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
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REPLY BRIEF OF SOUTHERN CALIFORNIA GAS COMPANY (U 904 G) AND SAN DIEGO GAS & ELECTRIC COMPANY (U 902 G)

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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. OVERVIEW</td>
<td>1</td>
</tr>
<tr>
<td>II. PROJECT DESCRIPTION AND TIMING</td>
<td>1</td>
</tr>
<tr>
<td>III. CEQA ISSUE IN SCOping MEMO</td>
<td>1</td>
</tr>
<tr>
<td>IV. RATESETTING PROPOSALS AND OPTIONS</td>
<td>2</td>
</tr>
<tr>
<td>A. NEED FOR THE NORTH-SOUTH PROJECT</td>
<td>2</td>
</tr>
<tr>
<td>1. Increased Demand for U.S. Gas Supplies in Mexico</td>
<td>2</td>
</tr>
<tr>
<td>2. Robust EG Demand on the Southern System</td>
<td>6</td>
</tr>
<tr>
<td>3. We Need a Long-Term Physical Solution to the Southern System Reliability Problem</td>
<td>9</td>
</tr>
<tr>
<td>4. Providing Southern System Customers with Access to On-System Storage Supplies is Crucial</td>
<td>15</td>
</tr>
<tr>
<td>5. SCGC’s Proposed On-System Physical Alternative Would be More Expensive and Provide Less Operational Flexibility than the North-South Project</td>
<td>18</td>
</tr>
<tr>
<td>6. SoCalGas and SDG&amp;E Used Reasonable and Appropriate Design Criteria for the North-South Project</td>
<td>23</td>
</tr>
<tr>
<td>7. The Moreno-Whitewater Pipeline is not Moving Forward</td>
<td>27</td>
</tr>
<tr>
<td>8. Intervenor Conspiracy Theories are Beyond Scope, Unfounded, and Illogical</td>
<td>28</td>
</tr>
<tr>
<td>9. The North-South Project is not designed to change economic incentives</td>
<td>33</td>
</tr>
<tr>
<td>10. ORA’s Assertion that Gas Operations is unqualified to represent SoCalGas and SDG&amp;E on the Issue of Reliability is not well founded</td>
<td>35</td>
</tr>
<tr>
<td>B. SHORT-TERM OR INTERIM OPTIONS</td>
<td>36</td>
</tr>
<tr>
<td>1. Continued Use of Existing System Operator Tools</td>
<td>36</td>
</tr>
<tr>
<td>2. System Operator Contracts With Interstate Pipelines</td>
<td>37</td>
</tr>
<tr>
<td>3. Southern System Minimum Flow Requirement</td>
<td>37</td>
</tr>
<tr>
<td>4. Transfer of Southern System Minimum Responsibility Back to Gas Acquisition</td>
<td>38</td>
</tr>
<tr>
<td>5. New Low OFO Procedures and Tighter Monthly Balancing Requirements</td>
<td>40</td>
</tr>
</tbody>
</table>
6. Requiring EG Customers to Maintain Alternate Back-Up Fuel ................................................................. 41
7. Core Service Option for Electric Generators ....................... 43
8. LNG Storage ................................................................................................................................. 44
9. LNG Supplies from Costa Azul ................................................................. 44
10. Looping Line 6916 ......................................................................................... 45
11. Purchase or Lease of El Paso’s Line 1903 ................................. 46
12. New Electric Transmission Lines ......................................................... 47
13. Electric-Driven Compressors at Adelanto ................................. 47

C. ALTERNATIVE PIPELINES ........................................................................ 50

1. From a Reliability Standpoint, the Foreign Pipeline Alternatives Would Simply Extend the Status Quo .......... 51
2. None of the Foreign Pipeline Alternatives Would Provide Southern System Customers with Access to SoCalGas Storage Supplies ................................................................. 52
3. The North-South Project would provide Substantially More Operational Flexibility than the Foreign Pipeline Alternatives ................................................................. 56
4. The North-South Project would increase Our Overall System Receipt Point Capacity; the Foreign Pipeline Alternatives would not ................................................................. 58
5. The North-South Project would provide Southern System Customers with the Widest Range of Receipt Point Options ............................................................................. 59
6. El Paso, TransCanada, and Transwestern Inappropriately Conflate Price and Value ................................ 60
7. Transwestern’s “Much Earlier” In-Service Claim Ignores Reality ........................................................................ 62
8. The Foreign Pipeline Proposals Would Effectively Rebundle a Portion of Noncore Service ................... 64
10. The Commission Should Not Place the North-South Project at a Disadvantage because it is Located in California and Subject to CEQA Review by the Commission ........................................................................ 67

D. COST RECOVERY AND RATESETTING PROPOSALS ............ 68
1. The Commission Should Authorize SoCalGas to Recover the Full Cost of the North-South Project in BTS Customer Rates ................................................................. 68
2. The Commission Should Approve SoCalGas and SDG&E’s Proposed Approach to Calculating the Revenue Requirements Associated with the North-South Project, Including Proposed Loaders, Escalation Rates, and AFUDC ................................................ 81
3. The Commission Should Decline to Approve SCGC’s Proposed Changes to Our Capitalization and Expense Policy ................................................................. 82
4. The Commission Should Authorize SoCalGas to File an Advice Letter within 60 Days After North-South Project Assets Are Placed Into Service, and to Incorporate the Actual Revenue Requirement in Rates on the First Day of the Next Month Following Advice Letter Approval ........................................ 83
5. The Commission Should Authorize SoCalGas to Adjust the First Year’s Revenue Requirement, if placed in Rates on a Date Other Than January 1, using the Gross-Up Method Proposed by SoCalGas and SDG&E ................................................................. 84
6. The Commission Should Authorize SoCalGas to Update the North-South Project Revenue Requirement Each Year Via SoCalGas’ Annual Consolidated Rate Filing for Rates Effective January 1st of the Following Year Until the North-South Project Revenue Requirement Is Included In a GRC .......... 84
7. The Commission Should Authorize SoCalGas to Establish a New Interest-Bearing NSIMA to Record Incremental O&M and Capital-Related Costs Associated With the North-South Project for Future Recovery ................................................................. 84
8. The Commission Should Authorize SoCalGas to Amortize NSIMA Balances in BTS Rates through SoCalGas’ Annual Regulatory Account Balance Update Filings until the Revenue Requirement and Incremental O&M Costs for the North-South Project Are Included In a GRC ........................................................................ 84
9. The Commission Should Authorize SoCalGas to Transfer Any NSIMA Residual Balance after Incorporation in a GRC to the BTBA and Elimination of the NSIMA ........................................................................ 85
## TABLE OF AUTHORITIES

<table>
<thead>
<tr>
<th>CPUC DECISIONS</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>D.90-12-119</td>
<td>70</td>
</tr>
<tr>
<td>D.92-10-056</td>
<td>70</td>
</tr>
<tr>
<td>D.93-02-012</td>
<td>72</td>
</tr>
<tr>
<td>D.98-03-073</td>
<td>30</td>
</tr>
<tr>
<td>D.04-03-020</td>
<td>70</td>
</tr>
<tr>
<td>D.06-09-039</td>
<td>27</td>
</tr>
<tr>
<td>D.06-11-050</td>
<td>72</td>
</tr>
<tr>
<td>D.06-12-029</td>
<td>30</td>
</tr>
<tr>
<td>D.07-12-019</td>
<td>35</td>
</tr>
<tr>
<td>D.09-10-035</td>
<td>70</td>
</tr>
<tr>
<td>D.09-11-006</td>
<td>38</td>
</tr>
<tr>
<td>D.14-03-004</td>
<td>6</td>
</tr>
<tr>
<td>D.14-12-020</td>
<td>81</td>
</tr>
<tr>
<td>D.15-06-004</td>
<td>8, 17, 18, 41</td>
</tr>
</tbody>
</table>
BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

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)

REPLY BRIEF OF SOUTHERN CALIFORNIA GAS COMPANY (U 904 G) AND SAN DIEGO GAS & ELECTRIC COMPANY (U 902 G)

I. OVERVIEW

In accordance with the schedule established by Administrative Law Judge (ALJ) Bemesderfer, Southern California Gas Company (SoCalGas) and San Diego Gas & Electric Company (SDG&E) hereby present their Reply Brief.1

In this Reply Brief, we respond to the Opening Briefs submitted by the Office of Ratepayer Advocates (ORA), The Utility Reform Network (TURN), the Southern California Generation Coalition (SCGC), the City Of Long Beach Gas & Oil Department (Long Beach), El Paso Natural Gas Company (El Paso), North Baja Pipeline, LLC and TransCanada Pipelines Limited (TransCanada), and Transwestern Pipeline Company, LLC (Transwestern).

II. PROJECT DESCRIPTION AND TIMING

Please see our Opening Brief on this topic.

III. CEQA ISSUE IN SCOPING MEMO

Please see our Opening Brief on this topic.

1 As with our Opening Brief will generally follow the list of issues specified at pp. 12-14 of the May 5, 2014 Assigned Commissioner’s Scoping Memo and Ruling (Scoping Memo) in this proceeding.
IV. RATESETTING PROPOSALS AND OPTIONS

A. NEED FOR THE NORTH-SOUTH PROJECT

As discussed at length in our Opening Brief, the North-South Project is needed to maintain Southern System reliability, and to alleviate the potential for curtailments of customers on the Southern System.\(^2\) No other physical or non-physical option (or combination of options) will provide benefits comparable to those provided by the North-South Project. Intervenor arguments to the contrary are not well founded.

1. Increased Demand for U.S. Gas Supplies in Mexico

In their Opening Briefs, ORA, TURN, and SCGC disagree with SoCalGas and SDG&E’s conclusion that substantial future flows to Mexico over the El Paso South Mainline will likely further reduce flows into Blythe. For example:

ORA vehemently disagrees with SCG witness Chaudhary’s argument that there necessarily will be a reduction in deliveries to Ehrenburg just because deliveries from EPNG to Mexico are increasing, due to the numerous supply basins, paths and flexibility over EPNG’s reticulated delivery system with two mainlines and crossovers, and EPNG expansions.\(^3\)

TURN asserts that “[i]increased Mexican demand will be met by expansions in interstate pipeline capacities pursuant to normal market dynamics and FERC regulations.”\(^4\) And SCGC believes that an increase in Mexican supplies, expanded gas production in the Permian Basin, and the reversal of flow on interstate pipelines to bring gas from northern states to Texas for redelivery into Mexico will lead to adequate future deliveries at Blythe.\(^5\)

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\(^2\) See SoCalGas/SDG&E Opening Brief at 10.
\(^3\) ORA Opening Brief at 24.
\(^4\) TURN Opening Brief at 18.
\(^5\) SCGC Opening Brief at 7.
Because we are dealing with long-range predictions about a variety of potential future events and activities, SoCalGas and SDG&E cannot be certain that these intervenors are wrong. But—trying as best we can to read the tea leaves, and using all of the operational and forecasting resources at our disposal—we think that ORA, TURN, and SCGC are taking the future potential for lower flows and higher prices at Blythe due to Mexican demand far too lightly.

Multiple sources (e.g., U.S. Energy Information Administration, Government of Mexico, Bentek, Kinder Morgan) predict substantial increases in pipeline export of natural gas to Mexico from the U.S., even after taking into account the potential increase in Mexican domestic gas production as a result of its oil and natural gas industry reforms. The dramatic decline in oil prices (from $107 per barrel in June 2014 to $45 recently), has led to a significant decline in U.S. oil drilling activities, particularly in the Permian Basin. In claiming significant projected increase in Permian Basin gas supply, SCGC relied on multiple forecasts that were developed before the collapse in oil price. Such low oil price makes future gas production in the Permian Basin particularly vulnerable as gas is produced in association with oil production, with oil production being the primary focus. This introduces additional uncertainties with respect to the future volume of crude oil and associated gas production in the Permian Basin. This low oil and gas price environment adds considerable uncertainty with regard to the future of energy production in Mexico.

SCGC states that the reversal of flows on Kinder Morgan’s interstate pipelines to bring northern shale gas to Texas will make additional supplies available to meet Mexican

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6 SoCalGas/SDG&E Opening Brief at 17-20.
7 Ex. SCGC-2 at 9-10.
8 Ex. SCG-14 (Chaudhury) at 4.
demand.\textsuperscript{9} Even if this turns out to be the case, gas exports to Mexico through south Texas will not substitute for gas deliveries to Mexico via El Paso’s South Mainline because they will serve Mexican gas demand in different geographic locations. In fact, Kinder Morgan already delivers a significant amount of gas to Mexico through its pipeline system other than the El Paso South Mainline: in 2014, total Mexican deliveries through the Kinder Morgan pipeline system was 1,953 MDthd, and delivery through the El Paso South Mainline accounted for 862 MDthd.\textsuperscript{10} The Mexican Government and commercial entities are constructing pipelines worth billions of dollars in northwest Mexico to transport gas from the U.S. border at Arizona (Wilcox, and Sierrita) and west Texas (Samalayuca). These entities would not have undertaken such enormous infrastructure projects if there was a reasonable possibility that flows to Mexico through Texas would supplant flows to Mexico off of El Paso’s South Mainline.

How accurate are projections of substantial increases in pipeline exports of natural gas to Mexico? As with any long-range forecast, it is impossible to tell until years from now. However, market participants are spending billions to develop new infrastructure to serve Mexican gas demand via the El Paso South Mainline. To SoCalGas and SDG&E, these capital investments are a “tell” that increased future natural gas exports to Mexico are a reality—and a real threat to the future availability of flowing supplies at Blythe.

Kinder Morgan, the parent company of El Paso, has constructed a number of projects in recent years to serve Mexican demand via the El Paso South Mainline. These projects currently have a combined capacity of 576,000 decatherms per day (Dthd), and include the Wilcox Lateral Expansion; the Samalayuca Lateral Expansion; the Wilcox II Lateral

\textsuperscript{9} SCGC Opening Brief at 9.
\textsuperscript{10} Ex. SCGC-11 (Kinder Morgan January 28, 2015 Analyst Conference) slide 23.
Expansion; and the Sierrita Pipeline. Furthermore, in July of 2014, Kinder Morgan announced a long-term firm transportation contract with Mexico’s Comision Federal de Electricidad (CFE) to provide 550,000 Dthd of capacity in the U.S. by October 2020 for delivery of natural gas to Mexico. Per the contract, Kinder Morgan will expand its El Paso pipeline system by 350 million cubic feet per day (MMcfd) to facilitate delivery along the Sierrita Pipeline.

In addition, Mexico is constructing a significant fleet of gas-fired power plants—both new plants and older plants converted from fuel oil—that are likely to rely on gas delivered from the El Paso South Mainline. In a March 2015 report, Bentek (an energy consulting company), noted that Mexico is embarking on one of the largest pipeline construction periods in its history to facilitate increased natural gas imports from the U.S. SoCalGas and SDG&E are concerned that as entities sign long-term contracts with El Paso to serve gas load in Mexico, the likely result will be substantially lower flowing supplies available to reach Ehrenberg.

In its Opening Brief, TURN argues that a recent long-term contract announcement by Kinder Morgan demonstrates that Mexico demand should not be a matter of concern for Southern System customers:

The announcement by Kinder Morgan of its long term contract with the Mexican Comision Federal de Electricidad explained that Kinder Morgan will expand its system by about 350 MMcfd and will use this expansion capacity and existing capacity to serve the contracted 550 MMcfd to Mexico. The Kinder Morgan

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11 SoCalGas/SDG&E Opening Brief at 19.
12 Ex. TURN-01 (Emmrich), Attachment 2.
13 Ex. SCG-5 (Chaudhury) at 4; Ex. SCGC-11 (Kinder Morgan January 28, 2015 Analyst Conference) slide 27.
14 SoCalGas/SDG&E Opening Brief at 18.
15 Ex. SCG-5 (Chaudhury) at 6.
announcement illustrates exactly the type of market response that is to be expected, and thus casts considerable doubt on the fear expressed by Mr. Chaudhury and Sempra.\textsuperscript{16}

SoCalGas and SDG&E beg to differ. CFE contracted for 550 MMcfd of capacity while Kinder Morgan has planned a related expansion of only 350 MMcfd—which means Kinder Morgan will be diverting 200 MMcfd of existing uncontracted capacity off of its El Paso South Mainline to serve Mexican gas demand. This 200 MMcfd of existing capacity will not be available to flow gas supply to SoCalGas’ Southern System at Ehrenberg for a long time.

As entities serving the new gas load in Mexico sign long-term contracts for capacity with El Paso, the likely result will be substantially lower flowing supplies available to reach Ehrenberg.\textsuperscript{17} For all the reasons discussed above and in our Opening Brief, SoCalGas and SDG&E believe that the additional exports associated with the expansions into Mexico off of the El Paso South Mainline will directly compete with available supplies into Ehrenberg.

2. **Robust EG Demand on the Southern System**

In its Opening Brief, ORA asserts that it is unreasonable for SoCalGas and SDG&E to plan for increased electric generation (EG) demand on the Southern System.\textsuperscript{18} According to ORA, the Commission’s recent Long-Term Procurement Plan decision (D.14-03-004) will lead to lower future EG demand on the Southern System, and ORA points to the 2014 California Gas Report and a recent California Energy Commission (CEC) Integrated Energy Policy Report as support for its position.\textsuperscript{19} SoCalGas and SDG&E respectfully disagree.

\textsuperscript{16} TURN Opening Brief at 20.
\textsuperscript{17} Ex. SCG-5 (Chaudhury) at 6.
\textsuperscript{18} ORA Opening Brief at 5.
\textsuperscript{19} ORA Opening Brief at 5 and 18-20.
ORA relies upon the latest edition of two regularly-updated state reports and its own intuition about how the marketplace will deal with the elimination of once-through cooling to reach its conclusion that EG demand on the Southern System will dwindle. For our part, SoCalGas and SDG&E would rather rely on what is actually taking place. And what we are seeing leads us to the conclusion that Southern System EG demand will increase, not decrease.

Since the closure of the San Onofre Nuclear Generating Station (SONGS), demand by Southern System electric generators has increased by approximately 80-100 MMcfd. Some of SONGS 2,150 MW may be met by out-of-state generation, but expected increases in overall EG demand lead SoCalGas and SDG&E to believe that Southern System demand will not decline below recent (2012/13) levels.

