

Company: Southern California Gas Company (U904G)
Proceeding: 2019 General Rate Case
Application: A.17-10-007/-008 (cons.)
Exhibit: SCG-210

SOCALGAS

REBUTTAL TESTIMONY OF NEIL P. NAVIN

(UNDERGROUND STORAGE)

JUNE 18, 2018

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



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**SOCALGAS REBUTTAL TESTIMONY OF NEIL NAVIN
(UNDERGROUND STORAGE)**

I. SUMMARY OF DIFFERENCES

TOTAL O&M - Constant 2016 (\$000)			
	Base Year 2016	Test Year 2019	Change
SOCALGAS	\$46,307	\$60,074	\$13,767
ORA	\$46,307	\$60,074	\$13,767

TOTAL CAPITAL - Constant 2016 (\$000)					
	2017	2018	2019	Total	Variance
SOCALGAS	\$208,535	\$180,646	\$172,606	\$561,787	
ORA	\$180,249	\$180,646	\$172,606	\$533,501	(\$28,286)

II. INTRODUCTION

This rebuttal testimony regarding SoCalGas’ request for Underground Storage addresses the following testimony from other parties:¹

- The Office of Ratepayer Advocates (ORA) as submitted by Kelly C. Lee (Exhibit ORA-14), dated April 13, 2018.
- The Office of the Safety Advocate (OSA) as submitted by Carolina Contreras and Jenny Au (Exhibit OSA-1), dated May 14, 2018.

A. ORA

ORA issued its report on SoCalGas – Underground Storage, and Aliso Canyon Turbine Replacement on April 13, 2018.² The following is a summary of ORA’s position(s):

¹ As a preliminary matter, the absence of a response to any particular issue in this rebuttal testimony does not imply or constitute agreement by SoCalGas with the proposal or contention made by these or other parties. The forecasts contained in SoCalGas’ direct testimony, performed at the project level, are based on sound estimates of its revenue requirements at the time of testimony preparation.

² April 13, 2018, Report on SoCalGas – Underground Storage, and Aliso Canyon Turbine Replacement, Exhibit ORA-14 (Kelly Lee).

1 **Underground Storage O&M**

2 **1. Non-Shared**

- 3 • ORA does not oppose SoCalGas’ proposed TY 2019 O&M expenses for
4 Underground and Aboveground Storage – Routine in the amount of
5 \$38.699 million. However, ORA recommends the establishment of a one-
6 way balancing account for costs resulting from “any emerging regulatory
7 requirements adopted and implemented by the utility over the GRC
8 period.”³
- 9 • ORA does not recommend any adjustment to SoCalGas’ TY 2019 forecast
10 of \$2.031 million for Storage Risk Management (Non-Refundable)
11 expenses.⁴
- 12 • ORA does not recommend any adjustment to SoCalGas’ forecasted TY
13 2019 expense in the amount of \$18.91 million for the Refundable Storage
14 Integrity Management Program (RSIMP).⁵ However, ORA recommends
15 that the Storage Integrity Management Program Balancing Account
16 (SIMPBA) be changed from a two-way balancing account to a one-way
17 balancing account.⁶

18 **2. Shared**

- 19 • ORA does not oppose SoCalGas’ forecast of \$0.434 million in TY 2019
20 for Senior VP – Storage and Transmission cost category.⁷

21 **Underground Storage Capital Expenditures**

- 22 • ORA recommends adopting SoCalGas’ 2017 adjusted-recorded capital
23 expenditures instead of SoCalGas’ 2017 forecast for Underground Storage

³ Ex. ORA-14 (Lee) at 1:17-21, and 2 (Table 14-1); *see* Revised Direct Testimony on Underground Storage, Exhibit SCG-10-R (Neil Navin) at NPN-18 (Table NPN-14).

⁴ Ex. ORA-14 (Lee) at 1:16-17, and 2 (Table 14-1); *see* Ex. SCG-10-R (Navin) at NPN-18 (Table NPN-14).

⁵ Ex. ORA-14 (Lee) at 2 (Table 14-1), and 11:2-3.

⁶ *Id.* at 1:22-24.

⁷ *Id.* at 1:26-27, and 2 (Table 14-1); *see* Ex. SCG-10-R (Navin) at NPN-29 (Table NPN-17).

1 which include Compressors, Wells, Pipelines, Purification, Auxiliary
2 Equipment, and SIMP.⁸ This results in a reduction of \$28.285M less than
3 \$208.535M, the amount forecasted by SoCalGas.

- 4 • ORA does not oppose SoCalGas’ 2018 and 2019 capital expenditures
5 forecast for Compressors, Wells, Pipelines, Purification, Auxiliary
6 Equipment, and SIMP in the amount of \$180.646M for 2018, and
7 \$172.606M for 2019.⁹
- 8 • ORA recommends a one-way balancing account for SoCalGas’ capital
9 expenses for Storage Wells “to record capital expenditures for wells
10 actually completed during this GRC period.”¹⁰
- 11 • ORA recommends that the SIMPBA be modified from a two-way
12 balancing to a one-way balancing account for capital expenditures.¹¹
- 13 • ORA does not oppose SoCalGas’ forecast for the Aliso Canyon Turbine
14 Replacement (ACTR) Compressors capital expenditures in the amount of
15 \$19.602 million in 2017, \$1.250 million in 2018, and \$0 in 2019.¹²

16 **B. OSA**

17 The OSA submitted testimony on May 14, 2018.¹³ The following is a summary of OSA’s
18 position(s) as it pertains to Underground Gas Storage operations:

- 19 • “[] Underground Gas Storage would benefit from a Safety Management
20 System approach.”¹⁴

⁸ Ex. ORA-14 (Lee) at 2 (Table 14-2), and 2:1-3.

⁹ *Id.* at 2 (Table 14-2), and 2:4-5; *see* Ex. SCG-10-R (Navin) at NPN-31 (Table NPN-18).

¹⁰ Ex. ORA-14 (Lee) at 2:6-8.

¹¹ *Id.* at 2:9-11.

¹² *Id.* at 3 (Table 14-2) and 3:10-11; *see* Ex. SCG-10-R (Navin) at NPN-31 (Table NPN-18).

¹³ May 14, 2018, Prepared Testimony of Carolina Contreras and Jenny Au on San Diego Gas and Electric Company and Southern California Gas Company 2019 General Rate Case, Exhibit OSA-1 (Contreras).

¹⁴ Ex. OSA-1 (Contreras) at 2-20.

- “The Utilities should develop a safety management system (SMS) framework to address [] gas storage assets/operations, and present its proposal in the next GRC.”¹⁵ “The framework/s should leverage the API 1173 framework’s emphasis on safety culture.”¹⁶

American Petroleum Institute (API) Recommended Practice (RP) 1173 *Pipeline Safety Management System* is a systematic way to identify hazards and control risks while validating that these risk controls are effective, and has a strong emphasis on process safety and safety culture. The company-wide development and implementation of this voluntary standard is further addressed in the direct and rebuttal testimonies of Omar Rivera, Exhibit SCG-05-R and Exhibit SCG-205, respectively.

III. REBUTTAL TO PARTIES’ O&M PROPOSALS

A. Non-Shared Services O&M

NON-SHARED O&M - Constant 2016 (\$000)			
	Base Year 2016	Test Year 2019	Change
SOCALGAS	\$43,853	\$59,640	\$13,787
ORA	\$43,853	\$59,640	\$13,787
OSA	No recommendation	No recommendation	No recommendation

1. Above Ground Storage (AGS) and Under Ground Storage (UGS) Routine O&M

a. ORA

ORA does not recommend adjusting SoCalGas’ proposed O&M expenses of \$38.698 million for TY 2019 but proposes a one-way balancing account only for AGS and UGS Routine O&M expenses “resulting from any new regulatory requirements [] imposed” over the GRC period.¹⁷ ORA asserts that a one-way balancing account “appropriately balances ratepayer protection with the uncertainty of when and how the final regulations [affecting gas storage] will

¹⁵ *Id.* at 2-4.

¹⁶ *Id.* at 2-25.

¹⁷ Ex. ORA-14 (Lee) at 7:20 to 8:1.

1 be adopted.”¹⁸ In making this recommendation, ORA implies that one-way balancing is needed
2 to protect ratepayers against uncertainty.

