testimony, TURN suggests that the Commission should require SoCalGas and SDG&E
20 to examine whether electric-motor driven compressors provide cost and environmental savings

²⁸ However, a compressor station is designed around available units on the market along with the operational requirements needed by the utility. It may very well be that any possible reduction in throughput at the compression would not alter the proposed design of the compressor station. Even if it would, there is operational value in some redundancy at compressor stations since compressor units are frequently removed from service for both planned and unplanned reasons.

²⁹ Updated Direct Testimony of Catherine E. Yap, dated May 4, 2015, page 6.

1 relative to our proposal for Adelanto, utilizing either a combined-cycle power plant to generate
2 electricity for the motors or connecting directly to existing power lines.³⁰ As an example of
3 feasibility, TURN cites the compressor upgrade underway at SoCalGas' Aliso Canyon storage field,
4 where units identical to that at Adelanto are being replaced with electric-motor driven
5 compressors.³¹

6 SoCalGas and SDG&E have already explained our decision to use gas-driven compression
7 for the redesigned Adelanto compressor station.³² In particular, we explained that electric-motor
8 driven compressors may be suitable for some applications that are not critical to reliably serve
9 customer demand due to the lower level of reliability of electric service relative to gas supply in this
10 situation. Electric outages occur more frequently than curtailments to gas service, and an electric
11 outage at a mainline compressor station could have serious consequences on our ability to maintain
12 continuous gas service. Moreover, electric generators would be among the first customers to lose
13 gas service in the event of a curtailment, further compounding the problem.

14 TURN's suggestion to construct a combined-cycle power plant to provide power to an
15 electric-motor driven compressor station at Adelanto is its attempt to address this reliability
16 problem, by essentially taking the Adelanto compressor station "off the grid." This concept is not
17 well conceived.

18 A combined-cycle power plant would not meet SoCalGas' operational requirements for
19 Adelanto. Specific load and system conditions may demand immediate compression response from
20 the station in order to maintain system integrity and reliability. Turbine driven compressors start up
21 in a matter of minutes independent of shutdown duration whereas the typical start-up duration for a
22 combined cycle plant is 30 minutes for a "hot" start and at least 2 hours for a "cold" start.

³⁰ Updated Prepared Direct Testimony of Herbert Emmrich, page 24.

³¹ Id., page 24.

³² Updated Direct Testimony of David M. Bisi, page 10, footnote 4.

1 **IX. TURN’S ARGUMENTS REGARDING THE POTENTIAL FOR SUPPLY**
2 **DISRUPTION ARE NOT WELL FOUNDED**

3 In its testimony, TURN provides a listing of the SoCalGas and SDG&E receipt points and
4 their upstream capacities, and concludes that because the system is supplied by a “variety of
5 pipelines totaling 6,725 MMcfd”³³ of supply capacity, “It is therefore unlikely that disruptions of
6 supply from any one of these sources would pose a serious reliability problem.”³⁴

7 First, TURN has referenced the incorrect set of data. For SoCalGas and SDG&E system
8 operations, it does not matter in the least what the upstream pipeline capacities are on the interstate
9 systems. The relevant figure is the SoCalGas and SDG&E system receipt capacity – our capacity to
10 take supply away from these interstate pipelines. That figure is normally 3,875 MMcfd, although it
11 is currently reduced due to pipeline maintenance work,³⁵ significantly less than the 6,725 MMcfd
12 cited by TURN.

13 Second, the conclusion that a disruption from any one of these sources would not present a
14 reliability problem is incorrect and is exactly the reason why SoCalGas and SDG&E submitted this
15 application. A disruption of the El Paso system that impacts its capacity to deliver supply at Blythe
16 would have a devastating impact on the SoCalGas Southern System because, as explained in depth
17 in our application, SoCalGas has very limited capacity to support the Southern System with supplies
18 delivered at our northern receipt points, has no capacity to deliver storage supplies to the Southern
19 System, and gas supply and capacity to Otay Mesa is frequently unavailable.

20 Finally, TURN seems to think that looping Line 6916, “formerly the Questar Southern Trails
21 Pipeline, should go a long way toward mitigating the Southern System flow problem.”³⁶ Line 6916

³³ Prepared Direct Testimony of Herbert Emmrich, page 17.

³⁴ Id.

³⁵ The current SoCalGas and SDG&E system receipt capacity at all receipt points is posted online at <https://scgenvoy.sempra.com/>.

³⁶ Prepared Direct Testimony of Herbert Emmrich, page 21.

1 is a 115 mile 16-inch diameter pipeline connected to SoCalGas' Northern System between Topock
2 and Newberry Springs. It has a capacity of 80 MMcfd and is limited to transporting supply
3 delivered at Topock. Despite its limited capacity, it has been useful in meeting the supply
4 requirements of the Southern System.

5 However, looping Line 6916 requires more pipeline than the North-South Project and still
6 would not allow access to storage or receipt points other than Topock to the Southern System.
7 Furthermore, Topock's receipt capacity is only 540 MMcfd – less than the capacity that the North-
8 South Project provides to the Southern System – and it frequently is not fully utilized. For these
9 reasons, SoCalGas and SDG&E believe that looping Line 6916 does not “go a long way” towards
10 solving this problem.

11 This concludes my prepared rebuttal testimony on project alternatives.