From the time the SONGS outage began in early 2012, SoCalGas and SDG&E have seen strong EG demand on our systems, and there are a number of gas-fired generation projects proposed for our service territories. The prospect of new EG demand on the Southern System was hammered home by post-hearing announcements of two new projects that will be located in the Southern System. The first project is the Sonoran Energy Project, which will include “553 MW of efficient, fast-start, clean natural gas-fueled, green energy shaping, generation…” alongside the existing Blythe Energy facility. The second is a 48

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20 Ex. SCG-2 (Marelli) at 6.
21 Ex. SCG-2 (Marelli) at 7.
22 Ex. SCG-2 (Marelli) at 7.
MW expansion at the Southern California Edison Mountainview power plant. Together, these projects will add 92 MMcfd of incremental demand to the Southern System. Additionally, these new power plants will incorporate quick-start technology, which will enable the plants to hit maximum rate in as little as 10 minutes—which is particularly useful when renewables become unavailable. In D.15-06-004, the Commission’s recent decision approving SoCalGas and SDG&E’s proposed new low OFO requirements, the Commission explained the challenges created for the SoCalGas System Operator by the combination of weather changes and new quick-start power plants:

> [w]eather and electric generation are difficult to forecast, as a single Heating Degree Day difference in the weather forecast can result in a change of 110 MMcfd of core customer demand, and an unexpectedly dispatched power plant can consume 200 MMcfd or more. While the Gas Control Department would attempt to meet these demand changes by using underground storage capacity, it needs the system-wide pack and draft capacity to manage hourly changes in both planned and unplanned customer demand.

> Furthermore, new power plants on the Applicants’ system are installed with “quick-start” capabilities, in which the plant demand can increase from completely off to 100 percent utilization in as little as seven minutes. Since gas does not move quickly through a pipeline, the rapid use of gas supply is met locally with linepack, which Applicants attempt to replenish after the fact with pipeline or storage field supplies.

As responsible providers of natural gas service to our customers, SoCalGas and SDG&E have an obligation to look beyond the most recent California Gas Report (which we contribute to) and the latest forecast of EG demand from the CEC. When new EG projects materialize—as we believe they will—future California Gas Report and CEC forecasts will change to reflect the increase. If we wait to act until forecasts catch up with marketplace

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25 D.15-06-004, mimeo., at 19-21 (citations omitted).
reality, however, we may already be too late. New quick-start, high-capacity EG units can be approved and put into service much more quickly than a project such as the North-South Project.

Moreover, these new EG projects will be added to a portion of our system that is already experiencing supply-related strains. SoCalGas and SDG&E experienced a preview of these potential issues during the week of December 9, 2013, when cold weather and high on-system EG demand led to combined core and noncore demand that was well in excess of local system capabilities.26 By working closely with the California Independent System Operator (CAISO), SoCalGas and SDG&E were able to weather those particular challenges without curtailing interruptible or firm deliveries to customers.27 But in the future we may not be so fortunate, especially since new gas-fired generation projects are being constructed in our Southern System.

3. **We Need a Long-Term Physical Solution to the Southern System Reliability Problem**

In their opening briefs, various intervenors take the position that SoCalGas and SDG&E are attempting to solve a problem that does not really exist, and that the North-South Project is not necessary. For example, SCGC argues that:

> The alleged threats to reliable deliveries to meet the Southern System minimum flow requirement do not justify the North-South Project. Flowing supplies will be available for delivery into SoCalGas at Ehrenberg over the long term, and there are multiple solutions to assuring that firm capacity will be retained on El Paso for delivery of the flowing supply into SoCalGas.28

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26 Ex. SCG-2 (Marelli) at 7.
27 Ex. SCG-2 (Marelli) at 7.
28 SCGC Opening Brief at 26.
Likewise, ORA, SCGC, and TURN point to the last two historically-warm winters as evidence that the Southern System minimum flow problem is diminishing;\(^{29}\) ORA and SCGC argue that state policy will reduce the use natural gas on the Southern System;\(^{30}\) and TURN characterizes the North-South Project as “the ultimate solution in search of a problem.”\(^{31}\)

These intervenor arguments are short-sighted, and do not reflect the fact that threats to Southern System reliability are real, and growing.

This is a fight that feels familiar. Virtually every time SoCalGas has proposed a new System Operator tool to help maintain Southern System reliability we have faced strong opposition—often from the same intervenors who are now arguing that existing System Operator tools are all we need to reliably serve Southern System customers. For example, when SoCalGas proposed baseload contracts to supplement spot purchases, SCGC opposed, arguing that “SoCalGas has failed to show that procuring supply using the baseload contracts would be cheaper than buying gas as needed on the spot market.”\(^{32}\) Likewise, when SoCalGas proposed an initial MILC with Gas Acquisition, SCGC protested on numerous grounds that were ultimately overruled by the Commission;\(^{33}\) same for MILC #2;\(^{34}\) and same when we proposed that the System Operator be authorized to deliver supplies at Otay Mesa.\(^{35}\)

At some level, SoCalGas and SDG&E understand the opposition by intervenors to the North-South Project. No one wants to pay more for something they’ve been receiving at a relatively low cost for years. And for many years our Gas Control group has been doing a

\(^{29}\) ORA Opening Brief at 22; SCGC Opening Brief at 2; TURN Opening Brief at 13.

\(^{30}\) ORA Opening Brief at 7; SCGC Opening Brief at 34.

\(^{31}\) TURN Opening Brief at 1.

\(^{32}\) Resolution G-3477 at 7.

\(^{33}\) See Resolution G-3485 at 7-8.

\(^{34}\) See Resolution G-3476 at 5-6.

\(^{35}\) See Resolution G-3474 at 5-6 and 10-11.
marvelous job providing Southern System customers with safe and reliable service despite the operational challenges we have been facing. To these particular intervenors it may seem logical that this safe and reliable service will continue without a substantial investment in long-term reliability—especially if you ignore all of the recent supply-related curtailments and near-misses.\(^{36}\) But, for all the reasons SoCalGas and SDG&E have emphasized in their testimony and Opening Brief, this is simply not the case.

Like a municipality facing the prospect of a costly update to its sewage treatment system, the North-South Project isn’t a “sexy” proposition. If the toilets and drains in the town seem to have been working fine in the past, some residents are likely to oppose an assessment or increased monthly rates to pay for additional treatment facilities. But the residents don’t see all of the engineering work that has gone on behind the scenes to keep the existing system working; all of the patches, repairs, and late-night service calls. Same for all of the behind-the-scenes efforts we have expended to provide uninterrupted service to all of our Southern System customers. As Ms. Marelli has explained, the amount of stress placed on the Southern System on a regular basis is not apparent outside the company, and neither is how close we come to curtailments.\(^{37}\) As prudent operators, we want and need a reasonable margin for error when cold weather blankets the desert southwest or nuclear power plants in Arizona trip offline, and we currently run out of headroom far too quickly on the Southern System.\(^{38}\)

When a municipality’s sanitation engineers say it’s time for new facilities, it would be wise to listen—no one knows the treatment system like they do, or the challenges they’ve

\(^{36}\) See SoCalGas/SDG&E Opening Brief at 21-23.
\(^{37}\) Ex. SCG-2 (Marelli) at 10.
\(^{38}\) Ex. SCG-2 (Marelli) at 10-11.
been facing. And the consequences of ignoring their warnings could be substantial; not life-threatening, perhaps—but access to working toilets and drain lines is an important convenience you don’t really appreciate until it’s gone. The same is true for our natural gas system and the North-South Project. The consequences of more frequent Southern System curtailments could be substantial; and the potential consequences of a lengthy outage/force majeure condition on the El Paso South Mainline would be even more severe. As with the sanitation system example, the Commission should trust the judgment of SoCalGas personnel working with our system on a day-to-day basis regarding whether we need a physical upgrade in order to continue to provide reliable service to Southern System customers.

SoCalGas and SDG&E don’t take lightly the prospect of requiring our customers to pay over $600 million for pipeline and compression facilities to enhance reliability, especially since we have been providing reliable service in the past without the benefit of these new physical facilities. But our experts have reviewed the situation from every angle, and we strongly believe that now is the time to finally tie our Northern and Southern transmission systems together into a unified whole; now is the time to finally provide Southern System customers with access to a variety of receipt points and supplies from storage. Continuing to have a vital, important, and large portion of our service territory hanging off one single receipt point is not a reasonable long-term strategy.

ORA, TURN, and SCGC point to the last two extraordinarily warm winters and say that the Southern System reliability problem is largely solved. SoCalGas and SDG&E see a
temporary masking of deep-seated problems that will likely return with a vengeance with the
return of normal (or even below-normal) temperatures.\textsuperscript{39}

SCGC and ORA point to statewide policies that supposedly will substantially reduce
natural gas demand on the Southern System. But what if electric cars substantially replace
gasoline vehicles? Remember when seeing a Tesla was unusual? If natural gas power plants
are an endangered species, why do new ones keep being announced for the Southern System?
Obviously the developers of these projects believe there will be a market for their gas-fired
output for many years to come. And what if commercial natural gas trucks and other
commercial vehicles largely supplant diesel vehicles in Southern California? This change is
already taking place.

Natural gas is the cleanest fossil fuel, and now more cheap and plentiful than anyone
could have imagined just a few years ago. Will businesses ignore this cheap, reliable source
of energy? Will emission control technologies stay stagnant over the coming decades? Will
gas transmission and distribution lines that run from the California border into millions of
homes and businesses throughout Southern California become worthless because more
renewables are becoming part of our generation resource mix? Natural gas is now the EG
resource of choice when the sun doesn’t shine and the wind doesn’t blow, and it appears that
this will be the case for many years to come. No one can predict the future, but SoCalGas and
SDG&E strongly believe there will be a long and productive future for natural gas, and a
corresponding long and productive future for the North-South Project.

ORA calls for a new rulemaking to consider alternatives to the North-South Project;\textsuperscript{40}

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\textsuperscript{39} December 2014 to February 2015 was officially California’s warmest winter on record. Ex. SCG-10 (Marelli) at 13.
before making any decision.\textsuperscript{41} We do not need a new rulemaking to consider the same
matters that the Commission has been considering in this proceeding for almost two years.
And calls for cost-benefit analyses appear to just be a somewhat-disguised effort to kill the
project—akin to sending a legislative bill to some obscure subcommittee for “further analysis
and review.” The operational benefits of finally having an on-system physical link between
the Northern and Southern portions of our transmission system can never really be directly
compared to interstate pipeline capacity contracts; likewise, we could spend months debating
the potential negative health effects of TURN’s proposal that large EG plants in Southern
California burn jet fuel or propane during natural gas curtailments; and these are just two of
the many alternatives presented by intervenors in this proceeding.

The time for the Commission to make a decision about the North-South Project is
now, not years from now. We need the North-South Project to help us respond to increased
demand for Southern System minimum flows while more and more supplies head to Mexico
via the El Paso’s South Mainline; we need the ability to insulate Southern System customers
when high basin prices or force majeure conditions east of California reduce flows on El
Paso’s South Mainline; we need the operational flexibility provided by the North-South
Project to help us deal with unanticipated on-system operational challenges such as a
compressor outage at Blythe; and we need the operational flexibility provided by the North-
South Project to help us provide uninterrupted service to our customers when we are
conducting pipeline safety, integrity, and maintenance work. Bottom line, SoCalGas and
SDG&E want the service we provide to our Southern System customers 10 or 20 years from
now to be just as reliable as it has been for the past 20 years; and we hope that the

\textsuperscript{40} ORA Opening Brief at 24.
\textsuperscript{41} TURN Opening Brief at 3; SCGC Opening Brief at 8.
Commission wants this as well. And for us to continue to provide this same high level of reliability to our Southern System customers, we need the North-South Project.

For the sake of brevity, SoCalGas and SDG&E will not repeat each of the points supporting the need for the North-South Project in this reply. We spelled these out in detail in our Opening Brief, and the benefits of the project have not changed in the past two weeks. But lest there is any confusion, SoCalGas and SDG&E strongly believe that we need a physical solution to the Southern System reliability problem. Only on-system physical assets will provide us with the necessary operational control and flexibility, and only on-system physical assets will help SoCalGas and SDG&E deal with unanticipated operational situations. And the North-South Project is by far the best physical solution to the Southern System reliability problem.

4. Providing Southern System Customers with Access to On-System Storage Supplies is Crucial

Several intervenors argue that providing Southern System customers with access to physical on-system storage supplies is of little or no benefit. TransCanada asserts that interstate flowing supplies are equivalent to physical storage supplies;

SoCalGas has not explained why the Southern System would need physical access to storage. If the North-South Project or any of the interstate pipeline alternatives is constructed, each project would be capable of delivering sufficient gas to the Southern System to be equal to or greater than the demand on the Southern System; thus, direct access to storage would confer no evident benefit and would not be necessary to meet SoCalGas' objective of increasing flows on the Southern System.

Transwestern asserts that Southern System customers have “no appetite” for physical storage supplies:

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42 See SoCalGas/SDG&E Opening Brief at 28-42.
43 TransCanada Opening Brief at 10.
Southern System customers already have access to 200 to 300 MMcf/d of storage supplies via displacement, and SoCalGas has offered no evidence that the “appetite” of Southern System customers for storage supplies exceeds that amount.\textsuperscript{44}

And TURN argues that on-system physical storage supplies would only be of benefit during a force majeure situation because to the time it would take gas to flow from Honor Rancho to the Southern System via the North-South pipeline:

\textit{[T]he main way in which the North-South pipeline would help in the event of a force majeure loss of upstream capacity on the EPNG pipeline would be by physically flowing supplies from storage in the Northern System. As explained by SoCalGas witness Bisi, such a response would require at least eight hours of lead time, since it would take gas approximately eight hours to physically flow the distance from the storage fields to the Southern System.}\textsuperscript{45}

Each of these assertions demonstrates a lack of understanding of the important role physical storage supplies play in our day-to-day system operations.\textsuperscript{46}

Physical storage plays a crucial role in the day-to-day operations of the SoCalGas and SDG&E transmission system, and flowing supplies from an interstate pipeline are not operationally equivalent to on-system physical storage supplies. Storage withdrawal (and injection) is an integral tool that Gas Control uses to keep the system balanced and to maintain sufficient linepack. As Mr. Bisi explained during hearings:

\textit{[W]hen it's on our system, we have control over when that gas supply flows down that pipeline, so that it [meets] the customer demands. We can put storage on withdrawal at any time of day.}

\textsuperscript{44} Transwestern Opening Brief at 21.
\textsuperscript{45} TURN Opening Brief at 38.
\textsuperscript{46} As discussed in more detail below in Section IV(C)(2), Transwestern’s repeated references to storage via “displacement” appear to be designed to make Transwestern’s project appear more promising than it really is. Storage via “displacement” does not involve receipt of gas molecules from Honor Rancho or any of our other storage fields, and Southern System customers already receive as much storage via “displacement” as they are willing to contract for. Southern System customers need access to \textit{physical} storage supplies, not paper storage transactions.
We can open and close valve stations, whereas outside of the SoCalGas system, we begin to have to deal with the cycles and schedules to get that gas to go during the times that we need it. And it could be that we don't recognize a problem or don't see that problem until that cycle has passed.47

Moreover, TURN’s concern about the time it takes for gas to move from Honor Rancho to the Southern System is misguided. Gas Control does not wait, flat-footed, until the late afternoon-early evening peak and then say “Wow, demand has really shot up in the last couple of hours; what happened?” Rather, Gas Control continually forecasts upcoming system demand, works with CAISO and other grid operators, and uses all of the assets at its disposal—including storage withdrawal. Yes, it will take time for gas molecules from Honor Rancho to reach the Southern System. But Gas Control will simply incorporate that time lag into its decisions regarding when to put Honor Rancho on withdrawal.

In D.15-06-004, the Commission’s recent decision approving SoCalGas and SDG&E’s proposed new low OFO requirements, the Commission explained the challenges created for the SoCalGas System Operator by the combination of weather changes and new quick-start power plants, and the role that storage plays in meeting those challenges:

[w]eather and electric generation are difficult to forecast, as a single Heating Degree Day difference in the weather forecast can result in a change of 110 MMcf/d of core customer demand, and an unexpectedly dispatched power plant can consume 200 MMcf/d or more. While the Gas Control Department would attempt to meet these demand changes by using underground storage capacity, it needs the system-wide pack and draft capacity to manage hourly changes in both planned and unplanned customer demand.

Furthermore, new power plants on the Applicants’ system are installed with “quick-start” capabilities, in which the plant demand can increase from completely off to 100 percent utilization in as little as seven minutes. Since gas does not move quickly through a pipeline, the rapid use of gas supply is met locally with linepack,

47 Tr. at 76-61 (SoCalGas/SDG&E/Bisi).
which Applicants attempt to replenish after the fact with pipeline or storage field supplies.\footnote{D.15-06-004, mimeo., at 19-21 (citations omitted).} 

In short, physical storage is crucial to our day-to-day operations. And while the rest of our system has access to multiple receipt points as well as storage gas, the Southern System does not have such flexibility. In order to provide Southern System customers with the same level of flexibility and reliability as other customers on our system, they need the access to physical on-system storage supplies provided by the North-South Project.

5. **SCGC’s Proposed On-System Physical Alternative Would be More Expensive and Provide Less Operational Flexibility than the North-South Project**

In its Opening Brief, SCGC describes an on-system physical alternative that would consist of SoCalGas looping Line 1185, Line 4000/4002, and Line 2001.\footnote{See SCGC Opening Brief at 43-47.} According to SCGC, this alternative “would involve more modest looping of an existing pipeline path from the Honor Rancho storage field on the Applicants’ Northern System to Moreno but would have all the benefits that the Applicants allege for the North-South Project.”\footnote{SCGC Opening Brief at 3.} SoCalGas and SDG&E agree that such a project could potentially provide many of the same benefits as the North-South Project. But it would definitely not be “more modest.” Instead, it would require more pipeline and compression than the North-South Project, and the cost per mile for SCGC’s alternative would likely be higher. Moreover, SCGC’s proposal would provide for a less direct path to the Southern System, which would diminish its operational value.

a. **SCGC’s alternative would require more pipeline than the North-South Project**

SCGC’s alternative depends on completion of approximately 16 miles of the North-

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\footnote{\(18\)}
South pipeline: “The North-South Pipeline that is proposed along with the rebuilt Adelanto Compressor Station in this proceeding would loop Line 1185 that runs south from Adelanto to Cajon.” In that respect, our proposals are the same.

South of Cajon, however, our proposals take very different paths. From Cajon the North-South Project would generally run to the southeast to the Southern System—towards Moreno, the largest demand center on the Southern System; the SCGC alternative would run to the southwest—away from Moreno. This would in turn result in a substantially longer project—approximately 86 miles of new pipeline for SCGC’s proposal (including approximately 30 miles necessary to complete the looping of Line 5000 between Chino and Moreno), versus 65 miles of new pipeline for the North-South Project—and the resulting cost associated with the additional pipeline.

b. SCGC mistakenly counts on another project that may or may not move forward

The fundamental premise behind SCGC’s proposal is that SoCalGas is supposedly already completing a 30-mile loop of Line 2001 with Line 5000 between Chino and Moreno, and that this particular line, together with a new loop of Line 4000/4002, would be a shorter substitute for the North-South pipeline south of Cajon. In effect, SGCC is treating the loop of Line 2001 with Line 5000 as a fait accompli. This significantly overstates the status of this potential future project.