3 SoCalGas disagrees that a one-way balancing account is needed for AGS and UGS
4 Routine O&M costs resulting from new regulatory requirements because the components of
5 activities forecasted in AGS and UGS O&M were developed to address regulations that are in
6 effect, are measurable, are not widely variable, and can be forecast as evidenced in Exhibit SCG-
7 10-R.¹⁹ AGS and UGS Routine O&M costs include activities such as:²⁰

8 Management, Supervision, Training, and Engineering

- 9 • “[A]dministrative salaries and engineering costs associated with the operation of the
10 underground storage fields.”²¹
- 11 • Studies for “reservoir operations and wells necessary to maintain the integrity of the
12 storage system.”²²
- 13 • “Leadership, safety, technical training, operator qualification, and quality assurance
14 functions are other critical components of this grouping.”²³

15 Wells and Pipelines

- 16 • “[S]alaries and expenses associated with routinely operating storage reservoirs such
17 as: operating wells, well testing and pressure surveys, and wellhead and down-hole
18 activities for contractors [and/or internal labor] that perform subsurface leakage
19 surveys on injection/withdrawal facilities.”²⁴

¹⁸ *Id.* at 8:2-5.

¹⁹ Ex. SCG-10-R (Navin) at NPN-18 to NPN-24; Ex. SCG-10-WP-R (Navin) at 10-12 (see the line item adjustments under Category “A. Underground and Aboveground Storage” in the 2019 forecast for Non-Shared Service Workpapers).

²⁰ For a full description of AGS and UGS Routine O&M activities, see Ex. SCG-10-R (Navin) at NPN-18 to NPN-24.

²¹ *Id.* at NPN-21:12-13.

²² *Id.* at NPN-21:14.

²³ *Id.* at NPN-21:15-16.

²⁴ *Id.* at NPN-21:8-11; see Ex. SCG-10-WP-R (Navin) at 7.

- 1 • “[C]osts associated with patrolling field lines, lubricating valves, cleaning lines,
2 disposing of pipeline drips, injecting corrosion inhibitors, pressure monitors, and
3 maintaining alarms and gauges.”²⁵

4 Data and Records Management

- 5 • “[M]aintaining data and records related to storage assets and operations,” which
6 includes work performed such as “work order authorizations, surveys and
7 documentation of wells, pipelines, topography, roads, rights-of-way, various
8 infrastructure and easements boundary verification, and creation and maintenance of
9 maps related to underground zones/rights.”²⁶
- 10 • “[A]ctivities related to internal and external audits and data requests.”²⁷

11 The above O&M activities can be assessed and forecast against the requirements in
12 recent new regulations, and these requirements are not anticipated to result in a wide range of
13 variability or change in the O&M activities. In SoCalGas’ direct testimony and workpapers,²⁸ the
14 forecasted incremental O&M costs for UGS and AGS Routine O&M, include leak surveys and
15 ambient air methane monitoring costs, and were developed primarily to address the new
16 regulations and legislation that had firm effective dates or were already in effect.²⁹ For
17 reference, the following regulations have been incorporated or factored into SoCalGas’ GRC
18 cost forecast:

- 19 • SB 887 (Pavley) – Natural Gas Storage Facility Monitoring: this legislation referred
20 to in Exhibit SCG-10-R was approved by the Governor and filed with the Secretary of
21 State on September 26, 2016 and had a firm effective date of January 1, 2018.
22 SoCalGas was aware of this legislation when it was developing the O&M for this
23 GRC and forecasted the O&M costs. SB 887 includes requirements for a continuous

²⁵ Ex. SCG-10-R (Navin) at NPN-21:21-23.

²⁶ *Id.* at NPN-22:13-17.

²⁷ *Id.* at NPN-22:17-18.

²⁸ Ex. SCG-10-WP-R (Navin) at 5-12.

²⁹ *Id.* at NPN-iv to NPN-v, NPN-21:1-8.

1 monitoring plan, additional reporting, risk management plans, training, and mentoring
2 programs.³⁰ SB 887 also includes requirements for ambient air methane monitoring
3 and SoCalGas included the labor for this routine activity in its 2018 and 2019
4 incremental forecasts. These requirements fall under AGS and UGS routine O&M
5 activities, do not have wide range of variability, and can be forecast in a measurable
6 way.

- 7 • California Air Resources Board (CARB) Oil & Gas Regulation:³¹ these regulations
8 for greenhouse gas emission standards for crude oil and natural gas facilities were
9 approved by the OAL for rulemaking and filed with the Secretary of State on July 17,
10 2017. The effective date of this regulation was October 1, 2017 with specific
11 compliance requirements for developing a monitoring plan, and implementation of
12 leak detection and emissions monitoring, repair, and reporting beginning on January
13 1, 2018. SoCalGas was aware of this regulation when it was developing the O&M for
14 this GRC and forecasted the O&M costs. CARB Oil & Gas regulations includes
15 requirements for special leak surveys at Aliso Canyon, Honor Rancho, La Goleta and
16 Playa del Rey storage fields and SoCalGas included the labor for this routine activity
17 in its 2018 and 2019 incremental forecasts.³² These requirements fall under AGS and
18 UGS routine O&M activities, do not have wide range of variability, and can be
19 forecast in a measurable way.
- 20 • U.S. Department of Transportation Pipeline and Hazardous Materials Safety
21 Administration (PHMSA) Underground Natural Gas Storage (UGS) regulations
22 49 Code of Federal Regulations (CFR) §192.12 (Interim Final Rule or IFR): PHMSA
23 revised Federal pipeline safety regulations, and adopts American Petroleum Institute
24 API RP 1171, as a mandatory regulation, which was cited as an incremental cost
25 driver in Exhibit SCG-10-R and have been effective as of January 18, 2017.³³

³⁰ *Id.* at NPN-21:1-4.

³¹ Ex. SCG-10-R (Navin) at NPN-v.

³² *Id.* at NPN-vii; *see* Ex. SCG-10-WP-R (Navin) at 8-11.

³³ Ex. SCG-10-R (Navin) at NPN-v, NPN-21.

1 SoCalGas was aware of this regulation when it was developing the GRC and
2 forecasted the O&M costs. The new regulation drives requirements for
3 implementation of recommended practices. These requirements fall under AGS and
4 UGS routine O&M activities, do not have wide range of variability, and can be
5 forecast in a measurable way.³⁴

6 Additionally, there are several known proposed regulations by DOGGR that may
7 supersede the requirements of SB 887 when they come into effect:

- 8 • DOGGR 14 CCR § 1726 – Proposed Requirements for California Underground Gas
9 Storage have been noticed for twenty-three months,³⁵ and DOGGR is required to
10 follow a specific rulemaking process.³⁶ SoCalGas has been engaged throughout the
11 pre-rulemaking and formal rulemaking process, and has reviewed the three versions
12 of draft regulations published.³⁷ As of May 16, 2018, the proposed regulations have
13 been submitted to the Office of Administrative Law (OAL) for review and approval.
14 These proposed regulations include requirements and standards for routine AGS and
15 UGS O&M activities like additional focus on employee safety and technical training;
16 supervisory qualification and leadership training; operator qualification; and quality
17 assurance; well testing and pressure surveys; subsurface leakage surveys, patrolling
18 field lines, maintaining alarms and gauges; labor to complete basic and major

³⁴ Ex. SCG-10-WP-R (Navin) at 8-12.

³⁵ DOGGR 14 CCR § 1726 existed as a pre-rulemaking draft since July 8, 2016 and entered into the formal rulemaking process on May 19, 2017. *See* Requirements for California Underground Gas Storage Projects (proposed July 8, 2016) (to be codified at Cal. Code Regs. tit. 14, § 1726), *available at* <http://www.conservation.ca.gov/dog/Documents/GasStorage/TextOfProposedRegulationsMarch2018.pdf>.

³⁶ The Office of Administrative Law (OAL) regular rulemaking process must be complied with when an agency undergoes a rulemaking action. The regular rulemaking process includes comprehensive public notice and comment requirements, and requires that documents and information on which the rulemaking action is based are available for review and inspection. More information regarding the OAL regular rulemaking process can be referenced at: https://oal.ca.gov/rulemaking_participation/ and https://www.oal.ca.gov/wp-content/uploads/sites/28/2017/05/Regular-Rulemaking-Flowchart_FINAL_June-2014-2.pdf.

³⁷ Text of Proposed Regulations was published on May 19, 2017, First Revised Text of Proposed Regulations was published on February 12, 2018, and Second Revised Text of Proposed Regulations was published on March 26, 2018.

1 equipment repairs; and maintaining data and records.³⁸ These requirements include
2 activities that fall under AGS and UGS routine O&M, do not have wide range of
3 variability, and can be forecast in a measurable way.³⁹

- 4 • DOGGR 14 CCR § 1724 – The proposed Underground Injection Control (UIC)
5 Regulations have been noticed for twenty-eight months, and DOGGR is required to
6 follow a specific rulemaking process. SoCalGas has been engaged throughout the pre-
7 rulemaking process, and have reviewed the two versions of draft regulations
8 published.⁴⁰ The proposed regulations include requirements for monitoring and
9 inspecting, additional geologic and reservoir data, and safety precautions.⁴¹ These
10 requirements include activities that fall under AGS and UGS routine O&M, do not
11 have wide range of variability, and can be forecast in a measurable way.⁴²

12 However, while adoption of any new DOGGR regulations (Requirements for California
13 Underground Gas Storage Projects and UIC Regulations) will supersede requirements detailed in
14 SB 887, only the forecasted work consistent with compliance to SB 887 would be incorporated
15 into AGS & UGS Routine O&M. SoCalGas' AGS & UGS Routine O&M cost forecast is
16 reasonable, considers regulations that are in effect, are measurable, and do not have a wide range
17 of variability and should not be subjected to a balancing account treatment.

18 Furthermore, AGS & UGS Routine O&M activities and its associated costs are
19 incorporated into Exhibit SCG-10-R in accordance with the Commission's new Risk Assessment
20 Mitigation Phase (RAMP) process as described in the direct testimony of Diane Day, Gregory
21 Flores and Jamie York (Exhibit SCG-02-R/SDG&E-02--R, Chapter 1: Risk Management and
22 Policy, Chapter 2: Enterprise Risk Management Organization, & Chapter 3: RAMP to GRC

³⁸ Ex. SCG-10-R (Navin) at NPN-21, NPN-23:15-19.

³⁹ Ex. SCG-10-WP-R (Navin) at 5-12.

⁴⁰ DOGGR 14 CCR § 1724 existed as a pre-rulemaking draft since January 21, 2016 and a second draft was issued on April 26, 2017. *See* Updated Underground Injection Control Regulations (Discussion Draft Version 2) (to be codified at Cal. Code Regs. tit. 14, § 1724), *available at* <http://www.conservation.ca.gov/index/Documents/04-26-17%20UIC%20Pre-Rulemaking%20DD%20V.2%204-25-17.pdf>.

⁴¹ Ex. SCG-10-R (Navin) at NPN-20:23-26.

⁴² Ex. SCG-10-WP-R (Navin) at 5-12.

1 Integration) and as identified in workpapers.⁴³ As a part of the Commission’s new risk-informed
2 GRC framework,⁴⁴ GRC cost requests for risk mitigation activities will be subjected to two
3 annual reports, the Risk Mitigation Accountability Report and the Risk Spending Accountability
4 Report,⁴⁵ which provides for an additional layer of ratepayer protection.

5 For these reasons, SoCalGas disagrees that a balancing account is needed for AGS and
6 UGS Routine O&M costs resulting from new regulatory requirements.

7 **2. Risk Management – Non-Refundable O&M**

8 **a. ORA**

9 ORA does not recommend any adjustment to the TY 2019 forecast of \$2.031 million in
10 Storage Risk Management expenses. SoCalGas requests that the Commission adopt the
11 SoCalGas’ TY 2019 forecast of \$2.031 million for 2019.

12 **3. Storage Integrity Management Program – O&M**

13 **a. ORA**

14 ORA does not recommend any adjustment to SoCalGas’ forecasted TY 2019 expenses of
15 \$18.91 million for RSIMP.⁴⁶ However, ORA recommends the Commission modify SIMPBA
16 from a two-way balancing account to a one-way balancing account “to better protect the
17 ratepayers.”⁴⁷ ORA argues SoCalGas has had adequate experience recording SIMP expenses in
18 the balancing account, stating that SoCalGas had opportunities to determine inspection costs and
19 degree of repair work needed.⁴⁸ ORA also argues a two-way balancing account allows
20 SoCalGas to spend without restriction and that a one-way balancing account will encourage

⁴³ *Id.* at 6-12, 18-22.

⁴⁴ Decision (D.)14-12-025.

⁴⁵ December 20, 2017, Revised Joint Testimony on Risk Management, Exhibit SCG-02-R/SDG&E-02-R (Chapter 1: Risk Management Policy by Diana Day) at DD-7:3-27.

⁴⁶ Ex. ORA-14 (Lee) at 11:2-3.

⁴⁷ *Id.* at 11:4-6.

⁴⁸ *Id.* at 11:6-8.

1 SoCalGas to spend within the amount authorized and encourage efficiency and less cost
2 variability.⁴⁹

3 SoCalGas agrees with ORA's recommendation to keep the TY 2019 forecast of \$18.91
4 million for the SIMP O&M and requests that the Commission adopt this forecast. However, with
5 regard to the balancing account treatment, SoCalGas disagrees with ORA's proposal and
6 rationale for a one-way balancing account.

7 (1) As described in Exhibit SCG-10-R, SIMP work is variable, not discrete, and
8 regulations relating to SIMP work are dynamic and changing in this context. For
9 example, costs of well inspections are within SIMP. Inspection logs for one well cost
10 \$80K, and the inspection may need to be repeated for reasons such as validation
11 testing after the well undergoes modification.⁵⁰ A two-way balancing account is the
12 most appropriate way to address these costs. Also, mechanical integrity inspections
13 for wells are a known requirement, however the proposed DOGGR regulations have
14 not adopted the two-year inspection interval and the most current draft of the
15 proposed regulations indicate that a less frequent interval may be approved.⁵¹ The
16 SIMP O&M forecast prudently assumes a two-year inspection interval and an
17 approximate number of wells requiring reinspection; however, there are uncertainties
18 in both of those assumptions. A longer inspection interval may be approved, or may
19 be approved on a per well basis. The number of wells requiring reinspection is
20 dependent on how many wells are abandoned after SIMP review, and how many
21 replacement wells are drilled that will require SIMP inspection. As stated in
22 SoCalGas' direct testimony,⁵² the two-way balancing account treatment of SIMP
23 would allow for excess re-inspection funds to be returned to ratepayers, and would
24 also allow for cost recovery if activities should exceed forecast due to the

⁴⁹ *Id.* at 11:10-13.

⁵⁰ Ex. SCG-10-R (Navin) at NPN-27:6-8.

⁵¹ *See* Requirements for California Underground Gas Storage Projects at 17 (proposed July 8, 2016) (to be codified at Cal. Code Regs. tit. 14, § 1726), *available at* <http://www.conservation.ca.gov/dog/Documents/GasStorage/TextOfProposedRegulationsMarch2018.pdf>.

⁵² Ex. SCG-10-R (Navin) at NPN-25:4-9.

1 unpredictability of inspections and remediation subject to certain reasonableness
2 reviews.

3 (2) Proposed regulations impose new requirements for SIMP related work, which
4 includes costs or requirements that are variable.⁵³

5 a. Well inspection logging and data analysis: Additional well inspections are
6 required; new inspection techniques/tools have been proposed, and the volume
7 and type of data generated by these inspections requires additional analysis
8 and comparison and potential additional consultant support.⁵⁴ Geology and
9 engineering studies in proposed regulations may also require additional data
10 collection and additional consultant support in excess of Routine O&M
11 studies to collect new reservoir characteristics data or new pressure flow
12 modeling, geology/reservoir models and/or collecting additional core
13 samples.⁵⁵

14 b. Data management: SoCalGas is developing a Well Integrity Management
15 Solution (data management procedures and systems) to improve data
16 collection, data consistency, accessibility, analyses, and regulatory reporting.⁵⁶
17 Consolidation and integration of key Underground Storage Operation Data
18 Systems into this enterprise solution allows for maintenance, monitoring, and
19 improvements of the existing data systems and future expansions to absorb
20 industry changes.⁵⁷ SIMP data management has upfront implementation costs
21 (attributed to standardizing data collection and data entry into existing and
22 future systems, enhancing data and records management processes and
23 procedures, digitizing the well file system, upgrading the document filing and
24 storage, new content authoring and reporting systems, and training for new

⁵³ *Id.* at NPN-25:20-24, NPN-26:1-3.

⁵⁴ Ex. SCG-10-WP-R (Navin) at 46-47.

⁵⁵ *Id.*

⁵⁶ Ex. SCG-10-R (Navin) at NPN-27:17-24; Ex. SCG-10-WP-R (Navin) at 43.

⁵⁷ Ex. SCG-10-WP-R (Navin) at 43.