In its current GRC proceeding, SoCalGas forecast costs for 2014, 2015, and 2016

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51 SCGC Opening Brief at 44.
52 Ex. SCG-06 (Bisi) at 12.
53 As explained by Mr. Buczkowski, the current estimated cost of the North-South pipeline is approximately $7.7 million/mile. (See Ex. SCG-03 (Buczkowski) at 20.)
54 See SCGC Opening Brief at 44.
using a five-year recorded average.\textsuperscript{55} Within that forecast, SoCalGas identified a 7.5 mile right-of-way acquisition associated with the looping of Line 2001 as being reasonably anticipated to occur. SoCalGas did not, however, request authorization or funding to proceed with the looping of Line 2001.\textsuperscript{56}

This GRC funding request is intended to enable SoCalGas to engage in initial right-of-way acquisition efforts that will help us assess the cost and feasibility of looping Line 2001 to reinforce supply and reduce pressure loss to the southerly coastal Transmission system.\textsuperscript{57} But requesting funding for preliminary work to determine feasibility is very different from a green light to move forward. At this stage, a loop of Line 2001 is a future possibility, but not something that SoCalGas or our customers can count on. As Mr. Bisi accurately explained during hearings:

\begin{quote}
In the GRC, this is something that, you know, I don't know that I would characterize that the company is actively going out there to put in that pipeline to complete Line 5000. I believe we only asked for some initial funding so we could investigate the feasibility of that.\textsuperscript{58}
\end{quote}

Note that it should not be inferred that looping Line 2001 with Line 5000 between Chino and Moreno would not have value if the North-South Project moves forward. As we explained in responses to SCGC data requests in the GRC, the possible completion of Line 5000 and the North-South Project are independent projects that complement each other, and would both improve the reliability and flexibility of the SoCalGas and SDG&E transmission

\textsuperscript{55} A.14-11-004, Ex. 25 (Direct Testimony of Raymond Stanford) at 52.
\textsuperscript{56} A.14-11-004, Ex. 25 (Direct Testimony of Raymond Stanford) at 53. SoCalGas’ forecast only encompassed a small portion of the necessary rights-of-way—7.5 miles of a 30 mile loop. (\textit{id.} at 53-54).
\textsuperscript{57} A.14-11-004, Direct Testimony of Raymond Stanford (Gas Engineering), at page 53.
\textsuperscript{58} Tr. at 743 (SoCalGas/SDG&E/Bisi).
SCGC’s alternative would likely have a higher cost per mile of pipeline than the North-South Project

The loop of Line 4000/4002 described by SCGC would traverse much more developed and populated areas than our route for the North-South Project. SoCalGas and SDG&E have not prepared a cost-per-mile estimate for SCGC’s proposal since we saw it for the first time in SCGC’s Opening Brief. But given the population density involved with looping Lines 4000 and 4002, we believe it likely that SCGC’s alternative would have a higher cost per mile of pipeline than the North-South Project.

d. SCGC’s alternative would require more compression than the North-South Project

SCGC speculates that its looping proposal “may require less compression, hence, less cost, at the Adelanto Compressor Station.” SCGC is incorrect.

SCGC’s alternative would still require the rebuild of the Adelanto Compressor Station that we have included in the North-South Project. This is because SCGC’s alternative would make use of existing pipeline (Lines 1185, 4000, and 4002) operating in common with loops of Line 1185 and Line 4000/4002. To adequately compress supplies destined for the Southern System as well as supplies needed for the rest of the system delivered on these lines, we would need the same new compression at Adelanto.

In addition, because SCGC’s alternative would utilize existing pipeline between Chino and Moreno, it will be subject to the lower Maximum Allowable Operating Pressures (MAOPs) of those pipelines, and therefore deliver lower pressures to Moreno (375-550 psig).

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59 A.14-11-004, Ex. 33 (Testimony of Cathy Yap) at Attachment B (SoCalGas/SDG&E Response to SCGC’s 3rd data request).
60 SCGC Opening Brief at 47.
than the North-South Project (640-780 psig). The delivered pressure to Moreno that the SCGC alternative would provide is insufficient to support SoCalGas and SDG&E demand south and east of Moreno without additional compression. SoCalGas and SDG&E would need to re-engineer the Moreno pressure limiting station and the Moreno compressor station, to provide for an additional 34,000 horsepower (for a total of 50,000 horsepower at the station, including the existing 16,000 horsepower needed to meet SDG&E demand).

Because SoCalGas and SDG&E are seeing the SCGC alternative for the first time in SCGC’s Opening Brief, we have not had an opportunity to prepare a detailed estimate of the potential costs for this redesign (e.g., for new station piping, valving, and controls)—but based on the forecasted direct cost of $136.8 million for 30,000 horsepower at Adelanto, an initial rough estimate of the cost of the additional compression required for SCGC’s alternative above and beyond the Adelanto rebuild is approximately $155 million.

e. **SCGC’s alternative would provide for a less direct path to the Southern System, which would diminish its operational value**

Although the Line 4000/4002 and Line 2001 looping proposed by SCGC will enable Honor Rancho supplies to be physically transported to the Southern System, this longer route would not provide as direct an interconnection with the Moreno load center as would the North-South Project. As a result, supplies delivered via SCGC’s alternative would not be able to respond as quickly to real-time operational needs.

f. **SCGC’s alternative would not make better use of existing system capacity**

SCGC also speculates that its alternative looping proposal would better use capacity that already exists on the SoCalGas system, specifically the capacity to transport supplies
between Chino and Moreno. SCGC’s speculation is incorrect. This particular “advantage” is not unique to SCGC’s alternative. The North-South Project will also make use of all of our existing system capabilities, including the redelivery of supply from Chino/Prado to Moreno. As explained by Mr. Bisi:

SoCalGas and SDG&E fully utilized the capacity of Chino Station, Prado Station, and Line 6916 in the analyses we used to develop the North-South Project and its alternatives. Had we not, the improvements necessary to operate the system without any supply delivered at Blythe and Otay Mesa would have been even more extensive.

For all of these reasons, SCGC’s proposed loop of Line 1185, Line 4000/4002, and Line 2001 is not a viable alternative to the North-South Project.

6. SoCalGas and SDG&E Used Reasonable and Appropriate Design Criteria for the North-South Project

In their Opening Briefs, ORA and SCGC take SoCalGas and SDG&E to task for overdesigning the North-South Project. As an example, ORA asserts that:

SCG is effectively collaterally attacking currently effective Commission decisions through their choice of unreasonable design parameters in requesting approval of this pipeline, and admit that had they followed Commission guidelines, their planned demand on a system winter peak day would have been 344 MM cf/d less.

SCG knowingly overstated the level of demand by 344 MMcf/d above the level required by the Commission to be used to assess the size the system for a 1-in-10-year cold day.

And, according to SCGC:

The Applicants should reconsider their design standard for capacity to transport gas from the SoCalGas Northern System to

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61 SCGC Opening Brief at 47.
62 Ex. SCG-17 (Bisi) at 11.
63 ORA Opening Brief at 4 and 17.
the Southern System. The Applicants have designed the North-South Project to meet a forecast that exceeds the Commission’s mandated design standards.64

These concerns are unfounded. SoCalGas and SDG&E used reasonable and appropriate design criteria for the North-South Project.

From the beginning, SoCalGas and SDG&E have been forthright about the fact that the demand condition we used to develop the North-South Project and evaluate its alternatives is somewhat more robust than the CPUC-mandated design standard for firm noncore service.65 The difference between a standard 1-in-10 year cold day demand forecast of 5.0 Bcfd and the demand condition used in our assessment is 344 MMcfd.66 That difference equates to only a 7% increase in demand over the 1-in-10 year cold day standard, and represents customer demand that is already connected to the system.67

Had SoCalGas and SDG&E used a 1-in-10 year cold day demand forecast as the design basis for this project, we may have been able to reduce the pipeline diameter or the compression requirement somewhat.68 However, such a design would allow for no error in the demand forecast, no operational upsets at the compressor station, and no future growth in customer demand on the Southern System.69 Indeed, as previously stated, two EG projects totaling nearly 100 MMcfd of demand have already requested service from the Southern System just since hearings concluded.

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64 SCGC Opening Brief at 35. TransCanada also registers concern that the North-South Project “is not designed to conform with CPUC design mandates . . . .” (TransCanada Opening Brief at 8.)
65 Ex. SCG-6 (Bisi) at 8-9.
66 Ex. SCG-17 (Bisi) at 10.
67 Ex. SCG-17 (Bisi) at 10-11.
68 Ex. SCG-17 (Bisi) at 11. As Mr. Bisi notes, however, a limited reduction in forecasted throughput may not actually alter the proposed design of the compressor station. And 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. (Id.)
69 Ex. SCG-17 (Bisi) at 11.
It would be poor project planning if SoCalGas were to complete the North-South Project and still be forced to purchase minimum flowing supplies or curtail Southern System customers because our demand forecast didn’t account for a somewhat more robust level of Southern System demand than a 1-in-10 year cold day.\textsuperscript{70} Moreover, the construction challenges we face with a project of this magnitude need to be taken into account. As explained by Mr. Bisi during hearings:

I mean, part of this is what -- what diameter pipeline should you install when you're putting in a 60-mile pipeline and you have one chance to do that for a generation. There's not a lot of routes available through the Cajon Pass for a pipeline. There's not a lot of routes through San Bernardino for a pipeline.

Do I waste that by putting in a 16-inch diameter pipeline? I don't think so. I think you at least ought to put a 30-inch. And the cost delta between a 30 and 36-inch, my understanding, is not significant.\textsuperscript{71}

Mr. Bisi explained that reducing compression at Adelanto is not a reasonable approach to project design:

Q Could you put in the same size pipeline but have a lower amount of compression and add in compression later?

A No. At some point you hit the MAOP of the pipeline, and you have problems.\textsuperscript{72}

Mr. Bisi also explained that if we undersize the pipeline used for this project, it would not be feasible to come back later and replace with larger-diameter pipe:

Q Well, if you designed the same pipeline you have right now with less compression than you have now, it would be the same amount of pipe but with a lower amount of capacity?

\textsuperscript{70} Ex. SCG-17 (Bisi) at 11.
\textsuperscript{71} Tr. at 666 (SoCalGas/SDG&E/Bisi).
\textsuperscript{72} Tr. at 666-67 (SoCalGas/SDG&E/Bisi).
A So if I put in -- for example, I put in the 36-inch diameter pipeline but half the compression at Adelanto for a 400 million a day throughput? Is that your question?

Q That could be one. Let's discuss -- sure.

A I would say that project is undersized to meet the design standard that we applied.

Q But -- and -- and theoretically you could build a smaller pipeline that had a right-of-way that would allow another parallel pipeline in the future?

A Except in this situation I don't believe that's possible.

Q Okay. And why would it not be possible?

A Because I think Mr. Buczkowski has testified this is going through very specific areas of our system where there's one and one chance only to put a pipeline in.73

For each of these reasons, the design criteria used by SoCalGas and SDG&E to develop the North-South Project and evaluate project alternatives is both reasonable and appropriate. For a long-term investment like the North-South Project, planning for a relatively small amount of additional load—load that is already connected to the system—is valid and in the best interest of our customers.

Finally, SoCalGas and SDG&E wish to correct an erroneous design standard reference so it does not take on a life of its own. In its Opening Brief, ORA cites to an average-day design standard:

The Commission ordered in D.06-09-039 that “the Southern California Gas Company shall plan and maintain intrastate natural gas backbone transmission systems sufficient to serve all system demand on an average day in a one-in-ten cold and dry-hydroelectric year.”74

The Commission should keep in mind that this is not the correct design standard for

73 Tr. at 667-68 (SoCalGas/SDG&E/Bisi).
74 ORA Opening Brief at 14 (citation omitted).
end use customer service. If SoCalGas and SDG&E were to only design end-use customer service to average day demand conditions, by definition, there would be insufficient capacity 50% of the time. As explained by SoCalGas, the design standard cited by ORA was intended for developing overall system receipt capacity, not end-use customer service.75

7. **The Moreno-Whitewater Pipeline is not Moving Forward**

In its Opening Brief, Transwestern continues to make arguments about the Moreno-Whitewater pipeline even though SoCalGas and SDG&E removed this pipeline from our Application in November of 2014,76 and even though Assigned Commissioner Florio has specifically excluded Moreno-Whitewater from the scope of this proceeding.77 According to Transwestern, because SoCalGas has not agreed to forego the option of reviving this pipeline in the future, our customers face the possibility of “another SoCalGas proposal for a major Southern System reliability project, with a $250 million price tag, in the not too distant future.”78 This is simply not the case.

As explained in SoCalGas and SDG&E’s February 2, 2015 Answers to Questions in Administrative Law Judge’s Ruling (Answers), the Moreno-Whitewater pipeline has been permanently removed from the North-South Project.79 SoCalGas and SDG&E do not have any plans to pursue the Moreno to Whitewater pipeline now or in the foreseeable future.80 Moreover, given what we currently know about demand on the Southern System, we do not envision a situation in which the benefits that would be provided by this physical system

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75 Tr. at 818-819 (SoCalGas/SDG&E/Bisi).
76 SoCalGas/SDG&E Opening Brief at 3.
77 March 9, 2015 Assigned Commissioner’s Amended Scoping Memo and Ruling at 2 (“After reviewing the Answers and considering the Responses, we amend the scope of the proceeding to exclude the Whitewater component as described in the up-dated testimony.”)
78 Transwestern Opening Brief at 20.
79 Answers at 18.
80 Answers at 19.
improvement could not be provided some other way at less cost. We need a physical solution to link our Northern System with our Southern System, thereby providing Southern System customers with access to storage supplies and Northern receipt points. But we do not need a physical solution to deal with a very limited flowing supply requirement at Blythe that will statistically occur less than once every 10 years.

It would not make sense for SoCalGas to irrevocably commit to never, ever doing a particular future project—what if customer location and demand patterns change dramatically in the next 30 years, and something we have committed never to do becomes a necessary and least-cost option? But a Moreno-Whitewater pipeline is not in the offing, and Transwestern’s speculation to the contrary should be disregarded.

8. Intervenor Conspiracy Theories are Beyond Scope, Unfounded, and Illogical

ORA, TURN, and SCGC all argue that the North-South Project is part of a conspiracy between SoCalGas, SDG&E, and our unregulated affiliates. The following example from ORA’s Opening Brief conveys the accusatory tone of these arguments:

The admitted multiple conflict [sic] of interest between affiliates in competing for gas demand leads to a convergence of interest between the subsidiaries and the parent company in the N-S Pipeline. Provision of additional gas supplies over an artificially exaggerated SCG system designed to offer excess capacity, to an LNG export facility serving a world market that pays higher gas commodity costs than paid domestically, with transportation available at costs subsidized by SCG’s monopoly ratepayers, would prove harmful to California consumers and poses numerous potential anti-competitive issues.

Likewise, TURN has this to say about the motivations behind the North-South Project:

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81 Answers at 19.
82 Answers at 19.
83 See ORA Opening Brief at 11-13; TURN Opening Brief at 3 and 24; SCGC Opening Brief at 2.
84 ORA Opening Brief at 11.
One may wonder, given the evidence in this proceeding, why Sempra has proposed the construction of the North-South pipeline, without conducting any serious cost-effectiveness analysis of alternatives. The answer, not surprisingly, is that Sempra is using the classic trick of having utility ratepayers subsidize assets that will be used to benefit Sempra’s unregulated affiliate.

. . .

The potential conversion of the Costa Azul terminal into an export facility will require a reliable source of natural gas supply for the facility. SoCalGas had already proposed building a new 36-inch Line 3602 as a replacement for existing Line 1600 from Rainbow to Santee in the SDG&E service territory. Both the North-South pipeline and Line 3602 are sized much larger than would be warranted by actual demand forecasts. The addition of the North-South pipeline and Line 3602 provide a continuous 36-inch corridor from the Northern System down to Mexico. It is difficult not to conclude that the ultimate goal of these two lines is to provide enough excess capacity so as to ensure the ability to flow a reliable amount of gas to supply Sempra’s potential LNG export terminal.

These conspiracy arguments are outside of scope, unfounded, and illogical.

a. **Line 3602 is outside the scope of this proceeding**

The conspiracy arguments of ORA, TURN, and SCGC all rely upon the construction of Line 3602 in SDG&E’s service territory—i.e., that the North-South Project and Line 3602 would provide a continuous 36-inch corridor from the Northern System down to Mexico. But after back-and-forth between the parties on this topic, Commissioner Florio specifically excluded Line 3602 from the scope of this proceeding. Per his Amended Scoping Memo:

> After considering the Answer and Responses we agree with SDG&E and SoCalGas that any other projects generally from the Rainbow region into the San Diego Gateway are distinct from this North-South project and any other project may properly be the subject of a separate application. We therefore do not expand the scope of this proceeding to include other potential projects.85

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85 March 9, 2015 Assigned Commissioner’s Amended Scoping Memo and Ruling at 3.
ORA, TURN, and SCGC should not be allowed to reintroduce an issue that
Commissioner Florio has specifically excluded from this proceeding.

b. **Intervenors’ conspiracy claims are unfounded**

ORA, TURN, SCGC argue for the existence of a conspiracy between SoCalGas and
SDG&E on the one hand, and our unregulated affiliates on the other. But they provide
absolutely no evidence to back up their claims. For ORA, TURN, and SCGC, the simple fact
that we operate within the same overall corporate structure is enough to establish improper
behavior and “anti-competitive” conduct. The Commission should hold itself to a higher
standard.

SoCalGas and SDG&E operate within the strictures of the Commission’s affiliate
transaction rules and the so-called remedial measures adopted when the Commission
approved the merger of Pacific Enterprises and Enova in 1998.\(^{86}\) We cannot favor our
unregulated affiliates or provide them with confidential information without sharing the
information with all other market participants at the same time. These rules and requirements
prevent us from doing anything with our affiliates unless it is on a carefully-scrutinized arms-
length basis. Confidential joint planning for something like a pipeline path to Mexico would
be impossible. As a practical matter, SoCalGas and SDG&E know nothing more about what
Sempra may be planning for Mexico and the ECA terminal than ORA, TURN, and SCGC—
just what we read in the newspapers and trade press.

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\(^{86}\) See D.06-12-029 for the most recent version of the Commission’s affiliate transaction rules. The
Enova/Pacific Enterprises merger decision is D.98-03-073, with the 25 Remedial Measures set forth in
Attachment B.
c. **Intervenors’ pipeline-to-Mexico arguments ignore operational limitations**

The concerns expressed by ORA, TURN, and SCGC about a “continuous 36-inch corridor from the Northern System down to Mexico” are unwarranted. As explained by Mr. Bisi, there is simply not enough capacity created by the North-South Project to meet the needs of the Southern System and also provide service to customers in Mexico.\(^\text{87}\) SoCalGas and SDG&E have designed our project to meet the needs of Southern System customers--not to meet the needs of Southern System customers and a large LNG export plant in Mexico. From an operational standpoint, the claims by intervenors do not make sense.

d. **Intervenors’ pipeline-to-Mexico arguments ignore commercial reality**

ORA, TURN, and SCGC’s concerns about a “North-South/Line 3602” path to Mexico beg a fundamental question—why would Sempra choose to risk the commercial viability of its proposed ECA export facility on two uncertain utility projects in California. As noted above, SoCalGas and SDG&E are not privy to the thinking of our unregulated affiliates. But it stands to reason that a path through Mexico and another state such as Arizona or Texas could be developed more quickly and with more certainty than a path from Adelanto to Otay Mesa.