1 software systems processes, and procedures) in 2016, 2017, and 2018 and may
2 not show predictable O&M expense trends until 2019 and onwards.⁵⁸ These
3 data management system integration and information governance projects
4 address both the pace and volume of SIMP activity, which generates a robust
5 suite of data for each gas storage well and requires enhancement in data
6 management. This data results from activities such as: well inspections,
7 wellbore inspection logs, noise and temperature logs, information and data
8 generated from field assessments, leak surveys, inspections, and pressure
9 monitoring.

- 10 c. Training and emergency response plan: DOGGR 14 CCR § 1726
11 Requirements for Underground Gas Storage Projects imposes broader
12 emergency response plan requirements such as: accident-response measures;
13 leakage mitigation approaches; well control processes for well failure and full
14 blowout scenarios; repositioning, as feasible, and identification of materials
15 and personnel necessary to respond to leaks, including materials and
16 equipment to respond; a schedule for regular drills, providing for an
17 opportunity for the involvement of the Division and local emergency response
18 entities.⁵⁹

19 (3) Ratepayers are protected. SoCalGas disagrees that a two-way balancing account does
20 not protect ratepayers.

- 21 a. Recovery of any costs exceeding, but limited to 35% in excess of GRC-
22 authorized costs would require the filing of a Tier 3 advice letter, which
23 includes an itemization of all costs and an opportunity for the Commission to
24 review costs. Additionally, any costs above the 35% ceiling must be recovered
25 through a separate application, can include Energy Division (ED) participation

⁵⁸ Ex. SCG-10-R (Navin) at NPN-27:17-24; Ex. SCG-10-WP-R (Navin) at 43.

⁵⁹ See Requirements for California Underground Gas Storage Projects at 7-8 (proposed July 8, 2016) (to be codified at Cal. Code Regs. tit. 14, § 1726), *available at* <http://www.conservation.ca.gov/dog/Documents/GasStorage/TextOfProposedRegulationsMarch2018.pdf>. Costs are detailed in my direct testimony, Ex. SCG-10-R (Navin) at NPN-26 to NPN-27, and in my revised workpapers, Ex. SCG-10-WP-R (Navin) at 47.

1 and input, and is subject to reasonableness review by the Commission.

2 Because of this review process,⁶⁰

- 3 b. A two-way balancing account allows SoCalGas to recover reasonably
4 incurred costs to maintain safety and system integrity, and provides SoCalGas
5 the flexibility in addressing unforeseen integrity work and to present costs
6 incurred to perform that work for the Commission to review for
7 reasonableness, which promotes the shared goal of safe system operation.

8 (4) In June 2016, the Commission approved a two-way balancing account for SIMP
9 (D.16-06-054, Ordering Paragraph 8). The Commission found the two-way balancing
10 account reasonable, stating “the costs of inspecting and remediating potential
11 problems at the underground storage facilities may vary. In order to remediate
12 potential problems at other wells, more monies [than what the parties agreed to] may
13 be necessary. Accordingly, the provision in the Attachment 5 settlement agreement to
14 institute a two-way balancing account procedure for the SIMP expenditures is
15 reasonable.”⁶¹ This same reasoning applies equally now.

16 (5) The SIMP is designed similarly to the already existing Transmission Integrity
17 Management Program (TIMP) and Distribution Integrity Management Program
18 (DIMP), and should be treated similarly. From a system-wide perspective, the safety
19 objectives, project uncertainties, and unpredictable nature of inspection and repair
20 work for SIMP are similar to DIMP and TIMP. ORA does not dispute continuing the
21 two-way balancing account treatment for TIMP and DIMP,⁶² and should similarly
22 accept two-way balancing account for SIMP. It is reasonable that the balancing
23 account treatment should be consistent among all three of these important safety,
24 system integrity, and risk management initiatives. Additionally, a two-way balancing
25 account is appropriate to address the variability generated by federal, state, and local

⁶⁰ Decision (D.) 16-06-054 at 249-250, OP 8.

⁶¹ *Id.* at 250.

⁶² April 13, 2018, Report on SCG – Gas System Integrity, Gas Transmission Operation, and Gas Transmission, Exhibit ORA-12 (Oge Enyinwa) at 1-23.

1 regulatory agencies as new and revised regulations are further developed that
2 implicate storage integrity work.

3 For these reasons, a two-way balancing account for the SIMP is appropriate and should
4 be maintained. Additionally, the regulatory accounting treatment of the proposed SIMP
5 balancing account (SIMPBA) is also further addressed in the rebuttal testimony of Rae Marie Yu
6 (Ex. SCG-242).

7 **4. Safety Management System for Underground Storage**

8 **a. OSA**

9 The OSA does not recommend any adjustment to Underground Storage’s costs for TY
10 2019 as presented in this GRC. However, OSA asserts in its testimony that Underground Gas
11 Storage would benefit from a Safety Management System approach,⁶³ and states that “[t]he
12 Utilities should develop a safety management system (SMS) framework to address [] gas storage
13 assets/operations, and present its proposal in the next GRC. The framework/s should leverage the
14 API 1173 framework’s emphasis on safety culture.”⁶⁴

15 SoCalGas agrees with OSA that Underground Gas Storage would benefit from an SMS
16 approach, and is committed to a voluntary implementation of API RP 1173.⁶⁵ As planning and
17 implementation of API RP 1173 moves forward company-wide, there is a coordination of efforts
18 which includes Underground Gas Storage to streamline initiatives and seek opportunities to
19 integrate SMS.⁶⁶ SoCalGas also agrees with ORA that “[t]he Utilities must develop a long-term
20 multi-year plan based on what will be prioritized and how to get there,”⁶⁷ and SoCalGas
21 highlights several new and emerging regulations Underground Storage is prioritizing which
22 shares elements of API RP 1173:

⁶³ Ex. OSA-1 (Contreras) at 2-20.

⁶⁴ Ex. OSA-1 (Contreras) at 2-4, 2-25.

⁶⁵ June 18, 2018, Rebuttal Testimony on Gas System Integrity, Exhibit SCG-205 (Omar Rivera) at OR-3, OR-6.

⁶⁶ *Id.* at OR-6 to OR-8.

⁶⁷ Ex. OSA-1 (Contreras) at 3-4; *see* Ex. SCG-205 (Rivera) at OR-7.

- API RP 1171, *Functional Integrity of Natural Gas Storage in Depleted Hydrocarbon Reservoirs and Aquifer Reservoirs*.⁶⁸ is an integral component of creating an SMS for Underground Storage. Specifically, “[s]torage design, construction, operation, and maintenance include activities in risk management, site security, safety, emergency preparedness, and procedural documentation and training to embed human and organizational competence in the management of storage facilities.”⁶⁹ The resources required to support the implementation of API 1171 for Underground Storage are included in the GRC filing.
- Division of Oil, Gas, and Geothermal Resources (DOGGR) Requirements for California Underground Gas Storage Projects: which includes, among other things, incorporation of human factors into risk management plans.

Elements developed as part of a company-wide effort of API 1173 would also be applicable for phased implementation in Underground Storage; for example, the Incident Evaluation Process (IEP), and SoCalGas plans further enhancement of the management of change process.⁷⁰ Again, API RP 1173 is not a mandated practice, however SoCalGas is voluntarily taking a steadfast approach in implementing API RP 1173 company-wide, and further company-wide implementation efforts are discussed in Mr. Rivera’s rebuttal testimony.⁷¹ Additionally, company-wide safety policy is addressed in the joint Safety Policy rebuttal testimony of David Buczkowski and David Geier, Exhibit SCG-250/SDG&E-252.

B. Shared Services O&M

SHARED O&M - Constant 2016 (\$000)			
	Base Year 2016	Test Year 2019	Change
SOCALGAS	\$454	\$434	(\$20)
ORA	\$454	\$434	(\$20)

⁶⁸ As discussed above, PHMSA revised Federal pipeline safety regulations and adopted API RP 1171 as a mandatory regulation. 49 C.F.R. § 192.12.

⁶⁹ API RP 1171, Preamble, *available at* http://www.api.org/~media/files/publications/whats%20new/1171_e1%20pa.pdf.

⁷⁰ Ex. SCG-205 (Rivera) at OR-18 to OR-20.

⁷¹ *Id.* at OR-17 to OR-18.

1 **1. Routine O&M Spending**

2 **a. ORA**

3 ORA does not oppose SoCalGas' forecast of \$434,000 in TY 2019 for this cost category.
4 SoCalGas requests that the Commission adopt SoCalGas' forecast as reasonable.

5
6 **IV. REBUTTAL TO PARTIES' CAPITAL PROPOSALS**

TOTAL CAPITAL - Constant 2016 (\$000)					
	2017	2018	2019	Total	Variance
SOCALGAS	\$208,535	\$180,646	\$172,606	\$561,787	
ORA	\$180,249	\$180,646	\$172,606	\$533,501	(\$28,286)

7
8 **A. 2017 Capital Forecasts**

9 **1. ORA**

10 ORA recommends adoption of SoCalGas' 2017 adjusted-recorded capital expenditures
11 and does not recommend any adjustment to 2018 and 2019 forecasted expenditures for each of
12 the Storage Capital Areas: Compressors, Wells, Pipelines, Purification, Auxiliary Equipment,
13 SIMP, and Compressors - ACTR.⁷²

14 SoCalGas agrees that its 2018 and 2019 forecast should be adopted. However, SoCalGas
15 disagrees with ORA's recommendation to adopt 2017 recorded capital expenditures because (1)
16 ORA fails to provide a basis as to why 2017 recorded costs are more appropriate; (2) ORA fails
17 to consider that the total amount of project work has not changed and that the delays in 2017 will
18 not change the overall funding needed to complete the work; and (3) ORA did not contest
19 SoCalGas' capital forecast methodology for 2018 and 2019.⁷³

20 ORA fails to support its reasoning to use 2017 recorded costs over SoCalGas' 2017
21 forecast costs and disregards the multi-year forecast cost drivers detailed in testimony and

⁷² *Id.* at 2:1-3.

⁷³ *Id.* at 15:4-5, 18:4-5, 18:21-22, 20:11-12, 21:17-18, 23:5-6.

1 | workpaper.⁷⁴ Also, ORA does not disagree or object to SoCalGas' overall forecast methodology
2 | or workpaper details.⁷⁵

3 | SoCalGas developed project level cost forecast details for 2017-2019 in workpapers,⁷⁶
4 | and provided additional detail via responses to ORA discovery, and those details were not
5 | disputed.⁷⁷ ORA's recommendation to adopt 2017 recorded capital expenditures rather than 2017
6 | forecast, casts a narrow year-to-year cost view of activities that were forecast over the span of
7 | three years, and ignores the broader spectrum of various projects' total costs and activities that
8 | were reasonably forecasted.⁷⁸ For example, the Compressors: Goleta Main Unit #4 Overhaul &
9 | Engine Block Oil Heater Addition capital project was forecasted for \$2.000M in 2017 and
10 | \$0.326M in 2018, and 2017 recorded expenditures were \$0.501M.⁷⁹ The difference between the
11 | 2017 forecast and the 2017 recorded is attributable to a project delay caused by contract
12 | negotiations with the contractor. This delay does not change the need for the compressor
13 | overhaul (and ORA does not explicitly dispute the need). SoCalGas anticipates needing the full
14 | amount forecasted to complete the work, and expects this work to be completed in 2018. The
15 | overall total cost forecast for this project remains reasonable. Another example is the Auxiliary
16 | Equipment: RAMP – Playa Del Rey – Hillside Soil Erosion and Slope Stability project, which
17 | forecasts costs of: \$0.400M in 2017; \$2.500M in 2018; and \$1.000M in 2019.⁸⁰ The 2017
18 | recorded costs were only \$0.109M, and the variance was predominantly attributed to permitting
19 | and easement delays. SoCalGas still needs to complete this work, which was evaluated in RAMP

⁷⁴ *Id.* at 12-26.

⁷⁵ *Id.*

⁷⁶ Ex. SCG-10-WP-R (Navin) at 25.

⁷⁷ See SoCalGas' responses to ORA-SCG-118-KCL, ORA-SCG-119-KCL, and ORA-SCG-159-KCL attached in Appendix A, B, and C.

⁷⁸ Ex. SCG-10-R (Navin) at NPN-30 to NPN-58; *see also* Ex. SCG-10-CWP-R (Navin).

⁷⁹ Ex. SCG-10-R (Navin) at NPN-31 to NPN-33; Ex. SCG-10-CWP-R (Navin) at 3-7; and the 2017 adjusted-recorded data for capital which was sent to Clayton Tang at ORA on March 12, 2018.

⁸⁰ Ex. SCG-10-R (Navin) at NPN-50:12-19; Ex. SCG-10-CWP-R (Navin) at 135-140; and the 2017 adjusted-recorded data for capital which was sent to Clayton Tang at ORA on March 12, 2018.

1 as mitigating a safety risk.⁸¹ SoCalGas expects this work to be completed in 2019 and believes
2 the overall total cost forecast of this project remains reasonable.

3 SoCalGas also offers an example below explaining why work anticipated to be completed
4 over a three-year GRC cycle can shift on a yearly basis and still be achieved within the TY2019
5 GRC cycle.

6 Well Plug & Abandon

- 7 • SoCalGas forecasted performing the necessary plugging and abandonment of
8 approximately fifty-seven to sixty-five wells in 2017-2019.⁸² The planned
9 abandonments were forecasted as follows: forty (40) wells in 2017, seventeen (17)
10 wells in 2018, and five (5) wells in 2019.⁸³ In response to the February 2018 ORA
11 data request for detailed status of this effort, SoCal Gas provided the following
12 response, “In 2017 SoCalGas fully plugged and abandoned 14 wells. Another 31
13 wells were in progress of full plug and abandonment. SoCalGas anticipates fully
14 plugging and abandoning approximately 57-65 wells by the end of 2019.”⁸⁴ As of
15 2017 to 2018-year-to-date, SoCalGas has or is in process of abandoning 45 wells.

16 As a result of SB 887, inspection requirements were prioritized over abandonments,
17 however SoCalGas still anticipates needing to complete the 2017-2019 forecasted abandonment
18 of the 57 – 65 wells. The resources needed for well abandonment and replacement well activity -
19 for example, rigs, company personnel, contract personnel – are the same resources that complete
20 inspections and were reallocated to meet SB 887 requirements. Consequently, the prioritization
21 of the required inspections also delayed the planning and drilling of replacement wells for those
22 that are planned to be abandoned. As wells are being abandoned, replacement wells must be
23 planned. SoCalGas does not anticipate a change in the total number of replacement wells that are
24 needed for 2018 and 2019. Even though the total amount of project work has not changed, ORA
25 is recommending that SoCalGas receive less funding for the same amount of work.

⁸¹ See I.16-10-015/-016 (cons.), Risk Assessment Mitigation Phase Risk Mitigation Plan Climate Change Adaptation (Chapter SCG-9); Ex. SCG-10-CWP-R (Navin) at 140.

⁸² Ex. SCG-10-R (Navin) at NPN-38; SCG-10-CWP-R (Navin) at 32.

⁸³ Ex. SCG-10-WP-R (Navin) at 32.

⁸⁴ ORA-SCG-119-KCL, Question 1 attached in Appendix B.

1 ORA analyzed SoCalGas’ forecasted capital expenditures but does not recommend
2 adjustment to the forecasts for 2018 and 2019.⁸⁵ ORA also does not question or dispute the
3 method in which costs and activity are being forecast for 2018 and TY2019.⁸⁶ Because the
4 overall 3-year forecast (2017, 2018, 2019) was established with each year being dependent on
5 and building off the others, the 2017 forecast should not be adjusted. As discussed in the well
6 plug and abandonment example above, a variety of operational impacts such as re-prioritization
7 and project constraints have created a variance between 2017 forecast and recorded costs.
8 SoCalGas work activities and cost models developed for its’ capital work is reasonable and
9 should be adopted in its entirety.

10 **B. Subcategory: Storage Wells Recovery Mechanism**

11 **1. ORA**

12 ORA does not recommend adjustment to SoCalGas’ cost forecast for 2018 and 2019, but
13 recommends a one-way balancing account for SoCalGas’ capital expenses subcategory “Storage
14 Wells” during this GRC period.⁸⁷ ORA does not provide any rationale for this recommendation
15 beyond stating “[f]rom 2017 to 2018, SCG only planned to replace four wells total, or an average
16 of 2 wells a year. SCG’s plan to replace seven storage wells in 2019 is over four times its
17 current pace,”⁸⁸ implying that SoCalGas’ forecast is overstated.

18 SoCalGas disagrees with ORA’s recommendation for a one-way balancing account for
19 Storage Wells capital expenses because the costs are reasonable and not overstated. ORA’s
20 observation of the well replacement activity increase in 2019 fails to acknowledge the decline in
21 forecast of other work activities in 2019 such as:

22 Well Plug and Abandonments

23 2017: 40 wells, 2018: 17 wells, 2019: 5 wells,⁸⁹

⁸⁵ Ex. ORA-14 (Lee) at 15:2-4, 18:2-4, 20:9-11, 21:15-17, 25:4-5.