Why would Sempra view a path traversing heavily populated areas in Southern California favorably when other opportunities are clearly available in the competitive marketplace? For that matter, if a path through California is so attractive, why wouldn’t Sempra simply strike a deal with TransCanada to take service on the pipeline proposed by TransCanada in this proceeding plus TransCanada’s existing North Baja line running from

\(^{87}\) Ex. SCG-18 (Bisi) at 8.
SoCalGas and SDG&E believe that intervenors are severely overrating the potential attractiveness of a “North-South/Line 3602” path to a commercial entity like Sempra.

e. **ORA’s proposal to punish Sempra if it ever ships gas on the SoCalGas/SDG&E system is misguided**

Even though Line 3602 is explicitly outside the scope of this proceeding, ORA nonetheless proposes a ratemaking regime should Sempra ever wish to ship gas to Mexico via the North-South Project and Line 3602:

> The Commission should require all gas that is transported over N-S and to the Mexican border to supply Costa Azul be at the maximum transportation rate, reflecting the affiliate relationship and potential for collusion in any negotiated discounts. The Commission should also consider a significant surcharge to be paid above that maximum rate for such transportation to be directly credited to all other ratepayers for providing the opportunity for the LNG plant to be served directly from SDG&E’s portion of SCG’s and SDG&E’s combined system, and to reflect the competitive advantage afforded Sempra LNG by being able to pay a large portion of its transportation costs to a corporate affiliate.  

This recommendation is seriously misguided. On the one hand, ORA expresses concern about the North-South Project being underutilized. On the other, ORA hopes the Commission will consider a “significant surcharge” for Sempra above maximum SoCalGas and SDG&E rates—presumably to discourage Sempra from taking service from SoCalGas and SDG&E. The logical inconsistency between these two propositions is substantial.

SoCalGas and SDG&E have no illusions that Sempra will view our transmission systems as a viable path for the large-scale shipment of domestic supplies to ECA for

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88 TransCanada’s North Baja Line already interconnects with Sempra’s Mexico pipeline facilities. *See* SCG-25 (non-confidential SoCalGas/SDG&E system map).

89 ORA Opening Brief at 12-13.

90 ORA Opening Brief at 11-12.
shipment overseas. But if Sempra does ever wish to ship gas on the SoCalGas and SDG&E system, such shipments should be encouraged, not discouraged. As Mr. Bisi noted in his rebuttal testimony, “[i]f Line 3602 is constructed, and SDG&E reinstalls the necessary equipment to serve Mexican customers at Otay Mesa, it would benefit SoCalGas and SDG&E ratepayers to fully utilize assets and increase throughput on the system.”

For each of these reasons, the conspiracy arguments of ORA, TURN, and SCGC should be disregarded by the Commission.

9. The North-South Project is not designed to change economic incentives

In its Opening Brief, ORA takes SoCalGas to task for assuming that shippers will choose the North-South Project over deliveries to Blythe:

SCG assumes as a design condition for the N-S Project that no gas will travel over Ehrenburg to SCG’s system, apparently because SCG believes that all shippers will choose the N-S Project over Ehrenberg once they have that option.

Likewise, ORA expresses concern about the economic incentives that the North-South Project either would or wouldn’t create:

SCG does not explain, however, why such shippers and particularly gas-fired electric generators would be more inclined or incentivized to bring such gas onto SCG’s northern system at multiple delivery points for delivery over N-S than to bring it to SCG through Ehrenburg, or how N-S would change the economic incentives of noncore shippers generally, or gas-fired generators in particular, to bring or not bring gas onto the system . . .

These concerns are misguided.

First, shippers on our system choose receipt points into the SoCalGas and SDG&E system, not individual operational paths within our system. The choice of how to route gas

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91 Ex. SCG-18 (Bisi) at 8.
92 ORA Opening Brief at 2-3.
93 ORA Opening Brief at 6.
within our system is an operation decision for our Gas Control group, not our customers.\textsuperscript{94}

Second, we are not assuming that the North-South Project will somehow cause shippers to deliver to receipt points other than Blythe. That is something that is already taking place due to market forces. As explained by Mr. Bisi during hearings:

\begin{quote}
[W]ith the variety of choices the SoCalGas system offers to customers to bring their gas supply, customers have chosen not to use El Paso's receipt point at Ehrenberg. And I feel that they will continue with that choice.\textsuperscript{95}
\end{quote}

Contrary to ORA’s claim, SoCalGas and SDG&E do not expect the North-South Project to “incentivize” shippers to use Northern receipt point in lieu of Blythe, or vice versa. Likewise, the North-South Project is not designed to change economic incentives for customers “to bring or not bring gas onto the system.”

The beauty of the North-South Project is that it will provide reliable service to Southern System customers regardless of what economic incentives are at work in the marketplace at any particular moment. Supplies arriving at Needles rather than Blythe?—the North-South Project provides a solution. Supplies arriving via Kern/Mojave or Wheeler Ridge?—same answer. Supplies being drawn away from California because of $40 gas at Opal?—with the North-South Project, Southern System customers still receive their supplies, even if customers choose to satisfy low OFO requirements via deliveries into Northern receipt points or storage withdrawals.

SoCalGas and SDG&E are not trying to change economic incentives with the North-South Project. Rather, we are proposing a Southern System reliability solution that should work well in all markets and foreseeable demand conditions.

\textsuperscript{94} Because SoCalGas and SDG&E offer postage-stamp rates, there is no rate difference between various operational paths on our system.

\textsuperscript{95} Tr. at 634 (SoCalGas/SDG&E/Bisi).
10. **ORA’s Assertion that Gas Operations is unqualified to represent SoCalGas and SDG&E on the Issue of Reliability is not well founded**

In its Opening Brief, ORA asserts that:

> Gas Operations is unqualified to represent SCG on the issue of reliability of Ehrenburg supplies when two separate divisions of SCG with actual knowledge and responsibility for obtaining gas supplies and maintaining reliability at Ehrenburg are not participating in this proceeding, and have not themselves stated that they are unable to provide sufficient gas to the California border at Ehrenburg.\(^96\)

This claim is unfounded. SoCalGas and SDG&E appreciate ORA’s vote of confidence for the skills and knowledge of our Gas Acquisition Department. As we explained in our Opening Brief, however, the procurement of supplies to meet Southern System minimum flow requirements has been the responsibility of the System Operator for over half a decade.\(^97\) Gas Acquisition exited that role in April of 2009, pursuant to the Commission’s direction in D.07-12-019.\(^98\)

The System Operator is responsible for the safe and reliable operation of the SoCalGas and SDG&E transmission system, not Gas Acquisition.\(^99\) Likewise, the System Operator is responsible for anticipating the future operational needs of SoCalGas and SDG&E customers, and planning for system improvements such as the North-South Project. The Commission can rest assured that SoCalGas and SDG&E have the right witnesses presenting testimony in this proceeding.

\(^{96}\) ORA Opening Brief at 7.

\(^{97}\) SoCalGas/SDG&E Opening Brief at 14.

\(^{98}\) SoCalGas/SDG&E Opening Brief at 14.

\(^{99}\) Gas Acquisition does have the responsibility to act on a best-efforts basis to provide Southern System gas supplies if called upon by the System Operator as “a provider of last resort.” (See SoCalGas Rule No. 41(12).) But this provision is rarely invoked.
B. SHORT-TERM OR INTERIM OPTIONS

None of the “short term or interim options” offered by intervenors is a reasonable alternative to the North-South Project.\(^{100}\)

1. **Continued Use of Existing System Operator Tools**

TURN and SCGC suggest the continued or increased use of existing System Operator tools are a viable alternative to the North-South Project.\(^{101}\) SoCalGas and SDG&E disagree. As explained in our Opening Brief, while continued or increased use of these tools may address the Southern System reliability problem in the near-term, it does not fix it.\(^{102}\) All of the existing tools for dealing with Southern System reliability problems are saddled with the same single pipeline source constraint that exists today, which is the crux of the problem.\(^{103}\) Non-physical tools will not solve this physical pipeline problem.\(^{104}\) The intervenors who are supporting the use of existing tools as an alternative to long-term physical improvements are not taking into consideration any of the longer-term issues such as the variability of the weather or projected outlook of pipeline capacity demands on the El Paso pipeline system due to increased demand in Mexico.\(^{105}\)

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\(^{100}\) SoCalGas and SDG&E are referring to “short-term or interim options” because that is the phrasing used by the Scoping Memo. However, many, if not most, of the options proposed by intervenors appear to be either semi-permanent or permanent, and a number of them—such as building new electric transmission lines or LNG storage facilities in lieu of the North-South Project—would definitely be long-term.

\(^{101}\) TURN Opening Brief at 1, 9, and 25; SCGC Opening Brief at 12 and 23. As explained in our Opening Brief, these existing System Operator tools include purchases and sales of spot gas, baseload contracts, movement of supplies from Blythe to Otay Mesa, a series of Memorandum In Lieu of Contracts (MILCs) with Gas Acquisition, and Backbone Transportation Service (BTS) discounts. See SoCalGas/SDG&E Opening Brief at 23-27.

\(^{102}\) SoCalGas/SDG&E Opening Brief at 43-45.

\(^{103}\) Ex. SCG-11 (Marelli) at 4.

\(^{104}\) Ex. SCG-11 (Marelli) at 4.

\(^{105}\) Ex. SCG-11 (Marelli) at 7.
into the system is not a prudent long-term reliability solution.106

2. System Operator Contracts With Interstate Pipelines

SCGC suggests that SoCalGas could enter into firm capacity contracts with interstate pipelines as a substitute for the North-South Project.107 This is exactly what El Paso Natural Gas Company, LLC (El Paso), TransCanada Pipelines Limited and North Baja Pipeline, LLC (collectively “TransCanada”), and Transwestern Pipeline Company, LLC (Transwestern) are proposing. Our reasons for not supporting such contracts are addressed at length in Section IV(C) below.

3. Southern System Minimum Flow Requirement

TURN proposes that the Commission order SoCalGas to adopt a “Southern System Specific” low Operational Flow Order (OFO) requirement to motivate noncore customers to deliver at Blythe.108 TURN’s proposal appears to contemplate that all customers would be required to bring in a portion of their usage into Blythe on low OFO days.109

As explained in our Opening Brief, SoCalGas and SDG&E proposed such a requirement in A.08-02-001, their last Biennial Cost Allocation Proceeding (BCAP).110 The proposal was opposed by a number of intervenors, and we ultimately dropped it as part of an overall settlement of issues in Phase 2 of the 2009 BCAP proceeding.111 SoCalGas and

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106 Ex. SCG-11 (Marelli) at 7.
107 SCGC Opening Brief at 13.
108 TURN Opening Brief at 31-33.
109 TURN Opening Brief at 31. In testimony, Long Beach suggested imposing such a requirement on only Southern System customers. (Ex. LB-1 (Fullmer) at 14-15.) However, Long Beach did not discuss this proposal in its Opening Brief. Our objections to either proposal are essentially the same, thought imposing such a requirement on only Southern System customers would create additional fairness concerns.
110 SoCalGas/SDG&E Opening Brief at 46.
111 D.09-11-006, Appendix A, Section II.K. SoCalGas also presented this approach to our customers at our annual Customer Forum in 2013 and related post-Forum workshops, and it does not appear to have gained in popularity during the intervening years.
SDG&E believe that there may be merit to requiring all end-use customers to bring some portion of their gas usage into the Southern System. But it would not solve the Southern System reliability problem. If SoCalGas and SDG&E are not able to obtain flowing supplies at Blythe, then it is unlikely that our customers will be able to do so either, no matter how large the potential financial penalty for noncompliance.\textsuperscript{112}

TURN responds to this last point by arguing that because SoCalGas and SDG&E have been able to find flowing supplies in the past, it is “highly likely” that transferring Southern System support responsibilities from the System Operator to individual noncore customers “may solve the minimum flow problems.”\textsuperscript{113} This statement again illustrates the tremendous gulf between SoCalGas, SDG&E, and the intervenors regarding Southern System reliability.

As stewards of our transmission and distribution systems, SoCalGas and SDG&E believe that it is incumbent on us to notice changing circumstances and to anticipate future problems. Our charge goes beyond simply looking at the past and hoping the future holds the same. For all of the reasons discussed at length above (and in our Opening Brief and testimony), SoCalGas and SDG&E strongly believe that we need an on-system physical upgrade to provide Southern System customers with reliable service over the long term.

Transferring responsibility for Southern System supply procurement from the SoCalGas System Operator to individual customers via a new low OFO procedure would simply move a tool for dealing with the minimum flow problem from one entity to many others—some who may be less well equipped to handle the task than SoCalGas—it would not solve the problem.

4. \textit{Transfer of Southern System Minimum Responsibility Back to Gas}

\textsuperscript{112} Ex. SCG-02 (Marelli) at 20.
\textsuperscript{113} TURN Opening Brief at 32.
Acquisition

TURN asserts that transferring Southern System support responsibilities back to SoCalGas’ Gas Acquisition Department could create cost savings.\(^{114}\) TURN also contends that this change would somehow substitute for the North-South Project:

TURN recommends that the better alternative, rather than building the expensive North-South pipeline, would be to authorize Gas Acquisition to purchase reliability supplies for all customers and allocate the resulting costs equitably to all customers.\(^{115}\)

As noted in our Opening Brief, transferring the responsibility back to Gas Acquisition would undermine the Commission’s goal of putting bundled core customers on a more equal footing with noncore customers.\(^{116}\) Moreover, any cost savings from such a transfer would likely be confined to a reduction in the limited time that the two SoCalGas Operational Hub employees currently spend on Southern System support purchases (they would continue to work on hub and storage transactions).\(^{117}\) There is certainly no evidence that our Gas Acquisition Department would procure Southern System supplies at a lower cost than the Operational Hub. The Hub’s purchases are vetted by the Commission each year, and thus far have always been deemed reasonable.\(^{118}\)

\(^{114}\) TURN Opening Brief at 2 and 27.
\(^{115}\) TURN Opening Brief at 33.
\(^{116}\) SoCalGas/SDG&E Opening Brief at 48.
\(^{117}\) As explained in our Opening Brief, the Operational Hub is the group within the SoCalGas System Operator responsible for obtaining flowing supplies to meet Southern System minimum supply requirements. (See SoCalGas/SDG&E Opening Brief at 14.)
More important than potential procurement cost savings, however, is the question of whether a transfer of Southern System supply purchasing responsibility can somehow substitute for the North-South Project. The answer to this question is a resounding “no.” The amount of flowing supplies needed to keep the Southern System operating, and the amount of supplies available to meet those needs, are independent of which department within SoCalGas purchases the supplies.\footnote{Ex. SCG-02 (Marelli) at 18.} Transferring responsibility for the Southern System minimum flow requirement would simply move a tool for dealing with the Southern System minimum flow problem—it would do nothing to address the underlying problem.\footnote{Ex. SCG-10 (Marelli) at 11.}

For each of these reasons, the Commission should not transfer Southern System support responsibilities back to SoCalGas’ Gas Acquisition Department.

5. New Low OFO Procedures and Tighter Monthly Balancing Requirements

TURN asserts that the Commission needs to evaluate the impacts of SoCalGas and SDG&E’s new low Operational Flow Order (OFO) procedures and proposed revised monthly balancing rules before considering the North-South Project.\footnote{TURN Opening Brief at 29.} Long Beach expresses a similar sentiment.\footnote{Long Beach Opening Brief at 6.} As explained in our Opening Brief, however, the new low OFO procedures and our proposed tightening of monthly balancing tolerances from 10% to 8% are not a substitute for necessary physical improvements.\footnote{SoCalGas/SDG&E Opening Brief at 48-49. The Commission approved new low OFO requirements for SoCalGas and SDG&E in D.15-06-004. SoCalGas and SDG&E have proposed tighter monthly balancing requirements in A.14-12-017, our current Phase 1 TCAP Proceeding. SoCalGas and SDG&E originally proposed a change from 10% to 5% monthly balancing tolerances. On August 31, 2015 we submitted a joint settlement with several other parties that would, among other things, set monthly balancing tolerances at 8% for the 2016-2019 TCAP period. This settlement has been opposed by certain parties and neither our original requests nor the settlement have yet been acted upon by the Commission.}
The new low OFO procedures will help bring additional supplies to the SoCalGas and SDG&E system as a whole, but the procedures will not provide for more supply to be delivered to the Southern System. Sufficient supplies could be delivered to our Northern System receipt points during a Low OFO event while Southern System receipt points remain underutilized. The North-South Project will remedy that situation by allowing those Northern System supplies and storage supplies to be delivered to the Southern System.

Likewise, tighter monthly balancing requirements would be beneficial from a long-term, system-wide standpoint. But they will likely have little, if any, impact on daily supply shortages on the Southern System—particularly since shippers and end-use customers will be able to cure their imbalances with deliveries to any of our receipt points, or withdrawals from storage.

6. **Requiring EG Customers to Maintain Alternate Back-Up Fuel**

According to TURN:

One relatively simple and more cost-effective alternative would be to ensure that EG customers have 5 to 10 days’ worth of alternate fuel back-up that would be used only during extreme weather conditions, most likely in winter months, when air quality concerns are minimal. Minimal use of alternate fuels on critical days would not endanger California’s long-term environmental or air quality goals. Moreover, an alternative fuel supply composed of LNG would not impact air quality.

Ideally, the Commission should require major electric generators to maintain 10 days’ worth of alternate fuel back-up in the form of jet fuel, propane or Liquefied Natural Gas (LNG) peak shaving plants. However, the Commission may not have authority to impose such a requirement in California’s deregulated electric

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124 Ex. SCG-18 (Bisi) at 3.
125 Ex. SCG-18 (Bisi) at 3.
126 Ex. SCG-18 (Bisi) at 3.
market. However, the Commission could impose a similar requirement upon SoCalGas, with the same ultimate impact.127

SoCalGas and SDG&E agree with TURN that it could create potential jurisdictional issues for the Commission to implement new alternate fuel requirements for electric generators (EGs). But we strongly question TURN’s assumption that the use of jet fuel or propane would be countenanced in today’s regulatory environment.

Southern California is subject to some of the most stringent air quality regulations in the country. For example, the South Coast Air Quality Management District (SCAQMD) requires combustion engine operations to stay within specific emission concentration limits.128 These stringent air quality regulations may create challenges for anyone attempting to generate electricity using jet fuel or propane. LNG would presumably have an emission profile similar to natural gas, but LNG storage by individual plant owners would likely be expensive and difficult to permit—the same challenges SoCalGas and SDG&E would face if we attempted to develop larger-scale LNG storage, but on a smaller scale.