⁸⁶ *Id.* at 12-25.

⁸⁷ *Id.* at 18:5-6.

⁸⁸ *Id.* at 18:6-9.

⁸⁹ Ex. SCG-10-CWP-R (Navin) at 32.

1 Tubing Upsizing

2 2017: 48 wells, 2018: 30 wells, 2019: 0 wells,⁹⁰

3 Well Workovers

4 2017: 10 wells, 2018: 2 wells, 2019: de minimis,⁹¹

5 These capital projects reflect a corresponding shift in work. ORA acknowledges 57 to 65
6 wells will be full plugged and abandoned by the end of 2019.⁹² The upward pace in which
7 replacement wells are drilled, correlates with the pace in which plug and abandonment work is
8 completed. SoCalGas disagrees with ORA’s implication that the forecast is overstated and that a
9 one-way balancing account is needed.

10 SoCalGas’ storage wells forecast considers a comprehensive outlook of the activities
11 required to correspond to well integrity assessment activities, well performance history, coupled
12 by system reliability and deliverability needs. SoCalGas’ wells forecast also considers the
13 potential of phasing in higher-deliverability replacement wells and eliminating higher cost wells
14 over time to reduce long term operating costs (reducing need for mitigation such as gravel packs)
15 and a redesign of wells for tubing flow only to create a dual barrier of safety. Well capital
16 projects have been reasonably forecasted to account for various operational drivers and
17 interdependencies of activity and should not be subjected to a one-way balancing account
18 treatment.

19 Furthermore, Storage Wells capital activities and its’ associated costs are incorporated
20 into Exhibit SCG-10-R in accordance with the Commission’s new Risk Assessment Mitigation
21 Phase (RAMP) process as described in the revised direct testimony of Diana Day, Gregory
22 Flores and Jamie York (Exhibit SCG-02-R/SDG&E-02-R, Chapter 1:Risk Management and
23 Policy, Chapter 2: Enterprise Risk Management Organization, & Chapter 3: RAMP to GRC
24 Integration) and as identified in workpapers.⁹³ As a part of the Commission’s new risk-informed

⁹⁰ *Id.* at 40.

⁹¹ *Id.* at 46.

⁹² Ex. ORA-14 (Lee) at 17:14-15.

⁹³ Ex. SCG-10-CWP-R (Navin) at 25-62.

1 GRC framework,⁹⁴ GRC cost requests for risk mitigation activities will be subjected to two
2 annual reports, the Risk Mitigation Accountability Report and the Risk Spending Accountability
3 Report,⁹⁵ which provides for an additional level of ratepayer protection.

4 For these reasons, SoCalGas disagrees that a balancing account is needed for Storage
5 Wells capital costs.

6 **C. Subcategory: SIMP Recovery Mechanism**

7 **1. ORA**

8 ORA does not oppose SoCalGas' SIMP capital forecast in the amount of \$71.370M in
9 2018, and \$53.382M in 2019 but recommends adoption of adjusted-recorded costs for 2017
10 (which is addressed in Section IV.A.1, *above*). ORA also recommends that the Commission
11 modify SIMPBA for capital expenditures from a two-way balancing to a one-way balancing to
12 "better protect ratepayers."⁹⁶ Here too, ORA states "SCG has had experience recording SIMP
13 costs," and "should be proficient going forward in recording these expenses in a one-way
14 balancing account."⁹⁷

15 Again, SoCalGas agrees with ORA's recommendation concerning the SIMP capital
16 forecast for 2018 and 2019, however SoCalGas disagrees with ORA's proposal and rationale for
17 a one-way balancing account. As stated in SoCalGas' direct testimony,⁹⁸ and in Section III.A.3,
18 *above*, SoCalGas recommends that SIMP related costs *continue* to be recovered through a two-
19 way balancing account due to the unpredictable and potentially variable nature of inspection and
20 remediation costs:

- 21 (1) SIMP capital work is variable, not discrete, and regulations are dynamic and
22 changing for: proactive plugging and abandonment of wells, inspection/return to
23 operation, data management, pilot emerging monitoring integrity and safety
24 technologies, and for cathodic protection. A two-way balancing account is the
25 most appropriate way to address these costs.

⁹⁴ D.14-12-025.

⁹⁵ Ex. SCG-02-R/SDG&E-02-R (Day) at DD-7:3-27.

⁹⁶ Ex. ORA-14 (Lee) at 25:14-16.

⁹⁷ *Id.* at 25:9-13.

⁹⁸ Ex. SCG-10-R (Navin) at NPN-51:22 to NPN-52:2.

- 1 a. Mechanical integrity inspections for wells are a known requirement,
2 however the two-year inspection interval is not yet finalized and the most
3 current draft of proposed regulations state DOGGR may approve a less
4 frequent interval. The SIMP capital forecast prudently assumes a two-year
5 inspection interval and approximated a number of wells requiring
6 reinspection (as opposed to wells forecasted for abandonment); however,
7 there are uncertainties in both of those assumptions. A longer inspection
8 interval may be approved, or a different number of wells requiring
9 reinspection may be required. As stated in SoCalGas' direct testimony,⁹⁹
10 the two-way balancing account treatment of SIMP would allow for excess
11 re-inspection funds to be returned to ratepayers, and would also allow for
12 cost recovery if activities should exceed forecast due to the
13 unpredictability of inspections and remediation.
- 14 b. Inspection/Return to Operation activities are variable based on conditions
15 of the well and field. For example: Capital workovers have exceeded
16 forecast cost when difficulties removing a production packer resulted in a
17 longer completion time, or when DOGGR requires additional steps such
18 as an inner liner to be installed to approve a well to return to service.
- 19 (2) External market resource uncertainties: SIMP inspection and return to operation
20 of gas storage wells is dependent on the availability of equipment and personnel,
21 which are the same types of resources used throughout the oil and gas industry.
22 The ability to timely secure these assets is dependent on energy demand and rig
23 availability nationwide. The oil and gas industry downturn beginning in
24 November 2014 allowed for greater access to workover infrastructure and
25 personnel; however, there has been increased activity in mid-2016 that may
26 increase competition for resources impacting availability. Financial outlays to
27 secure rigs and oil/gas field services can vary greatly over time due to domestic
28 and foreign developments related to energy.¹⁰⁰

⁹⁹ *Id.* at NPN-52 to 53.

¹⁰⁰ Ex. SCG-10-R (Navin) at NPN-52:13-19.

- 1 (3) Ratepayers are protected. SoCalGas disagrees that a two-way balancing account
2 does not protect ratepayers.
- 3 a. Recovery of any costs exceeding, but limited to 35% in excess of GRC-
4 authorized costs would require the filing of a Tier 3 advice letter, which
5 includes an itemization of all costs and an opportunity for the Commission
6 to review costs. Additionally, any costs above the 35% ceiling must be
7 recovered through a separate application, can include Energy Division
8 (ED) participation and input, and is subject to reasonableness review by
9 the Commission. Because of this review process,¹⁰¹
- 10 b. A two-way balancing account allows SoCalGas to recover reasonably
11 incurred costs to maintain safety and system integrity, and provides
12 SoCalGas the flexibility in addressing unforeseen integrity work and to
13 present costs incurred to perform that work for the Commission to review
14 for reasonableness, which promotes the shared goal of safe system
15 operation.
- 16 (4) The Commission approved a two-way balancing account for SIMP (D.16-06-054,
17 OP 8). The Commission found the two-way balancing account reasonable, stating
18 “the costs of inspecting and remediating potential problems at the underground
19 storage facilities may vary. In order to remediate potential problems at other
20 wells, more monies [than what the parties agreed to] may be necessary.
21 Accordingly, the provision in the Attachment 5 settlement agreement to institute a
22 two-way balancing account procedure for the SIMP expenditures is
23 reasonable.”¹⁰² This same reason applies equally now.
- 24 (5) The SIMP is designed similarly to the already existing Transmission Integrity
25 Management Program (TIMP) and Distribution Integrity Management Program
26 (DIMP), and should be treated similarly. From a system-wide perspective, the
27 safety objectives, project uncertainties, and unpredictable nature of inspection and

¹⁰¹ D.16-06-054 at 249-250, OP 8.

¹⁰² *Id.* at 250.