In addition, even if it were otherwise viable, TURN’s proposal EG would only help EG customers with their own alternate-fuel storage facilities. It would not assist natural gas customers who do not have their own LNG storage facilities. The North-South Project would provide a reliability solution for all Southern System customers, and not just EGs with the foresight and wherewithal to develop alternate fuel storage facilities.

For each of these reasons, imposing a new backup fuel requirement on EG customers is not a viable alternative to the North-South Project.

127 TURN Opening Brief at 35.
128 See, e.g., SCAQMD Rule 1120.2. SCAQMD regulates air quality in Los Angeles, Orange, Riverside, and portions of San Bernardino Counties. San Diego and Imperial Counties have their own local air districts which have rules and regulations similar to SCAQMD. See, e.g., San Diego Air Pollution Control District Rules 69 to 69.5.
7. **Core Service Option for Electric Generators**

TURN proposes that SoCalGas be required to analyze the cost-effectiveness of allowing EG customers to take core service, and planning expansions to meet greater forecast core load.\(^{129}\) This suggestion should not be adopted.

As explained in our Opening Brief, SoCalGas and SDG&E believe that the grid reliability component of EG demand could possibly be considered core if it could be better defined.\(^{130}\) At the current time, however, the existing restriction preventing large EGs from taking core service should be maintained so that other customers are not obligated to pay to build out the system for this sophisticated market segment.\(^{131}\)

Further, TURN’s proposal does not appear to have any real bearing on the North-South Project. The Southern System supply and reliability issues driving SoCalGas and SDG&E to propose this project exist independent of the service elections of large EG customers. Demand on the Southern System will not change if EG service elections change—just the planning criteria we would use to plan for future on-system capacity additions. Again, this would do nothing to address existing Southern System reliability concerns.

Moreover, SoCalGas and SDG&E have strong doubts that allowing large EG customers to take core service would provide us with any better on-system capacity planning signals than we receive today. As explained by SoCalGas and SDG&E in A.15-06-020, their recent application to revise curtailment procedures, firm service elections by EG customers do not provide us with relevant capacity planning signals because many EG customers choose to

\(^{129}\) TURN Opening Brief at 36.

\(^{130}\) SoCalGas/SDG&E Opening Brief at 50 (citing Ex. SCG-10 (Marelli) at 12).

\(^{131}\) SoCalGas/SDG&E Opening Brief at 50.
take interruptible service.\textsuperscript{132} It seems unlikely that the large EG customers who balk at taking on the limited additional requirements of firm service—i.e., the same rates as interruptible but 2-year service commitment versus 30 days for interruptible—would voluntarily incur much higher core rates and the 5-year core service commitment just because they now could.

For each of these reasons, SoCalGas and SDG&E should not be required to study the cost-effectiveness of allowing large EG customers to take core service.

8. LNG Storage

TURN and SCGC suggest the construction of new LNG storage facilities as an alternative to the North-South Project.\textsuperscript{133} As explained in our Opening Brief, such facilities would not be a reasonable alternative to the North-South Project.\textsuperscript{134}

Our preliminary assessment is that an adequately sized LNG facility—with storage capacity of 2.4 BCF, a maximum withdrawal/regasification rate of 800 MMcfd, and adequate liquefaction facilities—would cost well over $1 billion dollars.\textsuperscript{135} It would likely take at least 7-8 years to get such a project approved,\textsuperscript{136} and the facility would require significant operation and maintenance support and corresponding costs.\textsuperscript{137} Moreover, the siting of sizable LNG storage facilities anywhere in Southern California would likely present significant challenges. Such facilities are not a viable response to the reliability needs of Southern System customers.

9. LNG Supplies from Costa Azul

TURN and SCGC suggest that SoCalGas purchase LNG from the Energia Costa Azul (ECA) LNG facility in Baja California, Mexico, as an alternative to the North-South

\textsuperscript{132} A.15-06-020 at 7.
\textsuperscript{133} TURN Opening Brief at 2 and 35-36; SCGC Opening Brief at 23.
\textsuperscript{134} See SoCalGas/SDG&E Opening Brief at 50.
\textsuperscript{135} Ex. SCG-12 (Buczkowski) at 11.
\textsuperscript{136} Ex. SCG-12 (Buczkowski) at 11.
\textsuperscript{137} Ex. SCG-12 (Buczkowski) at 10-11.
This suggestion is not well founded. First, there does not appear to be any LNG at ECA that is not fully committed to other parties. Second, in March of 2014 Sempra—the owner of ECA—announced plans to convert ECA to an export terminal, and in February of 2015 signed an agreement with a subsidiary of PEMEX to pursue this project. Counting on LNG imports from a facility being converted to an export facility would not be reasonable.

10. Looping Line 6916

TURN suggests that “a looping of SoCalGas’ line 6916, formerly the Questar Southern Trails Pipeline, should go a long way toward mitigating the Southern System flow problem . . .,” and TURN argues that SoCalGas should be ordered to hold an open season that includes “a doubling of line 6916 capacity . . .” These suggestions do not have merit.

As explained in our Opening Brief, Line 6916 has been useful in meeting the supply requirements of the Southern System. But looping Line 6916 would require significantly more pipeline than the North-South Project (115 miles versus 63 miles), and still would not allow access to storage or receipt points other than Topock to the Southern System. Furthermore, Topock’s receipt capacity is only 540 MMcfd—less than the capacity that the North-South Project provides to the Southern System—and it frequently is not fully

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138 TURN Opening Brief at 2; SCGC Opening Brief at 22.
139 Ex. SCG-10 (Marelli) at 7.
140 PEMEX is Mexico’s state-owned oil and gas monopoly and controls exploration, processing and sales.
141 Ex. SCG-14 (Chaudhury) at 3.
142 TURN Opening Brief at 42.
143 SoCalGas/SDG&E Opening Brief at 52. Line 6916 is a 115 mile 16-inch diameter pipeline connected to SoCalGas’ Northern System between Topock and Newberry Springs with a capacity of 80 MMcfd. (Ex. SCG-17 (Bisi) at 13-14.)
144 Ex. SCG-17 (Bisi) at 14.
utilized.\textsuperscript{145} For these reasons, looping Line 6916 is not a viable alternative to the North-South Project.

\section{Purchase or Lease of El Paso’s Line 1903}

TURN asserts that “[a]nother option that the Commission should consider is for Sempra to purchase or lease the existing El Paso Line 1903.”\textsuperscript{146} According to TURN: “This pipeline crisscrosses the SoCalGas system from northwest to southeast and once connected to the SoCalGas system. It would therefore be a logical physical option to help support the Southern System.”\textsuperscript{147} SoCalGas and SDG&E do not agree.

As explained in our Opening Brief, SoCalGas considered the option of purchasing existing facilities from another entity, and determined that there is no viable purchase option that would resolve Southern System reliability concerns.\textsuperscript{148} No pipeline facilities in Southern California—including El Paso’s Line 1903—are currently available for sale.\textsuperscript{149} And, even if they were, such a purchase may be expensive, and offer little or no savings over new construction.\textsuperscript{150} Most important, existing facilities owned by other companies—including El Paso’s Line 1903—would not provide the same operational benefits as the North-South Project.\textsuperscript{151}

Line 1903 is a 30-inch 88 mile pipeline running from Cadiz to Ehrenberg owned by Kinder Morgan/El Paso. Even if this line were available for purchase, it could only transport up to 500 MMcfd—perhaps enough for most days, but not enough for our design criteria of

\begin{itemize}
\item \textsuperscript{145} Ex. SCG-17 (Bisi) at 14.
\item \textsuperscript{146} TURN Opening Brief at 42.
\item \textsuperscript{147} TURN Opening Brief at 42.
\item \textsuperscript{148} SoCalGas/SDG&E Opening Brief at 41-42.
\item \textsuperscript{149} Ex. SCG-02 (Marelli) at 22.
\item \textsuperscript{150} Ex. SCG-02 (Marelli) at 22.
\item \textsuperscript{151} Ex. SCG-02 (Marelli) at 23.
\end{itemize}
800 MMcfd.\textsuperscript{152} In short, Line 1903 is not available, and would not do what we need even if it were—therefore, it is not a viable option to the North-South Project.\textsuperscript{153}

\textbf{12. New Electric Transmission Lines}

As an alternative to the North-South Project, TURN suggests that SDG&E upgrade the Southwest Powerlink, or upgrade power lines from the Los Angeles and Orange County area to San Diego County in order to transport more electric power from Los Angeles and Orange County power plants and thereby reduce power production in San Diego County.\textsuperscript{154} As explained in our Opening Brief, this is not a reasonable proposal.\textsuperscript{155}

SoCalGas and SDG&E are seeking to upgrade the reliability of our natural gas transmission system, not redesign the electric grid. The potential natural gas reliability problems created by our current reliance on one single interstate gas pipeline and receipt point into the Southern System cannot be solved by importing electricity. Moreover, the cost and siting challenges associated with developing new electric lines in Southern California would likely make the North-South Project seem both simple and a bargain. SoCalGas and SDG&E (of course) are not averse to development of new electric transmission lines under the right circumstances. But such lines are not an appropriate substitute for the North-South Project.

\textbf{13. Electric-Driven Compressors at Adelanto}

TURN asserts that SoCalGas and SDG&E should be required “to evaluate the potential costs and environmental benefits of using an equivalent electric option consisting of a 22.37 MW combined-cycle power plant and associated electric motor-driven compressors

\textsuperscript{152} Ex. SCG-02 (Marelli) at 23.
\textsuperscript{153} In addition, Kinder Morgan is considering converting El Paso Lines 2000, 1903, and 1904 into a crude oil pipeline. (Ex. SCG-5 (Chaudhury) at 4; Ex. SCGC-11 (Kinder Morgan 1/28/2015 Analyst Conference) Slide 28.)
\textsuperscript{154} TURN Opening Brief at 47.
\textsuperscript{155} SoCalGas/SDG&E Opening Brief at 53.
before gas-fired compressors are authorized as part of this proposal.\textsuperscript{156} This suggestion should not be adopted by the Commission.

As explained in our Opening Brief, SoCalGas and SDG&E believe that the reliability of both our gas transmission system and the electric grid could be compromised by the use of electric compressors at Adelanto.\textsuperscript{157} As Mr. Bisi has pointed out, electric outages occur more frequently than curtailments to gas service, and an electric outage at a mainline compressor station could have serious consequences on our ability to maintain continuous gas service.\textsuperscript{158} An interruption at a major mainline compressor station could lead to noncore customer curtailments, and may also jeopardize core reliability.\textsuperscript{159} Electric generators would be among the first customers to lose gas service in the event of a curtailment, further compounding the problem.\textsuperscript{160} Conversely, natural gas mainline compressors act as a backstop to electric grid reliability by enabling local generators to come back on line in the event of a large-scale grid outage.\textsuperscript{161}

TURN’s response is that our reliability concerns are “overblown,” and that SoCalGas and SDG&E are overlooking the key to TURN’s proposal—that SoCalGas would also construct a 22.37 MW combined-cycle electric power plant to serve the new electric compressors.\textsuperscript{162} SoCalGas and SDG&E note TURN’s apparent preference for new power lines and combined-cycle power plants, and SDG&E will hope for TURN’s support should it

\textsuperscript{156} TURN Opening Brief at 46.
\textsuperscript{157} See SoCalGas/SDG&E Opening Brief at 53-54.
\textsuperscript{158} Ex. SCG-17 (Bisi) at 12.
\textsuperscript{159} Ex. SCG-06 (Bisi) at 10.
\textsuperscript{160} Ex. SCG-17 (Bisi) at 12.
\textsuperscript{161} Ex. SCG-06 (Bisi) at 10.
\textsuperscript{162} TURN Opening Brief at 47.
propose either in the future. In this instance, however, TURN’s electric-centric proposals do not make sense.

We know that gas-fired turbine driven compressors at Adelanto will be very reliable, and can contribute to the reliability of the electric grid even under strained electric operating conditions. The same cannot be said of electric compressors—even if backed up by our own combined-cycle power plant. As Mr. Bisi has explained, natural gas system operating conditions may demand immediate compressor response in order to maintain system integrity and reliability. Gas-fired compressors start up in a matter of minutes and can provide that responsiveness; whereas the typical start-up duration for a combined cycle plant is 30 minutes for a “hot” start and at least 2 hours for a “cold” start.

TURN ignores the undoubtedly substantial costs and environmental issues associated with developing a new power plant and having Southern California Edison install new power lines to either the power plant or our compression facilities. Moreover, SoCalGas is in the business of providing natural gas service to its 5.9 million natural gas customers. TURN’s proposal would have us enter a brand new line of business—becoming either an Electric Corporation or Exempt Wholesale Generator. SoCalGas should not have to enter into a whole new line of business in order to provide reliability improvements for its natural gas transmission system—especially when gas-fired turbine driven compression will provide better results.

For each of these reasons, the Commission should decline to adopt TURN’s electric-drive compression and combined-cycle power plant proposal.

163 Ex. SCG-17 (Bisi) at 12.
164 Ex. SCG-17 (Bisi) at 12.
165 According to TURN, when excess power would be produced by this new power plant, SoCalGas would supply it to the electric grid. (TURN Opening Brief at 47.)
C. ALTERNATIVE PIPELINES

The three intervenors who have presented “pipeline” options—or, rather, long-term capacity contracts supported by infrastructure projects—continue to tout their proposals with declarations of supposed superiority. For example, El Paso explains that:

EPNG quickly realized that it could replicate the benefits of the North-South Project at a much lower cost to Southern California ratepayers.166

Per TransCanada:

The TC Project provides the same gas supply solutions as the North-South Project but does so at a much lower cost, resulting in significant savings for ratepayers.

... The TC Project is not only a superior alternative to the North-South Project, but it is also a superior solution to each of the alternatives proposed by pipeline interveners [sic] in this proceeding.167

And, according to Transwestern:

Transwestern’s Needles-Ehrenberg Pipeline would provide greater reliability for the Southern System than the proposed North-South Pipeline project, at much lower cost and on a timelier basis, and with less long-term risk for SoCalGas and SDG&E ratepayers.168

These assertions are belied by the evidence, as well as common sense. None of these proposed foreign pipeline projects can provide the same benefits as the North-South Project—let alone greater benefits; none of these foreign pipeline projects is supported by SoCalGas

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166 El Paso Opening Brief at 2-3 (emphasis added).
167 TransCanada Opening Brief at 17 and 18 (emphasis added).
168 Transwestern Opening Brief at 29 (emphasis added).
and SDG&E; and none of them will be commercially viable unless and until SoCalGas is forced by the Commission to enter into it.

1. **From a Reliability Standpoint, the Foreign Pipeline Alternatives Would Simply Extend the Status Quo**

Supplies delivered via the El Paso and Transwestern projects would enter our system at Blythe—or perhaps Otay Mesa if the System Operator is able to move supplies from Blythe to Otay Mesa.\(^{169}\) This is no different than the status quo from a reliability/force majeure standpoint, with Southern System customers completely dependent on flowing supplies entering our system at one (or possibly two) existing Southern System receipt points. Even with basin supplies and matching interstate capacity, Southern System customers would still be at the mercy of operational and supply-related problems outside of California.\(^{170}\) Even after substantial expenditures to lock in long-term supplies and interstate transportation, we would essentially be no better off than we are today from a reliability standpoint.\(^{171}\)

TransCanada’s proposal would indeed provide Southern System customers with additional receipt point options (North Needles and South Needles); but those options are more limited than the receipt point options provided by the North-South Project (more on this topic below). Moreover, TransCanada’s alternative would interconnect with the SoCalGas system upstream of the Blythe compressor station.\(^{172}\) Accordingly, under TransCanada’s proposal, Southern System customers would be just as dependent as they are today on flowing supplies delivered through Blythe. Far from providing “greater reliability for the Southern System than the proposed North-South Pipeline project,” TransCanada’s proposal is still very

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\(^{169}\) See SoCalGas/SDG&E Opening Brief at 25 for a description of this particular System Operator tool.

\(^{170}\) Ex. SCG-02 (Marelli) at 17.

\(^{171}\) Ex. SCG-02 (Marelli) at 17.

\(^{172}\) Ex. SCG-17 (Bisi) at 2.
similar to the status quo from a reliability standpoint. Yes, if supplies are not able to reach Blythe via the El Paso South Mainline, the TransCanada option would enable supplies from North and South Needles to flow into the Southern System. But if SoCalGas should experience force majeure problems at Blythe (i.e., either problems with the compressors or the lines connecting to it), TransCanada’s option would be no more reliable than our current system configuration.

In contrast, the North-South Project allows supplies to be delivered virtually anywhere on the SoCalGas system to support the Southern System, and does not depend upon a single or specific path or contract, except for a minimal level of flowing supplies that would still be required at Blythe during a high-sendout event such as that assumed for the design condition. While dependency on upstream pipelines can never be fully eliminated, there is value in eliminating extreme levels of dependency, such as the situation that currently exists on the Southern System.

2. None of the Foreign Pipeline Alternatives Would Provide Southern System Customers with Access to SoCalGas Storage Supplies

As explained above in Section 4(A), providing Southern System customers with access to SoCalGas storage supplies is a crucial step towards making service to these customers as reliable as service to our other customers. And none of the foreign pipeline alternatives provide access to SoCalGas storage supplies.

Even if El Paso, TransCanada, and Transwestern dispute the advantage of SoCalGas being able to serve Southern System customers with Honor Rancho storage supplies, it is

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173 For example, in September of 2013, SoCalGas found anomalies on Line 2001, requiring us to reduce Blythe receipt point capacity to 750 MMcf/d. (Ex. SCG-02 (Marelli) at 11.)

174 Ex. SCG-06 (Bisi) at 18.

175 Ex. SCG-06 (Bisi) at 18.
wrong for these project proponents to argue that they can somehow “replicate the benefits of the North-South Project,” or that their proposals “would provide greater reliability for the Southern System than the proposed North-South Pipeline project” when their projects cannot access storage supplies on the SoCalGas system.

Transwestern asserts that: “The Needles-Ehrenberg Pipeline would provide Southern System customers with access to more than double the storage supplies they can currently access.”\(^\text{176}\) According to Transwestern, “Southern System customers currently have access to storage supplies via displacement . . .” and that such “displacement” would increase from 300 MMcfd to 800 MMcfd if Transwestern’s project is constructed.\(^\text{177}\) These statements are both misleading, and factually incorrect.

As Mr. Bisi explained during hearings, “storage via displacement” does not involve receipt of gas molecules from Honor Rancho or any of our other storage fields:

Q Understanding or recognizing your concerns with the -- with the displacement being the model for storage access at some certain point because it requires everything to be operating, assuming that the Transwestern Needles Ehrenberg Project was built and the North-South Project was not built and that project -- that pipeline, Needles Ehrenberg, was able to deliver the full 800 million cubic feet a day and do it reliably, would that not in essence be the same as providing Southern System customers access to SoCalGas storage supplies at Honor Rancho?

A So not on a physical basis. On a displacement basis, it's identical to what we're doing with El Paso supplies right now that they're swapping out. I think your project -- the way you phrased that is just that it's being delivered reliably every day. You're flowing 800 million a day down there, so that would be 800 million a day of storage on a displacement basis. But the moment that stops for whatever reason, the storage molecules aren't there. Whereas the

\(^{176}\) Transwestern Opening Brief at 20.
\(^{177}\) Transwestern Opening Brief at 20-21.
North-South project, those molecules are getting down to the Southern System.\footnote{Tr. at 766-767 (SoCalGas/SDG&E/Bisi).}

Southern System customers already receive as much storage via “displacement” as they are willing to contract for. And these “paper” displacement transactions are not limited to 300 MMcfd, as Transwestern would have the Commission believe.\footnote{See Tr. at 753-54, 765-66 (SoCalGas/SDG&E/Bisi).} But none of the supplies that currently enter the Southern System physically come from our storage fields. Rather, they are all flowing supplies delivered via interstate pipelines, with the vast majority of those supplies being delivered at Blythe via the El Paso South Mainline.\footnote{Tr. at 766-767 (SoCalGas/SDG&E/Bisi).}

Southern System customers don’t need more “storage via displacement”—they already have as much as they can contract for. Southern System customers need access to \textit{physical} on-system storage supplies. And that is something that Transwestern and its two foreign pipeline compatriots simply cannot provide. Despite Transwestern’s efforts to sow confusion with assertions about “storage via displacement,” the following is clear—the North-South Project would provide Southern System customers with access to physical SoCalGas storage supplies; the proposals from El Paso, TransCanada, and Transwestern would not.

El Paso ends its Opening Brief with the contention that “the cost of interconnecting SoCalGas’ storage complex to EPNG’s system” was “not fully developed on the record.”\footnote{El Paso Opening Brief at 10-11.} El Paso then goes on to say that: “Suffice it to say that this Commission, and any party to this proceeding, may look at any comparable project and quickly conclude that this cost projection is not reasonable.”\footnote{El Paso Opening Brief at 11.} SoCalGas and SDG&E strongly disagree.
SoCalGas and SDG&E presented detailed testimony regarding the estimated cost of delivering storage supplies from Honor Rancho into El Paso’s Kern/Mojave pipeline. Specifically, Mr. Bisi testified that in order to deliver 800 MMcf/d of storage supplies to the Kern/Mojave common pipeline at Wheeler Ridge for El Paso to transport to the Southern System via the Mojave Pipeline and its own system under the same demand condition used in our Application, SoCalGas would need to install additional pipeline, compression, valves, and metering with an estimated direct cost, based on historical cost data, of at least $890 million. Mr. Bisi testified that the same physical deliveries of storage gas to the Kern/Mojave pipeline at Kramer Junction, the estimated direct cost of necessary SoCalGas improvements would be at least $620 million. Mr. Bisi provided a detailed listing of the improvements needed to facilitate these deliveries; and Mr. Bisi explained that even though these estimates are not of the same high quality as our North-South Project estimate, we expect that estimated costs for these facilities would likely increase as a result of further study, not decrease.

This testimony is clear, detailed, and directly responsive to El Paso’s unsupported and inaccurate assertions that: “[t]o accommodate additional supply sources, including SoCalGas storage, EPNG, in collaboration with Mojave, could transport natural gas from SoCalGas at Wheeler Ridge and Kramer Junction” and “[n]o additional facilities in California would be

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183 Ex. SCG-17 (Bisi) at 4-5. The individual necessary improvements are described by Mr. Bisi. (Id.)
184 Ex. SCG-17 (Bisi) at 5-6. The individual necessary improvements are described by Mr. Bisi. Also, as explained by Mr. Bisi, neither of these cost estimates is of the same quality as our updated North-South Project cost estimate. These rough estimates represent a floor, and would likely be even higher if the necessary new facilities were subjected to the same scrutiny as the North-South Project. (Id.)
185 Ex. SCG-17 (Bisi) at 5.
186 Ex. SCG-17 (Bisi) at 6.
187 Ex. EP-01 (Sanabria) at 6 (emphasis added).
required to facilitate this additional firm capability.”¹⁸⁸ Moreover, Mr. Bisi’s testimony was submitted to all parties well in advance of evidentiary hearings, and Mr. Bisi was subjected to cross examination for several hours on August 10 and 11, 2015.¹⁸⁹ Given all of these facts, El Paso’s Opening Brief assertion that “the cost of interconnecting SoCalGas’ storage complex to EPNG’s system” was “not fully developed on the record” rings hollow.

Likewise, there is absolutely no support for El Paso’s claim that “any party to this proceeding . . . would conclude that this cost projection is not reasonable.” Mr. Bisi and his team of engineers are responsible for planning our system, and developing estimates such as this. They know far more about the design and operation of our storage and transmission facilities than El Paso’s lawyers and business development executives in Colorado Springs—or, for that matter, anyone else involved with this proceeding. El Paso clearly does not understand the design and hydraulics of our system, just as SoCalGas and SDG&E have only a rudimentary understanding of how El Paso’s system operates. But El Paso’s lack of understanding about something doesn’t make that something “not reasonable.”

3. The North-South Project would provide Substantially More Operational Flexibility than the Foreign Pipeline Alternatives

In addition to providing Southern System customers with access to physical storage supplies, the North-South Project would provide substantially more operational flexibility than the alternatives offered by El Paso, TransCanada, and Transwestern.

Transwestern asserts that its project “would provide SoCalGas with increased operational flexibility comparable to that offered by the North-South Pipeline.”¹⁹⁰ But this statement is clearly not accurate. Because El Paso, Transwestern, and TransCanada are

¹⁸⁸ Ex. EP-01 (Sanabria) at 6 (emphasis added).
¹⁸⁹ See Tr. at 626-823 (SoCalGas/SDG&E/Bisi).
¹⁹⁰ Transwestern Opening Brief at 24 (emphasis added).
offering contractual rights on upstream pipeline facilities rather than physical improvements on SoCalGas and SDG&E’s transmission system, there is no possible way for the alternatives to provide anything close to the benefits that will result from the North-South Project.

To use the upstream contractual rights proffered by El Paso, TransCanada, and Transwestern, SoCalGas would need to follow the established NAESB scheduling protocols consisting of two day-ahead and two flow-day scheduling cycles.191 The need for Southern System support may not be evident in time to schedule sufficient supply on these interstate assets.192 Conversely, the North-South Project would provide a vital link between our Northern Zone and Southern System that would enable us to deal in real time with maintenance outages, force majeure conditions, and other operating challenges. The North-South Project would be an important component of our integrated intrastate gas network, and gas supply could be transported on this integrated network whenever required by operational and customer needs.193 The North-South Project could even have alleviated or prevented a recent curtailment on the SoCalGas system in the Los Angeles area.194 That is something upstream supply contracts could never accomplish.

The best we could hope for from capacity arrangements with El Paso, TransCanada, or Transwestern would be a steady stream of flowing supplies at Blythe—assuming that the System Operator was bringing in supplies over the capacity, and that upstream force majeure conditions are not preventing the supplies from reaching California. This is not a significant

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191 Ex. SCG-17 (Bisi) at 9. An additional scheduling cycle will become available in April of 2016. (See SoCalGas Advice Letter 4842-G, approved by the Commission on September 1, 2015.)
192 Ex. SCG-17 (Bisi) at 9.
193 Ex. SCG-17 (Bisi) at 9.
194 SoCalGas/SDG&E Opening Brief at 32 (citing Ex. ORA-07 (SoCalGas/SDG&E response to ORA DR ORA-NSP-SCG-16)).
improvement over the current situation, and it would be nothing close to the long-term, day-
to-day, real-time operational benefits that would be provided by the North-South Project.

4. **The North-South Project would increase Our Overall System Receipt Point
Capacity; the Foreign Pipeline Alternatives would not**

The receipt capacity of SoCalGas’ Northern Transmission Zone (Northern Zone) is currently 1,590 MMcfd.\(^{195}\) Although it was not a driving factor for our proposal, the North-
South Project would increase this Northern Zone receipt capacity by 300 MMcfd to 1,890
MMcfd.\(^{196}\) This in turn would increase the entire system receipt capacity—from 3,875
MMcfd to 4,175 MMcfd.\(^{197}\)

The projects proposed by El Paso and Transwestern would provide firm interstate
capacity into SoCalGas’ existing receipt point at Blythe, but would not increase receipt point
capacity of the SoCalGas and SDG&E transmission system.\(^{198}\) As with the River Route
pipeline alternative rejected by SoCalGas and SDG&E, TransCanada’s proposal would
increase Northern Zone receipt capacity. But just like the River Route, TransCanada’s
alternative would interconnect with the SoCalGas system upstream of the Blythe compressor
station.\(^{199}\)

\(^{195}\) Ex. SCG-06 (Bisi) at 16. More information on SoCalGas’ receipt capacity can be found at
https://scgenvoy.sempra.com and in SoCalGas Schedule No. G-BTS. (Id.)

\(^{196}\) Ex. SCG-06 (Bisi) at 16.

\(^{197}\) Ex. SCG-06 (Bisi) at 16. System capacity, which is defined as system demand plus injection
capacity less off-system deliveries, must be equal to the level of supply delivered to the system.
SoCalGas and SDG&E cannot receive their total system receipt capacity of 3,875 MMcfd (or 4,175
MMcfd with the North-South Project) of supply unless the system capacity is also at least this much.
(Id.)

\(^{198}\) Although the design capacity of our Blythe receipt point is 1.2 Bcfd, this receipt capacity can be
(and currently is) reduced by pipeline maintenance or other issues. (Ex. SCG-02 (Marelli) at 11.) In
September of 2010, following the San Bruno explosion on PG&E’s system, SoCalGas voluntarily
reduced the operating pressure on Line 2000, reducing the receipt capacity at Blythe to 1,000 MMcfd.
(Id.)

\(^{199}\) Ex. SCG-17 (Bisi) at 2.
For any pipeline interconnecting with the Southern System upstream of the Blythe compressor station—the River Route pipeline, the Cross Desert pipeline, or TransCanada’s proposal—any increase in receipt capacity in the Northern Zone generated by the projects would be offset by a corresponding loss in receipt capacity on the Southern Zone—specifically at Blythe due to the limited capacity of the Blythe compressor station and the take-away capacity of the pipelines downstream of that location. Only the North-South Project can increase the Northern Zone receipt capacity without degrading Southern System receipt capacity—because it interconnects with the Southern System far downstream of Blythe and is not limited by the take-away capacity from that location.

5. The North-South Project would provide Southern System Customers with the Widest Range of Receipt Point Options

As discussed above, the El Paso and Transwestern proposals would not provide Southern System customers with access to new receipt points. Rather, supplies delivered via these interstate projects would enter our system at Blythe, or perhaps Otay Mesa.

TransCanada’s proposal would provide Southern System customers with additional receipt point options, but those options are still much more limited than the receipt point options that would be provided by the North-South Project. Because it has essentially the same configuration as the River Route pipeline, the TransCanada alternative would be limited to supplies delivered at the North Needles and South Needles receipt points. Supplies delivered at Kramer Junction, Wheeler Ridge, and Kern River Station could not be redelivered to the Southern System via TransCanada’s pipeline. Conversely, the North-

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200 Ex. SCG-06 (Bisi) at 16.  
201 Ex. SCG-06 (Bisi) at 16.  
202 Ex. SCG-06 (Bisi) at 13.  
203 Ex. SCG-06 (Bisi) at 14; Ex. SCG-17 (Bisi) at 8.
South Project will provide Southern System customers with access to supplies from all of these receipt points:

[T]he supplies available to North-South Project are those delivered at our North Needles receipt point, at our South Needles receipt point, at our Kramer Junction receipt point, at our Wheeler Ridge receipt point, at our Kern River Station receipt point, and from our Honor Rancho Storage Field. That is six-fold improvement over what we've had on the Southern System today where it is the receipt point from Blythe.  

This substantial benefit—along with all of the other substantial benefits discussed above—would be lost if the Commission requires SoCalGas to contract for foreign pipeline capacity rather than constructing the North-South Project.


El Paso, TransCanada, and Transwestern all make much of the fact that their proposals are supposedly less expensive than the North-South Project. And that could be the case, though SoCalGas and SDG&E have our doubts. But the arguments of the foreign pipeline intervenors ignore a crucial distinction—the price of something does not equal its value.

For example, at $399, a good Dyson upright vacuum is substantially more expensive than the $183 Hoover ProGrade dedicated shop vacuum—and the Hoover is a good vacuum. But if you need to clean your entire house, and not just your garage or workshop (the Hoover bolts to the wall), the Dyson upright is a much better value—even at the higher price.

Something can be nicely priced and of good quality; but if it isn’t what you need, the value

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204 Tr. at 798-99 (SoCalGas/SDG&E/Bisi).
205 El Paso Opening Brief at 11; TransCanada Opening Brief at 17; Transwestern Opening Brief at 27.
206 See SoCalGas/SDG&E Opening Brief at 64-76. The cost-related claims in the intervenors’ Opening Briefs did nothing to allay our concerns about the preliminary nature of their cost estimates and the questionable assumptions underlying their estimates. But their Opening Briefs presented no new information regarding the estimates themselves, and therefore SoCalGas and SDG&E will rely upon the discussion of this topic in our Opening Brief.
proposition evaporates. This is clearly the case for the long-term capacity contracts being offered by El Paso, Transwestern, and TransCanada.

El Paso—who seems to have the most firm cost estimate of the three—explains that its proposal would result in an annual revenue requirement of between $56.14 million to $72.30 million which, according to El Paso, represents a savings of between 41% to 53% compared with the North-South Project.207 For that cost, however, would Southern System customers receive access to supplies from SoCalGas’ storage facilities? Would Southern System customers receive access to supplies delivered into Northern receipt points? Would SoCalGas and SDG&E customers receive the operational and reliability benefits that would be created by finally linking the Northern and Southern portions of the SoCalGas/SDG&E transmission system? Would the overall receipt point capacity of the SoCalGas and SDG&E transmission system be increased? The answer to each of these questions is of course “no.”

As discussed above, the only benefit that would be provided by the El Paso and Transwestern projects would be the acquisition of a long-term firm interstate path to bring supplies into Blythe. The same is true for the TransCanada proposal, except that TransCanada’s project could also deliver supplies from North and South Needles into Blythe. Otherwise, El Paso, Transwestern, and TransCanada would simply perpetuate the status quo at a much higher cost than current Southern System support activities. Is it worth spending $56.14 million to $72.30 million annually in order to acquire long-term interstate capacity, but not improve the existing reliability situation? SoCalGas and SDG&E do not believe so. If we thought that long-term interstate capacity contracts would solve the Southern System reliability problem, we would have proposed them.

207 El Paso Opening Brief at 6.
Furthermore, El Paso, TransCanada, and Transwestern are offering a false comparison because their “lower” project prices do not take into account the costs to Southern System customers and the rest of California if keeping the reliability status quo should result in future curtailments. If, for example, Blythe remains the single source of flowing supplies into the Southern System and El Paso’s South Mainline goes down for an extended length of time, the resulting economic and social costs from the extended loss of natural gas service and rolling blackouts in the Southern System and perhaps other portions of Southern California could dwarf the cost of the North-South Project.

7. Transwestern’s “Much Earlier” In-Service Claim Ignores Reality

In its Opening Brief, Transwestern asserts that its project could be in service “much earlier than the North-South Pipeline.” TransCanada’s Opening Brief refers to a “faster project timeline,” but otherwise TransCanada and El Paso do not appear to be repeating their earlier claims of schedule superiority. SoCalGas and SDG&E believe this decision by El Paso and TransCanada is probably wise—intervenor assertions of quicker in-service dates for the alternative projects appear unfounded for a variety of reasons discussed at length in our Opening Brief.

For the sake of brevity, SoCalGas and SDG&E will not repeat our Opening Brief schedule arguments in response to Transwestern’s latest assertions. But we do wish to briefly provide a reality check for Transwestern. Here are the relevant timing-related facts:

- It is now mid-October 2015, and the Commission will almost certainly not be issuing a final ratesetting/safety decision in this proceeding prior to the first quarter of 2016. And if this decision is delayed until the conclusion of CEQA

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208 Transwestern Opening Brief at 25.
209 TransCanada Opening Brief at 16.
210 SoCalGas/SDG&E Opening Brief at 69-73.
review, the likely final decision date is probably closer to the first quarter of 2017.

SoCalGas will not issue a Request for Offers (RFO) for System Operator interstate pipeline capacity unless and until directed to do so by the Commission.

An RFO for long-term interstate capacity (and possibly other competing alternatives) will likely take substantial time to develop and execute, as will data exchange and negotiations with participating parties.

Any agreement(s) resulting from an RFO would need to be approved by the Commission in a separate application proceeding.\textsuperscript{211} This application will take substantial time to develop, particularly since SoCalGas and SDG&E do not believe that the long-term contractual alternatives presented in this proceeding are an adequate response to the Southern System reliability problem.

Given these circumstances, the \textit{earliest} a long-term capacity arrangement could be presented to the Commission via an application would probably be the fourth quarter of 2016. And if a final decision in this current proceeding is not issued until after the first quarter of 2016, any subsequent RFO-related application could not be submitted until 2017 or 2018.

The length of application proceedings at the Commission varies widely (this proceeding is already in its 23\textsuperscript{rd} month). It would be unusual for a contested application with intervenors arguing for a “no project” option to take less than 12 months, and a proceeding length of 18 months or more is probably more likely.

Assuming a best-case scenario for Transwestern of an RFO-related application in the fourth quarter of 2016 and an 18-month application proceeding from start to finish, the earliest that Transwestern (or the other foreign pipeline proponents) could begin their FERC and environmental reviews would be mid-2018. Transwestern estimates that Phase 1 of its project would take “24 to 36 months” to develop, “measured from the date a final decision is

\textsuperscript{211} The Scoping Memo makes it clear that the Commission would not be approving the alternative pipeline proposals in this Application. See Scoping Memo at 13 (“The consideration of alternative pipeline proposals here is limited solely to a hypothetical cost-benefit comparison to the North-South Pipeline proposal.”)
made to move forward with development.” accordingly, even using schedule assumptions favorable to Transwestern, its proposed project would have an initial in-service date later than the North-South Project, not “much earlier.”

FERC approval and NEPA/state environmental review of new pipelines in Arizona might take somewhat less time than Commission ratesetting, safety, and CEQA review of a pipeline project in California. But the North-South Project has been steadily moving forward since we filed this Application in December of 2013, while El Paso, Transwestern, and TransCanada have done nothing other than to try to stop the North-South Project. The North-South Project is on track to have an earlier in-service date than the purely conceptual alternatives being offered up by El Paso, Transwestern, and TransCanada.