1 repair work for SIMP are similar to DIMP and TIMP. ORA does not dispute
2 continuing the two-way balancing account treatment for TIMP and DIMP,¹⁰³ and
3 should similarly accept two-way balancing account for SIMP. It is reasonable
4 that the balancing account treatment should be consistent among all three of these
5 important safety, system integrity, and risk management initiatives. Additionally,
6 a two-way balancing account is appropriate to address the variability generated by
7 federal, state, and local regulatory agencies as new and revised regulations are
8 further developed that implicate storage integrity work.

9 For these reasons, a two-way balancing account for the SIMP is appropriate and should
10 be maintained.

11 **D. Subcategory: Aliso Canyon Turbine Replacement Project**

12 **1. ORA**

13 ORA does not oppose the forecast for Aliso Canyon Turbine Replacement Project
14 (ACTR) compressor in SCG-10-R. ORA also provides recommendations regarding SoCalGas'
15 ACTR, which are costs presented in my testimony. However, the specific details regarding the
16 Aliso Canyon Turbine Replacement project are found in Mr. Buczkowski's testimony (Ex. SCG-
17 11) and Mr. Buczkowski will address ORA's recommendations in his rebuttal testimony (Ex.
18 SCG-211).

19 **V. CONCLUSION**

20 To summarize, the activities and projects described are necessary for SoCalGas to
21 achieve its goals of maintaining the safety and reliability of essential gas underground storage
22 infrastructure. The expenditures in my direct testimony and further described in this rebuttal are
23 required to maintain public and employee safety while cost-effectively meeting customer needs,
24 in compliance with mandated regulatory requirements.

- 25 • Generally, no parties disputed SoCalGas' O&M forecast activities or costs for
26 Underground Storage, and these costs should be adopted by the Commission as
27 reasonable.
- 28 • No parties recommended adjustments to SoCalGas' capital forecast activities for
29 2018 and 2019, and these costs should be adopted by the Commission as reasonable.

¹⁰³ Ex. ORA-12 (Enyinwa) at 1-23.

- 1 • ORA fails to provide any basis as to why 2017 recorded costs for capital are more
2 appropriate than 2017 forecasted costs, and SoCalGas' 2017 capital forecast should
3 be adopted in parity with the 2018 and 2018 capital costs and activities.
- 4 • Maintaining a two-way balancing account treatment for SIMP (both O&M and
5 capital) is appropriate, given the nature of the variability of work, and the
6 development of new and emerging federal, state, and local regulations.
- 7 • SoCalGas disagrees with ORA's recommendation for one-way balancing account
8 treatment to SoCalGas' AGS & UGS Routine O&M and Storage Wells capital
9 forecast. SoCalGas took into consideration various factors in developing forecasts for
10 costs and activities, which included a comprehensive outlook of the activities required
11 to comply with current regulatory requirements, and requirements for system
12 reliability and deliverability needs.

13 This concludes my prepared rebuttal testimony.

LIST OF ACCRONYMS

ACTR	Aliso Canyon Turbine Replacement
AGS	Above Ground Storage
API	American Petroleum Institute
BCF	Billion Cubic Feet
BCFD	Billion Cubic Feet per Day
CARB	California Air Resources Board
CFR	Code of Federal Regulations
CPUC	California Public Utilities Commission
DA	District Attorney
DIMP	Distribution Integrity Management Program
DOGGR	California Department of Oil, Gas and Geothermal Resources
DOT	United States Department of Transportation
ED	Energy Division
FTE	Full Time Equivalents
IFR	Interim Final Rule
M	Million
MMCF	Million Cubic Feet
MMCFD	Million Cubic Feet per Day
NERBA	New Environmental Regulatory Balancing Account
O&M	Operations and Maintenance
OAL	Office of Administrative Law
PHMSA	Pipeline and Hazardous Materials Safety Administration
PSIG	Pounds per Square Inch Gauge
RCA	Root Cause Analysis
SoCalGas	Southern California Gas Company
SB	Senate Bill
SIMP	Storage Integrity Management Program
SIMPBA	Storage Integrity Management Program Balancing Account
TCAP	Triennial Cost Allocation Proceeding

TIMP	Transmission Integrity Management Program
UGS	Under Ground Storage
UIC	Underground Injection Control

APPENDIX A
DISCOVERY RESPONSES
Responses to Data Request ORA-SCG-118-KCL

Exhibit Reference: SCG-10-R, SCG-10-CWP-R

SCG Witness: Neil Navin

Subject: Compressor Capital Expenditures

Please provide the following:

1. Referring to Ex. SCG-10-R, page NPN-33, lines 15 to 29, and workpapers SCG-10-CWP-R, page 9, SCG proposes capital expenditures of \$1 million in 2017, \$3 million in 2018, and \$10 million in 2019 for an early study to replace five compressors in Honor Ranch. Please provide detailed schedule and detailed study components and the associated expenditures which were included to build up these capital expenditures. Please also provide plan operational dates of each of the new compressors.

SoCalGas Response 1:

This project consists of performing a feasibility study using preliminary front end engineering and design (pre-FEED) and front end engineering and design (FEED) methodology. Pre-FEED began in 2017 and will continue with FEED in 2018 and 2019. Upon completion of FEED, detailed design and engineering, permitting and procurement shall commence and are forecasted to be completed by the end of 2021. Estimated forecast for start of construction is in 2021 with completion and start up in 2024.

The cost estimate for this feasibility study was derived from two methods. The first was referencing the article "Oil & Gas Journal, Regressions allow development of compressor cost estimation models" dated 1/09/2012, in which a cost per horsepower was used to replace a 30,000 horsepower prime mover. The second was from a recent SoCalGas Aliso Canyon Turbine Replacement (ACTR) Project. Extrapolating the cost to perform preliminary front end engineering design (Pre-FEED) and front end engineering (FEED) was estimated at \$14MM. The estimated schedule to complete the Pre-FEED and FEED scope of work is planned for the next three years beginning in 2018.

2. Referring to Ex. SCG-10-R, page NPN-34, lines 26 to 27, SCG proposes capital expenditures for Blanket Projects of \$5.0 million for 2017, \$12.17 million for 2018, and \$15.70 million for 2019. Please provide detailed schedule and detailed individual projects and the associated expenditures which were included to derive these annual capital expenditures.

SoCalGas Response 2:

Please reference Table 1 below. ‘Blanket Projects’ are generally a collection of many like-kind or associated component projects whose precise makeup and schedule may alter over time, as described in SCG-10-R at page NPN-35 beginning at line 2. The process for evaluating additional compressor station work is ongoing and plans are subject to change.

Table 1: Compressor Stations Blanket Projects					
Station	Asset Description	Anticipated Work	2017 Estimated Forecast	2018 Estimated Forecast	2019 Estimated Forecast
Playa del Rey	Vapor Recovery Compressor	Replacement/Overhaul	20,000	100,000	200,000
Playa del Rey	Main Units	Compressor/Engine Overhauls	120,000	150,000	150,000
Playa del Rey	Main Units - Compressor Station Equipment	Inlet Separator Upgrade	0	0	200,000
La Goleta	Main Units	Compressor/Engine Overhauls	0	900,000	2,000,000
La Goleta	Main Units - Compressor Station Equipment	Cooling Fan Replacement	100000	500000	500000
La Goleta	Main Units - Compressor Station Equipment	Valve/Actuator Replacements, Safety Upgrades, Equipment Foundation Upgrades, Safety and Compliance Upgrades, Automate Unloaders	900,000	705,000	1,150,000
Honor Ranch	Main Units	Compressor/Engine Overhauls	100,000	1,600,000	1,700,000
Honor Ranch	Main Units - Compressor Station Equipment	Venting Recovery	710,000	2,980,000	1,280,000
Honor Ranch	Main Unit - Engine Equipment	Replace Engine Turbochargers, Upgrade Exhaust Manifolds, Refurbish Engine Heads, Catalyst Replacement	1,424,000	1,700,000	1,820,000
Honor Ranch	Wet Gas Compressor	Installation	126,000	0	0

SoCalGas Response 2:-Continued

Aliso Canyon	Field Generators	Emission Controllers Installation	150,000	0	0
Aliso Canyon	KVS Units - Compressor Equipment	Cooler Upgrade	150,000	1,700,000	3,000,000
Aliso Canyon	KVS Units	Compressor/Engine Overhauls	1,200,000	1,200,000	3,200,000
Aliso Canyon	Field Compressor	Compressor Upgrade	0	635,000	500,000

**APPENDIX B
DISCOVERY RESPONSES**

Responses to Data Request ORA-SCG-119-KCL

**ORA DATA REQUEST
ORA-SCG-119-KCL
SOCALGAS 2019 GRC – A.17-10-008
SOCALGAS RESPONSE
DATE RECEIVED: FEBRUARY 2, 2018
DATE RESPONDED: FEBRUARY 12, 2018**

Exhibit Reference: SCG-10-R

SCG Witness: Neil Navin

Subject: Wells Capital Expenditures

Please provide the following:

1. Referring to Ex. SCG-10-R, page NPN-38, lines 3 to 4, SCG proposes capital expenditures for Well Plug & Abandonments of \$38.9 million for 2017, \$23.15 million for 2018, and \$7.25 million for 2019. Please provide detailed status of this effort as of the end of 2017, these details should include the number of plug & abandonment completed and the total recorded expenditures for 2017.