8. **The Foreign Pipeline Proposals Would Effectively Rebundle a Portion of Noncore Service**

The proposals from El Paso, Transwestern, and TransCanada would require SoCalGas to purchase long-term interstate capacity on behalf of our noncore customers. Moreover, SoCalGas’ System Operator would also need to buy a substantial volume of gas supplies in the producing basins each day to fill that capacity (empty interstate capacity would do nothing to help meet Southern System minimum supply requirements). This approach would effectively “rebundle” noncore service to some extent, since SoCalGas would be back in the business of procuring interstate capacity and basin supplies for customers other than our bundled core customers.

SoCalGas and SDG&E view this as a step backwards. Yes, we currently procure flowing supplies on behalf of noncore customers in order to maintain Southern System

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212 Transwestern Opening Brief at 25.
213 SoCalGas and SDG&E currently estimate that the North-South Project could be placed in service by the fourth quarter of 2019. (See SoCalGas/SDG&E Opening Brief at 8.)
minimum flows. But our current purchases are more limited than those contemplated by the foreign pipeline intervenors. Further, SoCalGas and SDG&E are trying to get out of the business of day-to-day gas procurement for noncore customers. If the North-South Project is allowed to proceed, the SoCalGas System Operator will no longer need to procure supplies to meet Southern System minimum flow requirements unless and until demand conditions exceed a 1-in-10 year cold day requirement.

Putting SoCalGas back in the position of entering into long-term transportation and supply arrangements on behalf of its noncore customers would run contrary to two decades of natural gas deregulation. The Commission should think long and hard before taking such a step.

9. **In this case, “Buying” rather than “Leasing” Makes Sense**

In its Opening Brief, El Paso responds to the following statement by Ms. Marelli during hearings:

> One of the obvious benefits of buying versus leasing, what you're suggesting, is we actually have a physical asset that we operate, that we control, that we're not beholden to another party to make it work to benefit our system.

According to El Paso, the “buying versus leasing” argument fails to take into consideration the continuity of service rights inherent in the FERC’s regulatory framework.

SoCalGas and SDG&E do not disagree with El Paso’s contention that current FERC rules provide for a Right of First Refusal (ROFR) to a shipper paying a pipeline’s maximum tariff rate for capacity. But this is just one factor to consider, and not the most important one.

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214 Ex. SCG-02 (Marelli) at 18.
215 El Paso Opening Brief at 3-4 (citing Tr. at 253 (SoCalGas/SDG&E/Marelli)).
216 El Paso Opening Brief at 4.
217 See El Paso Opening Brief at 4-5.
First, it only makes sense to buy or lease something if you need it. A long-term lease of agricultural land in St. Helena may be a great idea if you are a wine maker. But if what you really need is a shorter commute into San Francisco, Napa Valley agricultural acreage would not be a wise choice. A “lease” of space on interstate pipeline facilities is simply not equivalent to a much-needed on-system link between our Northern and Southern Transmission systems.

Second, no matter how El Paso wishes to characterize the situation, what they and the other foreign pipeline intervenors are offering is a contractual right to use space on a FERC-jurisdictional pipeline. A ROFR only gives a shipper the right to continue to pay the pipeline’s maximum tariff rate—which is subject to change with each pipeline rate case—for some or all of the shipper’s capacity at the end of a contract term; and the shipper holding the ROFR may be required to match another shipper’s bid for the capacity for an unlimited subsequent term, for example ten or twenty years, to retain the capacity. Moreover, FERC-jurisdictional assets under contract can be repurposed or taken out of service if FERC allows it, and FERC can change its rules with respect to capacity commitments.

The North-South Project would be tangible physical assets owned by SoCalGas that is dedicated to public service for many, many years. At the end of a contract with El Paso, Transwestern, or TransCanada, SoCalGas would own nothing, and we would need to re-contract at maximum rates if the capacity still holds operational or economic value. By contrast, after 20 years of service from the North-South Project, SoCalGas would own a substantially-depreciated asset dedicated to public use—an asset that could continue to

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218 Ex. SCGC-8 (SoCalGas/SDG&E Response to SCGC Data Request No. 23.4.1).
To provide public service for decades to come, with a lower and lower cost each year, at least for the pipeline component.

To achieve an acceptable level of future reliability for Southern System customers, we need a physical link between our Northern Zone and Southern System, and we should own that link. Renting space on an interstate pipeline simply doesn’t achieve what we are trying to accomplish with the North-South Project. Renting works in some instances—for example, SoCalGas’ Gas Acquisition Department “rents” interstate pipeline capacity on a regular basis. But for an asset that is crucial to reliability and operational flexibility, we need to be an owner, not a renter.

10. The Commission Should Not Place the North-South Project at a Disadvantage because it is Located in California and Subject to CEQA Review by the Commission

As mentioned in our Opening Brief, SoCalGas and SDG&E strongly believe that the Commission should not put the North-South Project at a disadvantage vis-à-vis the foreign pipeline alternatives because our project will be constructed in California, and that only our project will be subject to CEQA review by the Commission.219 We think this point bears repeating.

El Paso, TransCanada, and Transwestern are FERC-jurisdictional entities proposing FERC-jurisdictional projects. SoCalGas and SDG&E do not have a problem with FERC-jurisdictional pipelines in general; in fact most of our flowing supplies are provided courtesy of FERC-jurisdictional interstate pipelines. But the purported speed and cost savings of the intervenor alternatives in this proceeding—to the extent they really exist at all—appear to have at least some relationship to a relatively quick approval process at FERC, streamlined

219 SoCalGas/SDG&E Opening Brief at 76.
environmental reviews, and, at least for the El Paso and Transwestern proposals, reduced costs associated with doing business in Arizona rather than California.

It would not be fair for the Commission to penalize SoCalGas and SDG&E for the additional time and dollars we will need to spend to satisfy California’s more stringent regulatory and environmental requirements—including CEQA review by the Commission. Conversely, El Paso and Transwestern should not be given a leg up by the Commission for proposing Arizona-based projects that are not subject to CEQA, and TransCanada should not be advantaged by the time it may save by having the California States Lands Commission be the CEQA lead agency for its proposed project.220

D. COST RECOVERY AND RATESETTING PROPOSALS

The cost recovery and ratesetting proposals proposed by SoCalGas and SDG&E are reasonable, and should be adopted by the Commission.221 The alternatives proposed by intervenors are unreasonable and should not be approved.

1. The Commission Should Authorize SoCalGas to Recover the Full Cost of the North-South Project in BTS Customer Rates

As explained in our Opening Brief, SoCalGas and SDG&E propose to recover the full cost of the North-South Project in Backbone Transmission Service (BTS) rates.222 This proposal is reasonable, and should be approved. Counterproposals from TURN, ORA, and SCGC are without merit, and should be denied.

220 Ex. NB-01 (Schoene) at 11 (“TransCanada believes that California State Lands will be the lead agency in the CEQA review process.”)
221 As with our Opening Brief, this discussion of cost recovery and ratesetting proposals generally follows the order of presentation in our Application, interspersed with contrary cost recovery and ratesetting proposals from intervenors.
222 SoCalGas/SDG&E Opening Brief at 77-78.
a. The Commission should not treat the North-South Project as an Incrementally-Priced “Let the Market Decide” Project

SCGC and TURN propose that the Commission treat the North-South Project as an incrementally-priced “Let the Market Decide” project. According to SCGC:

[I]f the Applicants are permitted to proceed with the Project, they should be permitted to proceed only if the revenue requirement for the Project is kept separate from the Applicants’ general revenue requirement and is billed separately through rates charged only to Project participants that contractually agree to bear North-South Project costs on a “let-the-market-decide” basis.223

Likewise, TURN asserts that: “Sempra should instead pursue this project as a market-based pipeline and recover costs through incremental rates paid by shippers who contract for pipeline capacity.”224 These proposals are misguided, and should not be adopted.

The Commission has used a “let the market decide” approach for very few projects, most notably PG&E’s Line 401 in the early 1990s.225 The fundamental characteristic of these projects is that they were an increase in capacity to serve a new class of customers or market participants. Moreover, SoCalGas and SDG&E are not aware of this policy being applied to any in-state pipeline projects for many years.226

The Commission has never used a “let the market decide” approach for reliability improvements, and for good reason. Individual customers such as the anchor tenants on Line 401 may be able to justify entering into long-term arrangements for new capacity if the contract provides them something valuable they would not otherwise receive—in the case of the Line 401 anchor tenants, a firm path to competitively-priced Canadian supplies. But it

223 SCGC Opening Brief at 48.
224 TURN Opening Brief at 44.
225 See D.90-12-119 and D.92-10-056.
226 Recent applications of this policy appear to have been limited to competitive storage projects in PG&E’s service territory. See, e.g., D.09-10-035 (Gill Ranch Storage); D.04-03-020 (Lodi Gas Storage).
would not make sense for existing customers to enter into long-term contracts just to receive the same level of service and reliability other customers are receiving without the extra charge and long-term commitment.

Drawing on the sewage treatment facility analogy above, would it make sense for any of a municipalities’ residents to sign up for a long-term commitment to pay for the new facilities when their neighbors did not have to? Of course not. Anyone signing up would receive a substantial burden—a long-term commitment to pay higher costs—while receiving nothing more than their neighbors who were not shouldering the same burden. The new sewage treatment facilities will benefit everyone in the town, and should be paid for by everyone. The same holds true for the North-South Project. SoCalGas and SDG&E are proposing this project to increase reliability and decrease the risk of curtailment, not to increase capacity for certain customers or customer groups, to compete against proposed interstate pipeline expansions, or anything of the sort. Yes, the project will increase overall system receipt capacity. But that is an incidental benefit of the project (which will potentially benefit all of our customers through increased flexibility), and not the purpose of the project itself.227

For each of these reasons, the “let the market decide” proposals by SCGC and TURN are ill-conceived and misguided. The cost of the North-South Project should be paid for by all customers through BTS rates, as SoCalGas and SDG&E have proposed.

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227 Ex. SCG-18 (Bisi) at 12.
b. The Commission Should Decline to Adopt ORA’s Proposal that SoCalGas Shareholders bear the Cost of the Supposed “Slack Capacity” that ORA Attributes to the Project

In its Opening Brief, ORA argues that SoCalGas should bear the cost of a substantial portion of the North-South Project, based on a hypothetical load-factor-based formula:

ORA first requests that SCG bear the costs and risk for cost recovery for a portion of the capacity forecasted to be unused, which ORA suggests be calculated based on the load factor forecast provided by SCG extrapolated into a firm contract equivalent, based on an assumption of a 75% load factor for a fully subscribed pipeline. In turn, SCG would be at risk for the costs of 253 MMcf/d of its proposed 800 MMcf/d pipeline, or 31.6% of its proposed costs. This 31.6% figure is equivalent to approximately $197 million of the proposed 622 million revenue requirement, imposing the remaining 425 million as the revenue requirement to be recovered from ratepayers.228

This proposal from ORA—presented for the first time in its Opening Brief—is neither logical nor reasonable. ORA provides no explanation for why a load factor should be assigned to the project for cost recovery purposes. In fact, if load factor were the criteria for system improvements, capacity planning would be a very different process, with pipelines and compressors sized to operate much closer to their limits, and with no consideration given to peak-day planning criteria (since a 1-in-10 or 1-in-35 cold year analysis would obviously provide much different results from a system designed to always have a “75% or greater” load factor).

In addition, it is not clear what ORA means when it says that SoCalGas should be “at risk” for 31.6% of project costs. Is “at risk” simply a euphemism for disallowance? If so, the proposal is patently unreasonable. A utility is entitled to an opportunity to recover its full operating costs, plus a reasonable return, in exchange for providing utility service under

228 ORA Opening Brief at 12.
SoCalGas has a right to seek recover the full cost of the North-South Project in customer rates, and not just some percentage thereof. Even if “at risk,” is not code for “disallowance,” and SoCalGas would have some sort of opportunity to recover the “at risk” portion of its North-South Project expenditures, ORA’s proposal raises more questions than it answers: How would SoCalGas have an opportunity to recover such costs? Would shareholders be able to sell a portion of the project’s capacity to the highest bidder? And, if so, what could SoCalGas charge, and which customers would have priority when the project’s capacity is needed to avert a curtailment? More crucially, as discussed in the previous subsection, the Commission does not—and should not—leave the responsibility for safe and reliable utility service up to the vicissitudes of the competitive market.

For each of these reasons, the Commission should disregard ORA’s new “load factor” proposal. SoCalGas should be able to recover the full cost of the North-South Project via BTS rates.

c. Core Customers Should Not be Exempted from Paying for North-South Project Costs

TURN takes the position that core customers should not have to pay any North-South Project costs. According to TURN, this is because “[n]ot only has the core consistently flowed gas into Blythe, but also both core average and peak day demands are forecast to

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229 See, e.g., D.93-02-012, mimeo., at 42 (“The guiding principle has been that the Constitution protects utilities from being limited to a charge for their property serving the public which is so 'unjust' as to be confiscatory . . . . If the rate does not afford sufficient compensation, the State has taken the use of utility property without paying just compensation and so violated the Fifth and Fourteenth Amendments.” (citing Duquesne Light Co. v. Barasch (1989) 488 U.S. 299, 307-308)). See also D.06-11-050, mimeo., at 21-22.
decline through 2035.” TURN alternatively proposes that the core be held responsible for no more than $6.1 million per year of North-South Project annual revenue requirement because that is the supposed “price premium” that core has incurred from 2009-14 to bring gas into Blythe rather than other receipt points. Neither proposal has merit.

The North-South Project will provide reliability benefits for all Southern System customers, core and noncore alike. It would be unfair to require noncore customers to pay for all of these costs, just as it would be unfair to place all such costs on core customers. Likewise, it does not make sense to allocate these costs on the basis of past Blythe delivery price premiums or some other artificial benchmark. If core customers point to Blythe delivery price premiums, noncore customers will likely point to System Operator minimum flow costs that were even less than the premiums paid by core customers in certain years—with the end result that neither group would end up paying for their fair share of North-South Project costs.

North-South Project costs should be recovered in BTS rates, consistent with the treatment of all other SoCalGas backbone transmission costs. No customer or group of customers should be exempted from paying for these costs.

d. The Commission Should Not Establish a Cost Cap for the Project

In testimony, ORA and TURN argued that a cost cap should be placed on the total North-South Project to limit ratepayer exposure to rising construction costs. And in our Opening Brief SoCalGas and SDG&E responded, explaining why a cost cap would not be appropriate.

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230 TURN Opening Brief at 45.
231 TURN Opening Brief at 45.
232 Ex. SCG-09 (Bonnett) at 1.
233 Ex. ORA-02 (Sabino) at 75; Ex. TURN-02 (Emmrich) at 2.
234 SoCalGas/SDG&E Opening Brief at 78-80.
TURN and ORA once again argue for a cost cap in their Opening Briefs, but they also make it explicit that they are recommending a hard cost cap\textsuperscript{235}—i.e., that no matter how reasonable our development and construction of the project, SoCalGas would not be able to seek rate recovery of costs in excess of the cap.

SoCalGas and SDG&E do not favor a cost cap for the North-South Project for the reasons discussed in our Opening Brief. But imposition of a hard cost cap would be unreasonable, and bad policy. Market factors such as escalation and a steady supply of qualified vendors are beyond the control of SoCalGas and SDG&E, and it would be unreasonable for shareholders to bear the risk of cost overruns attributed to these factors while ratepayers enjoy the benefits of the North-South Project.\textsuperscript{236} SoCalGas and SDG&E should not be required to forgo necessary expenditures in order to stay within a cap, or have shareholder penalties be imposed for undertaking necessary costs.\textsuperscript{237}

Placing all risk upon a utility of the costs of a project exceeding a pre-established cost cap, regardless of whether those costs are reasonably-incurred, could either discourage infrastructure investment or force utilities to increase their initial project estimates to account for a broader range of potential risks that cannot be completely predicted or controlled.\textsuperscript{238} Neither outcome would benefit our customers. If SoCalGas prudently executes a needed infrastructure project through sound project and construction management, thoughtful and preemptive risk mitigation, and proactive and diligent negotiation of purchase orders,

\textsuperscript{235} TURN Opening Brief at 2 and 44; ORA Opening Brief at 12. In its Opening Brief, SCGC also indicates that it supports the imposition of a cost cap on the project. (SCGC Opening Brief at 55.)
\textsuperscript{236} Ex. SCG-19 (Yee) at 2.
\textsuperscript{237} Ex. SCG-19 (Yee) at 2.
\textsuperscript{238} Ex. SCG-13 (Buczkowski) at 2.
construction contracts and change orders, then customers’ rates should reflect the full costs of this benefit.239

The North-South pipeline and compression assets will be dedicated to public service for many years. SoCalGas deserves an opportunity to seek recovery of their entire cost in rates. SoCalGas and SDG&E do not believe that a cost cap is even necessary in this instance. But if the Commission chooses to impose one, SoCalGas deserves an opportunity to seek recovery of project expenditures in excess of the cap.

e. **If the Commission Adopts a Cost Cap for the North-South Project, the Cap Should Be the Full Estimated Cost of the Project, with Reasonableness Review Only for Project Costs that Exceed the Cap**

For our response to ORA’s and TURN’s arguments that the North-South Project should be subject to a hard cost cap, please see the discussion in the subsection immediately above. Otherwise, please see our Opening Brief.240

f. **If the Commission Adopts a Cost Cap for the North-South Project, it should authorize a Separate Regulatory Account for SoCalGas to Record Project Costs in Excess of the Cap**

This proposal by SoCalGas and SDG&E was not addressed by any of the intervenors in their opening briefs. Please see our Opening Brief on this topic.241

g. **The Commission Should Deny SCGC’s Reasonableness Review and Rate Recovery Deferral Proposals**

SCGC asserts that SoCalGas should not receive recovery of North-South Project costs until after a GRC reasonableness review of project costs in the GRC following completion of the project.242 This proposal is not reasonable, and should be denied.

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239 Ex. SCG-13 (Buczkowski) at 2.
240 SoCalGas/SDG&E Opening Brief at 81.
241 SoCalGas/SDG&E Opening Brief at 81.
242 SCGC Opening Brief at 51.
According to SCGC, “[a] GRC reasonableness review would provide the Commission with an opportunity to determine whether the Project is needed before burdening ratepayers with the cost of the Project and would ensure that the costs incurred by the Applicants in completing the Project were reasonable before the costs would be recovered in rates.”243 This proposition is completely unreasonable. The purpose of the current proceeding is to determine whether the North-South Project is needed, and whether SoCalGas will be able to recover project costs in customer rates. It would be utterly unfair—and it would make a mockery of the regulatory process—to have the Commission authorize rate recovery of the North-South Project in this proceeding, and then to have a future proceeding to “determine whether the Project is needed.”

Likewise, now that SoCalGas has gone to the time and considerable expense of developing the project scope and AACE Class 3-quality estimates, it would not be reasonable to subject all project costs to the risk of future disallowance in a subsequent reasonableness review. As discussed above, SoCalGas and SDG&E do not believe that a cost cap is necessary for the North-South Project. But a cost cap—with reasonableness review only for project costs in excess of the cap—is eminently preferable to post-construction reasonableness review of all project costs.