SoCalGas Response 1:

In 2017 SoCalGas fully plugged and abandoned 14 wells. Another 31 wells were in progress of full plug and abandonment. SoCalGas anticipates fully plugging and abandoning approximately 57-65 wells by the end of 2019. The total recorded expenditure for well plug and abandonment work in 2017 is \$32.3MM.

APPENDIX C
DISCOVERY RESPONSES

Responses to Data Request ORA-SCG-159-KCL

ORA DATA REQUEST
ORA-SCG-159-KCL
SOCALGAS 2019 GRC – A.17-10-008
SOCALGAS RESPONSE
DATE RECEIVED: MARCH 13, 2018
DATE RESPONDED: MARCH 23, 2018

Exhibit Reference: SCG-10-R, SCG-10-CWP-R

SCG Witness: Neil Navin

Subject: 2017 Recorded Expenditures

Please provide the following:

1. Referring to Sempra's email of March 12, 2017 to ORA which contained SCG 2017 adjusted-recorded capital expenditures: The data for Exh. No: SCG-10-CWP-R include six major categories. Please provide breakdowns to the same subcategories as presented in the tables in Ex. SCG-10-R for each of the six major categories. Please do the same for 2017 recorded O&M expenses, when they become available.

SOCALGAS Response 01:

SoCalGas objects to this request on the grounds that it is unduly burdensome. SoCalGas is not required to create new data or present existing data in a different form beyond that which might be readily available. There are no instructions or requirements in the Rate Case Plan regarding the provision of Base Year + 1 data (in this case 2017 data). SoCalGas has already provided sufficient 2017 data in the 2017 Recorded-Adjusted Capital Expenditure file submitted to ORA in March 2017 in the format nearly identical to that provided in the 2016 General Rate Case for base-year-plus-1 data. Subject to and without waiving the foregoing objection, SoCalGas responds as follows:

Workpaper	Workpaper Title	Base	Adj	V&S	Esc	Total Adj-Rec (2016\$)
004110.000	GT Stor Comp Sta Add / Rpls / Externally Driven	5,738	18	133	(206)	5,683
	1. GOLETA- MAIN UNIT #4 O	505				
	2. HONOR RANCH-REPLACE MA	168				
	3. PLAYA DEL REY-WET GAS	464				
	4. COMPRESSORS - BLANKET PROJECTS	4,601				
004120.000	GT Stor Wells / Externally Driven	53,030	177	102	(1,862)	51,446
	1. RAMP - C1 - WELL REPLACEMENTS	-35				
	2. RAMP - C2 - WELL PLUG & ABANDON	32,409				
	4. RAMP - C3 - TUBING UPSIZING	996				
	5. RAMP - C4 - WELL WORKOVERS	18,288				

**ORA DATA REQUEST
ORA-SCG-159-KCL
SOCALGAS 2019 GRC – A.17-10-008
SOCALGAS RESPONSE
DATE RECEIVED: MARCH 13, 2018
DATE RESPONDED: MARCH 23, 2018**

SOCALGAS Response 01:-Continued

	6. RAMP - C5 - WELLHEAD REPAIRS AND REPLACEMENTS	712				
	8. RAMP - C7- WELLS - BLANKET PROJECTS	659				
	9. C8 - CUSHION GAS PURCHASE	-				
			140			20,662
004130.000	GT Stor Pipelines / Externally Driven	20,939	495 ¹	331	(748)	21,017
	1. ALISO CANYON - VALVE REPLACEMENTS	315				
	2. RAMP - ALISO PIPE BRIDGE REPLACEMENT		468 ²			
	3. PIPELINES - BLANKET PROJECTS	20,624				
004140.000	GT Stor Purifi / Externally Driven	2,919	0	102	(106)	2,915
	1. ALISO CANYON DEHYDRATION UPGRADES	847				
	2. GOLETA DEHYDRATION UPGRADES	85				
	3. PURIFICATION - BLANKET PROJECTS	1,987				
			1,439			18,086
004190.000	GT Stor Aux Equip & Infrac / Externally Driven	16,988	971 ³	314	(655)	17,618
	1. ALISO CANYON - OVERHEAD POWER SYSTEM UPGRADES	1,170				
	2. ALISO CANYON - GO-95 ELECTRICAL SYS UPGRADES - NR	2,339				
	3. RAMP-ALISO CYN-FRNANDO FEE 32 SLOPE STABILITY	2,439				
	4. ALISO CANYON SESNON GATHERING PLANT RELIEF	387				

¹ SoCalGas' March 12, 2017 email to ORA which contained SCG 2017 adjusted-recorded capital expenditures, identified workpaper 00413.000 GT Stor Pipelines/Externally Driven 2017 Adjustments as "140". Upon further review, this adjustment is revised to "495", which further revises the Total Adj-Rec (2016\$) to "21,017".

² SoCalGas' March 12, 2017 email to ORA which contained SCG 2017 adjusted-recorded capital expenditures had incorrectly allocated the "RAMP – Aliso Pipe Bridge Replacement" subcategory amount of "468" into the Base column of Workpaper 00419.000 GT Stro Aux Equip & Infrac/Externally Driven. The cost has been corrected to reflect in the Adjustment column of Workpaper 00413.000 GT Stor Pipelines/Externally Driven.

³ Please see footnote 2.

**ORA DATA REQUEST
 ORA-SCG-159-KCL
 SOCALGAS 2019 GRC – A.17-10-008
 SOCALGAS RESPONSE
 DATE RECEIVED: MARCH 13, 2018
 DATE RESPONDED: MARCH 23, 2018**

SOCALGAS Response 01:-Continued

	5. HONOR RANCH - OPERATIONS CENTER MODERNIZATION	84				
	6. RAMP-PLAYA DEL REY-HILLSID SOIL EROSN & SLOPE STAB	102				
	7. AUX EQUIPMENT - BLANKET PROJECTS	9,999				
004410.000	SIMP Work	63,942	135	134	(2,243)	61,968
	1. RSIMP – Plug and Abandon	5,404				
	2. RSIMP – Inspection/Return to Operation	57,773				
	3. RSIMP – Data Management	765				
	4. RSIMP – Emerging Monitoring Integrity & Safety Technology Pilot	N/A ⁴				
	5. RSIMP – Cathodic Protection	N/A ⁵				
					1,908	160,760
Total		163,556	1,796⁶	1,116	(5,819)	160,648

⁴ Project begins in TY2019.

⁵ Project begins in TY2019.

⁶ See footnote 2.

SCG-2019 GRC Testimony Revision Log – June 2018

Exhibit	Witness	Page	Line	Revision Details
SCG-10-WP-R	Neil Navin	42		The table incorrectly itemizes the 2019 non-labor line item forecast as "5931", and the correct value should reflect "6599". This error is isolated to SCG-10-WP-R at 42, and the correction does not impact the overall total dollars forecast in workpaper summaries of 2US002.000 - Underground Storage - RSIMP, or in testimony (SCG-10-R).
SCG-10-WP-R	Neil Navin	44		The table incorrectly itemizes the 2017 non-labor line item forecast as "3230", and the correct value should reflect "3550". This error is isolated to SCG-10-WP-R at 44, and the correction does not impact the overall total dollars forecast in workpaper summaries of 2US002.000 - Underground Storage - RSIMP, or in testimony (SCG-10-R).
SCG-10-WP-R	Neil Navin	45		The section titled "Physical Description & Project Justification" details the number of noise and temperature surveys to be conducted for each forecast year (2017, 2018, 2019). The description incorrectly details the number of wells to be surveyed for the 2019 year as "approximately one hundred and fifty-five (155) wells in 2019" for the forecast. The description should read "approximately one hundred and sixty-four (164) wells in 2019."