SCGC’s proposal to defer rate recovery of any North-South Project costs until the GRC following completion of construction is similarly unreasonable. It would not be fair for the Commission to require SoCalGas to pay for the costs associated with this important project without receiving any rate recovery for project costs until many years hence. Moreover, the lengthy delay in rate recovery posited by SCGC is a recipe for rate shock.

243 SCGC Opening Brief at
their 2016 GRC proceedings (A.14-11-004/A.14-11-003), SoCalGas and SDG&E have proposed a three-year GRC period. Presuming Commission approval of that particular proposal, SoCalGas would need to file another GRC for the period of 2019 through 2021. With an estimated Project completion date of December 31, 2019, deferring recovery in rates of the North-South Project’s revenue requirement until the effective date of SoCalGas’ next GRC would result in a Project-related rate increase on January 1, 2022, of close to $375 million.244 Such a rate increase would be in addition to the impact on rates for implementing the 2022 GRC revenue requirement and could potentially create rate shock.245

SCGC points to SoCalGas’ acquisition and refurbishment of Line 6916 as a capital addition between rate cases that was handled in a subsequent rate case.246 But that project was much smaller. SoCalGas and SDG&E are seeking pre-construction rate recovery authorization for the North-South Project precisely because the North-South Project is not like other smaller capital projects such as Line 6916.

SCGC alternatively argues that rate recovery for North-South Project expenditures until the next GRC should be limited to the savings attributable to the project.247 From a fairness and potential rate shock standpoint, this is almost as bad as providing SoCalGas with no project-related rate recovery until 2022—and it raises the additional potential complication of a regulatory battle each year to determine the level of potential savings attributable to the North-South Project. SCGC’s only support for limiting interim rate recovery to project savings is the Commission’s interim rate treatment of the Diablo Canyon and San Onofre

244 Ex. SCG-20 (Ahmed) at 2.
245 Ex. SCG-20 (Ahmed) at 2.
246 SCGC Opening Brief at 51.
247 SCGC Opening Brief at 52.
nuclear power plants in the 1980s. These are obviously unusual projects that may have required special treatment (especially since one of the Diablo units was constructed backwards). The Maximum Additions Adjustment Clause (MAAC) balancing account approach used for Diablo Canyon and SONGS in the 1980s has never been implemented for anything other than these two nuclear power plants. There is no reason or rationale for extending such extraordinary treatment to a natural gas pipeline or a compressor station rebuild.

For each of these reasons, SoCalGas and SDG&E respectfully request that the Commission deny SCGC’s unfair proposals for post-construction reasonableness review and deferral of project-related rate recovery.

h. The Commission Should Decline to Adopt the Contingency Cap proposed by ORA

In its testimony, ORA recommended capping the North-South Project contingency costs at 5%. ORA’s sole rationale for this recommendation was that Transwestern apparently included a 5% contingency on its proposal. In our Opening Brief, SoCalGas and SDG&E explained at length why ORA’s reliance on Transwestern’s proposal is misplaced, and why the overall contingency amount of 13.8% included in our North-South Project estimates is both reasonable and consistent with Commission precedent.

In its Opening Brief, ORA mentions contingency only once—in the “Recommendations” section of its brief:

Contingency above current costs should be capped at 5%, which is the factor used by competitor North Baja, and reflects the already

248 SCGC Opening Brief at 52-53.
249 Ex. ORA-02 (Sabino) at 79.
250 Ex. ORA-02 (Sabino) at 56 (referencing Transwestern data response ORA-NSP-TW-02, Q.1).
251 SoCalGas/SDG&E Opening Brief at 82-85.
increased costs upon the resubmission of the original application. 252

Given that this is just a summary recommendation that adds no new argument or rationale, SoCalGas and SDG&E will rest on our Opening Brief presentation on this topic—with only one limited response here. ORA’s reference to the contingency used by North Baja is incorrect (and may in fact just be a typo). Transwestern was the foreign pipeline proponent that included a 5% contingency factor in its preliminary estimate. TransCanada’s (i.e., North Baja’s) cost estimate includes contingencies of 10% or 15%, depending on project element. 253 While SoCalGas and SDG&E do not endorse TransCanada’s project, its contingency is more aligned with industry estimating practices, and supports our use of an overall 13.8% contingency for the North-South Project.

For these reasons, and for all of the reasons described in our Opening Brief, the Commission should decline to adopt the 5% contingency cap proposed by ORA.

i. **The Commission Should Decline to Adopt the Project Cost Disallowances proposed by ORA and SCGC**

In their Opening Briefs, ORA and SCGC recommend disallowance of a number of North-South Project costs. These recommendations are not reasonable, and should not be adopted.

i. **ORA’s Proposed Elimination of Contingency for Adelanto Compressor Station Tax**

This proposal in ORA’s testimony was not addressed by ORA or any other intervenor in their opening briefs. Please see our Opening Brief on this topic. 254

ii. **ORA’s Proposed Disallowance of Project Outreach and**

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252 ORA Opening Brief at 24.
253 Ex. SCG-12 (Buczkowski) at 7 (referencing SCG-TransCanada-DR2).
254 SoCalGas/SDG&E Opening Brief at 85-86.
Education Expense

This proposal in ORA’s testimony was not addressed by ORA or any other intervenor in their opening briefs. Please see our Opening Brief on this topic.255

iii. SCGC’s Proposed Reductions of Post-Construction O&M Costs

In its Opening Brief, SCGC contends that the Commission should reject SoCalGas and SDG&E’s proposal to include incremental post-startup O&M in the NSIMA.256 According to SCGC, “[t]he Applicants should be required to manage post-startup costs of the new North-South facilities just as they manage O&M for all of their other transmission activities.”257 On the surface, prudent “management” of O&M costs sounds like a reasonable proposition. But that isn’t really what SCGC is asking for. Rather, SCGC is proposing a straight disallowance that would neither be reasonable nor fair.

As explained in our Opening Brief, the North-South Project will result in post-construction O&M costs—greenhouse gas emission fees resulting from operating the new compressor units at Adelanto; and incremental costs to safely operate the Adelanto Compressor Station, Adelanto-Moreno pipeline, Moreno Pressure Limiting Station, Whitewater Pressure Limiting Station, Shaver Summit Pressure Limiting Station, and Desert Center Pressure Limiting Station.258

All of these post-construction O&M costs will be incremental.259 They will not be included in SoCalGas’ revenue requirement until the North-South Project is incorporated into

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255 SoCalGas/SDG&E Opening Brief at 86-87.
256 SCGC Opening Brief at 54.
257 SCGC Opening Brief at 54.
258 SoCalGas/SDG&E Opening Brief at 87.
259 Ex. SCG-13 (Buczkowski) at 12-13.
the test year of a GRC.\textsuperscript{260} If SoCalGas is not allowed to include these costs in its NSIMA,\textsuperscript{261} they will effectively be disallowed until the next GRC decision. This would not be fair. There is no reasonable rationale for having SoCalGas shareholders pay for the cost of Adelanto Compressor Station emission credits and necessary North-South Project O&M expenditures until the project flanges up with a GRC test year.\textsuperscript{262} SoCalGas and SDG&E are proposing that all North-South Project costs—including post-construction O&M costs—be included in future GRCs.\textsuperscript{263} Until that time, however, SoCalGas needs to be able to record the costs in its NSIMA, and recover them in the manner we have proposed.

iv. **SoCalGas and SDG&E Agree With SCGC Regarding the Appropriate Treatment of Greenhouse Gas Emission Fees Associated With the Project**

This topic was not addressed by SCGC or any other intervenor in their opening briefs. Please see our Opening Brief.\textsuperscript{264}

2. **The Commission Should Approve SoCalGas and SDG&E’s Proposed Approach to Calculating the Revenue Requirements Associated with the North-South Project, Including Proposed Loaders, Escalation Rates, and AFUDC**

As explained in our Opening Brief, SoCalGas and SDG&E’s revenue requirement calculations for the North-South Project are reasonable, and based upon Commission-

\textsuperscript{260} Ex. SCG-07 (Ahmed) at 2.
\textsuperscript{261} As noted in our Opening Brief, SoCalGas and SDG&E agree with SCGC that as a result of D.14-12-020 greenhouse gas emission fees should be recorded in an account other than the NSIMA. (SoCalGas/SDG&E Opening Brief at 89.)
\textsuperscript{262} In testimony, SCGC argued that our post-construction O&M cost estimates were too high. SoCalGas and SDG&E responded with rebuttal testimony, and in our Opening Brief. (See SoCalGas/SDG&E Opening Brief at 88-89.) SCGC did not include this argument in its Opening Brief.
\textsuperscript{263} See SoCalGas/SDG&E Opening Brief at 95-97.
\textsuperscript{264} SoCalGas/SDG&E Opening Brief at 89.
approved methodology. They should be approved by the Commission without any changes.

3. The Commission Should Decline to Approve SCGC’s Proposed Changes to Our Capitalization and Expense Policy

In its testimony, SCGC proposed that expenditures for office space and other office-related costs during the North-South Project’s construction be capitalized as a direct cost under “rents” or capitalized indirectly through the Administration & General (A&G) loader. Additionally, SCGC proposed that expenditures for environmental monitoring after the North-South Project is placed in-service should be expensed. SoCalGas and SDG&E responded to both of these proposals in our Opening Brief.

In its Opening Brief, SCGC presents a somewhat revised version of its arguments regarding expenditures for office space and other office-related costs during the North-South Project’s construction (labelled “pre-startup O&M expenses” by SCGC). But SCGC does not address the treatment of expenditures for environmental monitoring after the North-South Project is placed in-service. Accordingly, with respect to the latter topic, please see our Opening Brief.

With respect to pre-startup O&M expenses, as explained in our Opening Brief, these expenses will consist primarily of office space and office-related costs. These expenses are forecasted to total approximately $700,000 for the project. SCGC proposes that these expenses not be included in the NSIMA because SoCalGas will be adding an A&G loader to

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265 SoCalGas/SDG&E Opening Brief at 90-92.
266 Ex. SCGC-02 (Yap) at 19.
267 Ex. SCGC-02 (Yap) at 23.
268 SoCalGas/SDG&E Opening Brief at 92-93.
269 SoCalGas/SDG&E Opening Brief at 92.
270 Ex. SCG-08 (Yee) at 3.
North-South Project costs. According to SCGC, “Applicants should not be permitted to both fully load North-South Project costs and to simultaneously directly charge overhead office costs of by recording the costs in the NSIMA.”271 This proposal by SCGC is not well founded.

Pre-startup O&M expenditures for the North-South Project are incremental costs that will be incurred directly as a result of the North-South Project. Direct charging of these particular incremental O&M costs to the project as opposed to employing an allocation methodology such as an overhead rate is superior as there is a direct cost causation that is specifically identifiable and traceable to a source.272 And SoCalGas will not be double-recovering these pre-startup O&M expenses—once through direct charge and a second time via loaders applied to project costs—as SCGC appears to be arguing. This is because pre-startup O&M expenses that are directly charged to the project will not also be factored into overhead loaders applied to the project.

SoCalGas and SDG&E’s proposed treatment of these costs is consistent with our capitalization policy—which conforms to the FERC Code of Federal Regulations – Uniform System of Accounts.273 SCGC’s proposed approach is not, and should not be adopted.

4. The Commission Should Authorize SoCalGas to File an Advice Letter within 60 Days After North-South Project Assets Are Placed Into Service, and to Incorporate the Actual Revenue Requirement in Rates on the First Day of the Next Month Following Advice Letter Approval

For our response to SCGC’s proposal that SoCalGas not receive recovery of any North-South Project costs until after a reasonableness review of project costs in the GRC

271 SCGC Opening Brief at 54.
272 Ex. SCG-19 (Yee) at 4.
273 Ex. SCG-19 (Yee) at 3. In general, SoCalGas and SDG&E define capital costs as those costs with a useful life of more than one year and that are incurred to construct, install, or prepare plant, property, and equipment for its intended use. (Id.)
following completion of the project, please see the discussion in subsection (D)(1) above. Otherwise, please see our Opening Brief.\textsuperscript{274}

5. **The Commission Should Authorize SoCalGas to Adjust the First Year’s Revenue Requirement, if placed in Rates on a Date Other Than January 1, using the Gross-Up Method Proposed by SoCalGas and SDG&E**

For our response to SCGC’s proposal that SoCalGas not receive recovery of any North-South Project costs until after a reasonableness review of project costs in the GRC following completion of the project, please see the discussion in subsection (D)(1) above. Otherwise, please see our Opening Brief.\textsuperscript{275}

6. **The Commission Should Authorize SoCalGas to Update the North-South Project Revenue Requirement Each Year Via SoCalGas’ Annual Consolidated Rate Filing for Rates Effective January 1st of the Following Year Until the North-South Project Revenue Requirement Is Included In a GRC**

For our response to SCGC’s proposal that SoCalGas not receive recovery of any North-South Project costs until after a reasonableness review of project costs in the GRC following completion of the project, please see the discussion in subsection (D)(1) above. Otherwise, please see our Opening Brief.\textsuperscript{276}

7. **The Commission Should Authorize SoCalGas to Establish a New Interest-Bearing NSIMA to Record Incremental O&M and Capital-Related Costs Associated With the North-South Project for Future Recovery**

This proposal by SoCalGas and SDG&E was not addressed by any of the intervenors in their opening briefs. Please see our Opening Brief on this topic.\textsuperscript{277}

8. **The Commission Should Authorize SoCalGas to Amortize NSIMA Balances in BTS Rates through SoCalGas’ Annual Regulatory Account Balance Update Filings until the Revenue Requirement and Incremental O&M**

\textsuperscript{274} SoCalGas/SDG&E Opening Brief at 93-94.
\textsuperscript{275} SoCalGas/SDG&E Opening Brief at 94-95.
\textsuperscript{276} SoCalGas/SDG&E Opening Brief at 95.
\textsuperscript{277} SoCalGas/SDG&E Opening Brief at 95-97.
Costs for the North-South Project Are Included In a GRC

For our response to SCGC’s proposal that SoCalGas not receive recovery of any North-South Project costs until after a reasonableness review of project costs in the GRC following completion of the project, please see the discussion in subsection (D)(1) above. Otherwise, please see our Opening Brief.278

9. The Commission Should Authorize SoCalGas to Transfer Any NSIMA Residual Balance after Incorporation in a GRC to the BTBA and Elimination of the NSIMA

This proposal by SoCalGas and SDG&E was not addressed by any of the intervenors in their opening briefs. Please see our Opening Brief on this topic.279

V. SAFETY

In the Scoping Memo, Assigned Commissioner Florio presents three safety-related questions:

6) Will the North-South Pipeline meet or exceed all applicable state and federal safety regulations, rules and requirements?

7) Will the North-South Pipeline management procedures and processes for the construction project provide public and worker safety during all phases of the project including, but not limited to, trenching, construction/fabrication, testing, and initial operation?

8) Will there be adequate management procedures and processes for fully documenting, and retaining records and documents related to, all aspects of the project including, but not limited to, initial design, materials procurement, employee and contractor operator qualifications, construction, testing, and initial operation?280

278 SoCalGas/SDG&E Opening Brief at 97.
279 SoCalGas/SDG&E Opening Brief at 98.
280 Scoping Memo at 13-14.
As explained in our Opening Brief, and in the undisputed testimony of Ms. Haines, the answer to each of these three questions is an unequivocal “yes”—(1) the North-South Project will meet or exceed all applicable state and federal safety regulations, rules and requirements; (2) the North-South Project management procedures and processes for the construction project provide public and worker safety during all phases of the project; and (3) there will be adequate management procedures and processes for fully documenting, and retaining records and documents related to, all aspects of the North-South Project.281

Despite the fact that only SoCalGas and SDG&E sponsored safety-related testimony, and despite the fact that no one had questions for our safety witness, ORA makes the following assertions about fire threats in its Opening Brief:

ORA is concerned that by approving a Greenfield pipeline that goes through two downtowns and over the fire-prone Cajon Pass where fires have previously threatened other gas pipelines, would pose unnecessary safety risks to California citizens near the path of the pipeline.282

It is not clear to SoCalGas and SDG&E whether ORA is arguing that the operation of the North-South Pipeline could create fires, or that naturally-occurring (or manmade) wildfires would themselves pose a threat to the new underground pipeline. Either way, however, the Commission and Southern Californians need not be concerned.

SoCalGas and SDG&E safely operate thousands of miles of natural gas transmission and distribution pipelines throughout Southern California. Our pipelines are located in a variety of locales, including both urban areas and sparsely populated habitats. These

281 See SoCalGas/SDG&E Opening Brief at 99-102.
282 ORA Opening Brief at 11. ORA’s only support for this proposition consists of two Riverside Press Enterprise newspaper articles about recent fires in the Cajon Pass. The Press Enterprise articles are dated July 18, 2015, and August 2, 2015. (Id.)
pipelines, and our related pipeline operations (such as right of way inspections), do not create a substantial fire risk at any location.\textsuperscript{283}

Moreover, the North-South Pipeline will not be put at substantial risk by wildfires that might occur in either the Cajon Pass or other portions of the pipeline route. Almost all of the pipeline will be buried 3 or more feet below the ground, so it will not be exposed to wildfires. Even above-ground portions of the line (such as bridge crossings) will not be at any risk from wildfires because the steel is so thick that it will easily withstand the heat of the fire. After a wildfire, SoCalGas might be required to re-coat exposed portions of the line. But neither the wildfire nor the recoating would affect the operation or safety of the line.

SoCalGas and SDG&E are used to operating pipelines in fire-prone areas—in fact a good case can be made that most of Southern California now qualifies as a fire-prone area—and we have not had any significant problems from wildfires. When wildfires occur we routinely send personnel to the site to help make sure that equipment being used to fight the fire doesn’t accidentally dig into one of our lines. In addition, mesh and fiber optics will be installed around the North-South Pipeline. Mesh should make dig-ins even less likely, and the fiber optics will give SoCalGas real-time information regarding pipeline condition.

For each of these reasons, ORA’s new post-hearing fire concerns are unfounded. The North-South pipeline (and related pipeline operations) will not create a substantial fire risk, and SoCalGas has effective policies and procedures in place to deal with the risk of wildfires to its pipeline facilities.

\textsuperscript{283} This may be obvious, but it bears noting that aside from a limited number of above-ground facilities such as valve stations, the North-South Pipeline will be located underground, with at least 42” of soil/fill material covering the pipeline in most locations.
VI. CONCLUSION

For the reasons set forth above and in our Opening Brief, Application, and supporting testimony, SoCalGas and SDG&E respectfully request that the Commission expeditiously approve the ratesetting and safety-related aspects of the North-South Project, and adopt each of the proposed recommendations set forth at the beginning of our Opening Brief.

Respectfully submitted,

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